Four Supplications.

1529—1553 A.D.

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A
Suplicacyon for the Beggers.
WRITTEN ABOUT THE YEAR 1529 BY
Simon Fish.
NOW RE-EDITED BY
FREDERICK J. FURNIVALL.

WITH
A Supplication to our moste Soueraigne Lorde
Ryngge Henry the Eght
(1544 A.D.),
A Supplication of the Poore Commons
(1546 A.D.),
The Decaye of England
by the great multitude of shepe
(1550-3 A.D.),
EDITED BY
J. MEADOWS COWPER.

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FOREWORDS.

When trying to get together some evidence on the Condition of England in Henry VIII's and Edward VI's reigns for the Introduction to the Ballad of Now a Dayes (?ab. 1520, A.D.) for my first volume for the Ballad Society, I was struck by the difficulty of finding out what tracts and books on the subject there were, and how few of them could be easily got at, much less bought at any reasonable price. But when I did get hold of some of them, I found them of such interest and value that I resolved to reprint such of them as I could, and one of the earliest¹ is now before the reader.

The second in date, the celebrated Supplicacyon for the Beggers, is however the first in importance, from its influence on Henry VIII and the Reformation, and its calling forth an answer from Sir Thomas More, his Supplicacyon of Soulys (in Purgatory), which gave rise to his controversy with Tyndal. I therefore give Foxe's full account of the whole matter from the third edition of his Acts and Monuments, A.D. 1576, pp. 986—991.

¹ Roy's Rede me and be not wroth is the earliest, and was in print by 1527 or -8, says Mr Arber. Mr Hazlitt dates Roy, 'Wormes 1526': but query. It is not in Foxe's list of Forbidden Books in 1526 (p. xii., below), though it is in that of 1531, printed in my Political, Religious, and Love Poems, 1866, p. 31: '7. The burying of the masse in English yn ryme.' Of Roy's other book in that list, '13. A Boke made by freer Roye ayenst the sevyn sacraments,' I know of no copy. Bohn's edition of Lowndes says of the 'Rede me and be not wroth', 'in the Roxburghe Sale Catalogue this piece stands entitled 'The Buryinge of the Mass, a Satire.' Can Foxe's 'M. Roo' on the next page be William Roy?
Before the tyne of M. Bilney, and the fall of the Cardinal, I should have placed the story of Symon Fish, with the booke called "the Supplication of Beggars," declaryng how and by what meanes it came to the kynges hand, and what effect therof followed after, in the reformation of many thynges, especially of the Clergy. But the missyng of a few yeares in this matter, breaketh no great square in our story, though it be now entred here [under the year 1531] which should have come in sixe yeares before. The maner and circumstaunce of the matter is this:

After that the light of the Gospel, workyng mightely in Germanie, began to spread his beames here also in England, great styrrre and alteration folowed in the harts of many: so that colored hypocrisie, and false doctrine, and painted holynes, began to be espied more and more by the readying of Gods word. The authoritie of the Bishop of Rome, and the glory of his Cardinals, was not so high, but such as had fresh wittes sparcled with Gods grace, began to espy Christ from Antichrist, that is, true sinceritie from counterfeit religion. In the number of whom, was the sayd M. Symon Fish, a Gentleman of Grayes Inne. It happened the first yeare that this Gentleman came to London to dwell, which was about the yeare of our Lord 1525, that there was a certaine play or interlude made by one M. Roo of the same Inne, Gentleman, in which play partly was matter agaynst the Cardinal Wolsey. And where none durst take vpom them to play that part, whiche touched the sayd Cardinal, this foresayd M. Fish tooke vpon him to do it; wherupon great displeasure ensued agaynst him, vpon the Cardinals part: In so much as he, beyng pursued by the sayd Cardinal, the same night that this Tragedie was playd, was compeld of force to voyde his owne house, & so fled ouer the Sea vnto Tyndall: vpon occasion wherof, the next yeare folowynge this booke was made (beyng about the yeare 1527.) and so not long after, in the yeare (as I suppose) 1528. was sent ouer to the Lady Anne Bulleyne, who then lay at a place not farre from the Court. Which booke, her brother seyng in her hand, tooke it and read it, & gaue it her agayne, willyng her earnestly to give it to the kyng, which thyng she so dyd.

This was (as I gather) about the yeare of our Lord 1528. The kyng, after he had receuued the booke, demaunded of her, who made it. Wherunto she answered and sayd, a certaine subject of his, one Fish, who was fled out of the Realme for feare of the Cardinal. After the kyng had kept the booke in his bosome iiij. or iiiij. dayes, as is credibly reported, such knowledge was giuen by the kynges servantes to the wife of ye sayd Symon Fishe, ye she might boldely send for her husband, without all
perill or daunger. Whereupon, she thereby beyng encouraged, came first, and made sute to the kyng for the safe returne of her husband. Who, vnderstanding whose wife she was, shewed a marvelous gentle and chearefull countenance towards her, askynge where her husband was. She answered, if it like your grace, not farre of. Then sayth he, fetch him, and he shall come and go safe without perill, and no man shal do him harme; saying moreover that hee had much wrong that hee was from her so long: who had bene absent now the space of two yeares and a halfe. In the whiche meane tyme, the Cardinall was deposed, as is aforeshowed, and M. More set in his place of the Chauncellourshyp.

Thus Fishes wife, beyng emboldened by the kynges wordes, went immediatly to her husband beyng lately come ouer, and lying priuely within a myle of the Court, and brought him to the kyng: which appeareth to be about the yeare of our Lord 1530.When the kyng saw him, and vnderstode he was the authour of the booke, he came and embraced him with louing countenance; who after long talke, for the space of iij. or iiiij. houre, as they were ridyng together on huntyng, at length dimitted him and bad him take home his wife, for she had taken great paynes for him. Who aanswered the kyng agayne and sayd, he durst not so do, for feare of Syr Thomas More, then Chauncellour, & Stoksley, then Byshop, of London. This seemeth to be about the yeare of our Lord 1530.

The kyng, takyng his signet of his finger, willed hym to haue him recommended to the Lord Chauncellour, chargynge him not to bee so hardy to worke him any harme. M. Fishe, receiuyng the kynges signet, went and declared his message to the Lord Chauncellour, who tooke it as sufficient for his owne discharge, but he asked him if he had any thyng for the discharge of his wife; for she a little before had by chance displeased the Friers, for not sufferyng them to say their Gospells in Latine in her house, as they did in others, vnsesse they would say it in English. Whereupon the Lord Chauncellour, though he had discharged the man, yet leauyng not his grudge towards the wife, the next mornyng sent his man for her to appeare before hym: who, had it not bene for her young daughter, which then lay sicke of the plague, had bene lyke to come to much trouble. Of the which plague her husband, the saide M. Fish, deceasing within halfe a yeare, she afterward maryed to one M. James Baynham, Syr Alexander Baynhams sonne, a worshipful knight of Glostershyre. The which foresaid M. James Baynham, not long after was burned, as incontinently after, in the processe of this story, shall appeare.

And thus much concernyng Symon Fishe, the author of the booke of beggers, who also translated a booke called the Summe of the Scripture, out of the Dutch.
Now commeth an other note of one Edmund Modyss, the kynges footeman, touchyng the same matter.

This M. Modyss beyng with the kyng in talke of religion, and of the new bookes that were come from beyond the seas, sayde, if it might please his grace to pardon him, & such as he would bryng to his grace, hee should see such a booke as was maruell to heare of. The kyng demaunded what they were. He sayd, two of your Marchauntes, George Elyot & George Robinson. The kyng poynted a tyme to speake with them. When they came afore his presence in a priuye closet, he demaunded what they had to saye, or to shew him. One of them sayd there was a booke come to their hands, which they had there to shew his grace. When he saw it, hee demaunded if any of them could read it. Yea, sayd George Elyot, if it please your grace to heare it. I thought so, sayd the kyng, for if neede were, thou canst say it without booke.

The whole booke beyng read out, the kyng made a long pause, and then sayd, if a man should pull downe an old stone wall and begin at the lower part, the upper part thereof might chance to fall vpon his head: and then he took the booke, and put it into his deske, and commaundd them vpon their allegiance, that they should not tell to any man, that he had sene the booke. &c. The Copie of the foresayd booke, intituled of the Beggers, here ensueth.

[The Boke of Beggers follows here in print.]

Agaynst this booke of the Beggers aboue prefixed, beyng written in the tyme of the Cardinal, another contray booke or supplication, was demaunded and written shortly upon the same by one sir Thomas More, knight, Chauncellour of the Duchy of Lancaster, vnder the name and title of the poore sely soules pewlyng out of Purgatory. In the which booke, after that the sayd M. More, writer thereof, had first demided the whole world into foure partes, that is, into heauen, hell, middle earth, and Purgatory: then he maketh the dead mens soules, by a Rhetoricall Prosopopea, to speake out of Purgatory ymynofde, sometymes lamentably complaing, sometymes pleasantly dalyng and scoffing, at the author of the Beggers booke, sometymes scoldyg and rayling at hym, calyling hym foole, wittlesse, frantike, an asse, a goose, a madde dogge, an heretike, and all that naught is. And no meruel, if these sely soules of Purgatory seene so furnish & testy. For heate (ye know) is testie, & some inflameth choler; but yet those Purgatory soules must take good heed how they call a man a foole and heretike so often. For if the sentence of the Gospell doth pronounce them guiltie of hell fire, which say, fatue, foole: it may be douted lest those poore sely melancholy soules of
Purgatory, calling this man foole so oft as they haue done, do bryng themselves therby out of Purgatory fire, to the fire of hel, by ye° just sentence of the gosspell: so that neyther the v. wounds of S. Fraunces, nor all the merites of S. Dominicke, nor yet of all the Friers, can release them, poore wretches. But yet for so much as I do not, nor cannot thinke, that those departed soules, eyther would so farre overshoote themselves if they were in Purgatory, or els that there is any such fourth place of Purgatory at all (unlesse it be in M. Mores Vtopia) as Maister Mores Poeticall vasei doth imagine. I cease therefor to burden the soules departed, and lay all the wyte in maister More, the authour and contriuer of this Poeticall booke, for not kepyng Decorum Personae, as a perfect Poet should haue done. They that gene precepts of Arte, do note thys in all Poeticall fictions, as a speciall observation, to foresee and expresse what is convenient for euery person, according to hys degree and condition, to speake and vttter. Wherefore if it be true that maister More sayeth in the sequel of hys booke, that grace and charitie increaseth in them that lye in the paynes of Purgatory, then is it not agreeable, that such soules, lying so long in Purgatory, should so soone forrette their charitie, and fall a rayling in their supplication so fruishesly, both against this man, with such opprobrious and vnfitting termes, and also against John Badby, Richard Howndon, Iohn Goose, Lord Cobham and other Martirs of the Lord burned for hys worde: also agaynst Luther, William Tindall, Richard Hunne and other mo, falsly belying the doctrine by them taught and defended: which is not lyke that such charitiable soules of Purgatory would euer doe; neyther were it convenient for them in that case, which in deede though their doctrine were false, should redound to the more encrease of their payne. Agayne, where the B. of Rochester defineth the Angels to be ministers to Purgatory soules, some wyll thinke peraduenture maister More to haue missed some part of his Decorum in makyng the euill spirite of the authour and the deuill to be messenger betwene middle earth and Purgatory, in bringing tidinges to the imprisoned soules, both of the booke, and of the name of the maker.

Now, as touching the maner how this deuill came into Purgatory, laughyng, grynnyng, and gnashyng his teeth, in sothe it maketh me to laugh, to see ye° mery Antiques of M. More. Belike then this was some mery deuill, or els had eaten with his teeth some Nasturciurn before: which comming into Purgatory to shew the name of this man, could not tell hys tale without laughing. But this was (sayth he) an enmious & an enuous laughing, ioyned with grynnyng and gnashyng of teeth. And immediatly vpon the same, was contriued this scoffing and rayling supplication of the pewlyng soules of Purgatory, as hee hym selde doth terme them. So then here was emyng, enuyng, laugh-
ing, grinning, gnashynge of teeth, pewlyng, scoffing, rayling, and begging, and altogether to make a very blacke *Sanctus* in Purgatory.

A blacke Sanctus in Purgatory.

In deede we read in Scripture, that there shall bee wepyng and gnashynge of teeth in hell, where the soules & bodyes of men shall be tormented. But who woulde ever haue thought before, that the euill amuggel of this man that made the booke of Beggers, beyng a spirituall and no corporall substance, had teeth to gnase, & a mouth to grynne? But where then stode M. More, I mernuell al this meane while, to see the deuell laugh with his mouth so wyde, yt the soules of Purgatory might see all his teeth? Belyke this was in Vtopia, where M. Mores Purgatorye is founded. But because M. Moore is hence departed, I will leaue hym with his mery Antiques. And as touchyng hys booke of Purgatory, whiche he hath lefte behynde, because Iohn Frith hath learnedly and effectuously ouerthrowne the same, I will therfore referre the reader to hym, while I repayre agayne (the Lord willyng) to the historye.

After that the Clergye of England, and especially the Cardinall, vnderstode these booke of the Beggars supplication aforesayd, to be strawne abroade in the streetes of London, and also before the kyng, the sayd Cardinall caused not onely his seruauntes diligently to attend to gather them vp, that they should not come into the kynges handes, but also, when he understode that the kyng had receaued one or two of them, he came vnto the kynges Maiesty saying: If it shall please your grace, here are diuers seditious persons which haue scattered abroad bookes conteyning manifest errours and herisies; desirying his grace to beware of them. Wherupon the kyng, puttynge his hand in his bosome, tooke out one of the booke, and deliuered it vnto the Cardinall. Then the Cardinall, together with the Byshops, consulted how they might provide a spedy remedy for this mischief, & therupon determined to gene out a Commission to forbid the readdyng of all English booke, and namely this booke of Beggars, and the new Testament of Tyndals translation: which was done out of hand by Cuthbert Tonstall, Byshop of London, who sent out his prohibition vnto his Archdeacons, with all spede, for the forbiddynge of that booke and diuers other booke: the tenor of whiche prohibition here foloweth.

†A prohibition sent out by Cuthbert Tonstall, Bishop of London, to the Archdeacons of his dio-
cesse, for the callynge in of the new Testament translated into English, with diuers other booke: the Cataloge wher-
of hereafter ensueth.

A prohibition against English booke.
benediction. By the dutey of our pastorall office, we are bounde diligently with all our power, to foresee, provide for, roote out, and put away, all those thynges which seeme to tend to the peril & danger of our subiectes, and specially the destruction of their soules. Wherefore, we, hauyng vnderstandyng by the report of duers credible persons, and also by the euident apparaunse of the matter, that many children of iniquittie, maintayners of Luthers sect, blynded through extreme wickednes, wandryng from the way of truthe and the Catholicke faythe, craftely have translated the new Testament into our English tongue, entremedly therwith many heretickall Articles & erroneous opinions, pernicious and offensiue, seduyng the simple people, attemptyng by their wicked and peruerse interpretations, to prophalanate the maiestye of the Scripture, which hetherto hath re-mained vndeifieled, & craftely to abuse the most holy worde of God, and the true sence of the same; of the which translation there are many bookes imprinted, some with gloses and some without, containing in the English tongue that pestiferous and most pernicious poysone dispersed throughout all our diocese of London in great number: which truly, without it be spedely foreseen, wythout doubt, wyll contaminate and infect the flock committed vnto us, with most deadly poysone and heresie, to the grieuous peril and danger of the soules committed to our charge, and the offence of Gods divyne majesty. Wherefore we, Cuthbert the bishop aforesayd, greunously sorowying for the premisses, willyng to withstand the craft and subtletie of the auncient enemy and hys ministers, which secke the destruction of my flock, and with a diligent care, to take hede vnto the flock committed to my charge, desiring to provide speedy remedies for the premisses, do charge you ioynly and severally, & by vertue of your obedience, straitly enioyne and commaunde you, that by our authority you warne or cause to be warned all & singular, aswel exempt as not exempt, dwelling within your Archdeaconries, that within .xxx. dayes space, wherof .x. dayes shalbe for the first, .x. for the second, & .x. for the third and peremptory terme, vnder paine of excommunication, and incuring the suspicion of heresie, they do bryng in, and really deliever vnto our vicar generall, all & singular such bookes as conteyne the translation of the new Testament in the Englishe tongue; and that you doe certifie vs, or our sayd Commissarye, within ij. monethes after the day of the date of these presentes, duly, personally, or by your letters, together with these presentes, vnder your scales, what you haue done in the premisses, vnder payne of contempt, geuen vnder our scale the .xxiiij. of October, in the v. yere of our consecration .an. 1526."

¶ The lyke Commission in lyke maner and forme, was sent to the three other Archdeacons of Middlesexe, Essex, and Colchester, for the execution of the same matter, vnder the Byshops scale.
THE NAMES OF THE BOOKEES THAT WERE FORBIDDEN AT THIS TYME, TOGETHER WITH THE NEW TESTAMENT.

The supplication of beggers.          (2)
The revelation of Antichrist, of Luther. (3)
The new Testament of Tindall.          (22)
The wicked Mammon.                     (23)
The obedience of a Christen man.       (24)
An introduction to Paules Epistle to the Romanes. (22)
A Dialogue betwixt the father and the sonne. (1)
Oeconomicæ Chrístianæ.                 (6)
Vno dissidentium.
Piae precationes.                      (5)
Captivitas Babylonica.
Ioannes Hus in Oscam.
Zwinglius in Catabaptistas.
De pueris instituendis.
Brentius de adminstranda Republica.
Luther ad Galatas.
De libertate Christiana.
Luthers exposition upon the Pater noster.

The editor of the reprint of the Supplicacyon in 1845 refers also to Strype's Memorials, i. 165, and says that Wilkins (Concilium, 3. 706) gives us this edict or injunction [of Tonstall's, above] issued by the authority also of Warham, Archbishop of Canterbury. Again, in the year 1530, a public instrument agreed upon, says Wilkins (3. 728), in an Assembly of the Archbishop of Canterbury, the Bishop of Durham and others, by order of King Henry the Eighth, was put forth "containing divers heretical and erroneous opinions selected from various books, which had been considered and condemned."

One of those is from the Supplication, and is the passage [on Purgatory] beginning, "There be many men of great literature, &c." [p. 10, below, l. 21], and ending, "in all holy Scripture." And, once more, in the same year (Wilkins, iii. 737), or, with less probability, in 1529 (Strype, i. 165), a Royal Proclamation was published "for resisting and withstanding of most damnable heresies sown

1 These numbers refer to those in the 'List of Books proscribed in 1531' printed in my edition of Political, Religious, and Love Poems, for the Society, 1866, p. 34-5, in which nine books in Tonstall's 1526 list are repeated. (The Pre of No. 5 there should be Pic.)
within this realm by the disciples of Luther, and other heretics, perverters of Christ’s religion;” at the end of which, with some other books, “the Supplication of Beggars” is strictly prohibited. Mr Arber tells me that Foxe’s list of books on the opposite page is a spurious one, because it contains the names of several books not published till after 1526,—among them our Supplication of Beggars, which can be proved to have been published late in 1528 or early in 1529;—that the Unio dissidentium is by H. Badius; and that Pie Precationes, Captivitas Babylonica, and De Libertate Christiana, are Luther’s.

Wood’s account of Fish, in his Athenæ Oxonienses, is taken from Foxe, but he notes also what Sir T. More, in his ‘Apology’ (Works, &c., ed. Rastell, 1577, p. 881), says of Fish: that he “had good zeale, ye wote well, when he made the Supplicacion of beggers. But God gaue hym suche grace afterwarde, that he was sory for that good zeale, and repented hymselfe, and came into the church agayne; and forsoke and forsware all the whole hill of those heresyes, out of which the fountain of that same good zeale sprang.”

“In More’s Supplication of Souls, written to counteract the effect of Mr Simon Fish’s Supplication of Beggars, More continually calls Fish ‘this beggar’s proctor,’ and represents one of the souls in purgatory as saying of him, ‘He is named and boasted among us by the evil angel of his, our and your ghostly enemy, the devil; which, as soon as he had set him at work with that pernicious book, ceased not to come hither, and boast it among us: but with his envious and envious laughter, gnashing the teeth and grinning, he told us that his people [i.e. the reformers] had, by the advice and counsel of him, [i.e. the devil] and of some heretics almost as evil as he, made such a book for beggers, that it should make us beg long ere we got aught.’—More’s ‘Works,’ pp. 288-9. The Supplication of Beggars

. . . . was originally transmitted to England from the Continent, whither Fish had fled; so that More would suppose that Tyndale and Joye were privy to its composition.”—Parker Soc.’s Tyndale’s ‘Works,’ iii. 268, note. In the Parker Society’s Tyndale’s Works, ii. 335, Tyndale, in his tract on The Practice of Prelates, again makes mention of Fish’s Supplication, which secretary (Thomas More) yet must first deserve it with writing against Martin [Luther], and

1 See Mr Arber’s Preface to his facsimile reproduction (1871) of Tyndale and Roy’s first printed English New Testament, Cologne-Worms? 1525, 4to.
against *The Obedience* and *Mammon*, and become the proctor of purgatory, to write against *The Supplication of beggars.*”

Bishop Tanner ascribes to Fish ‘The boke of merchants\(^1\) rightly necessary to all folkes, newly made by the lord Pontapole,’ and ‘The spiritual nosegay.’

That he translated from the Dutch the *Sum of the Scriptures* Foxe has already told us in the last lines of page vii above.

Fish was living at his house at Whitefriars in 1527-8. See Necton’s Confession. *Strype*, I. ii. 63, ed. 1822. (Arber.)

No new facts about Fish are given in any modern biographical dictionaries that Mr W. M. Wood has searched for me. Foxe, as we have seen (p. vii, above, l. 9 from foot), says that Fish died of the plague about 1530; and the way that Sir Thomas More speaks of him seems to assume that he died before 1533.

The reader will notice how the *Supplication of the Poore Commons*, 1546, refers, on p. 61-2 below, to the *Supplication of Beggers*, and its influence on Henry VIII.

F. J. F.

The second and third *Supplications*, printed from the original black-letter editions now in the British Museum,\(^2\) are anonymous. The dates of their publication are 1544 for the second, and 1546 for the third. It is useless to guess who was the author (I believe the two proceed from one pen), but I have not much hesitation in suggesting Henry Brinklow ("Roderyck Mors"), who was busy at this time. Brinklow’s two tracts\(^3\) will as soon as practicable be included in this series, and then our readers will be able to judge for themselves. The same vehement language, and unqualified abuse of the clergy and all who were not of his way of thinking, will be observed throughout. The references to certain topics of the day cannot be

\(^1\) Lond. Jugge, 1547, 12mo.—Lowndes.

\(^2\) Mr E. Brock read the proofs with the originals.

\(^3\) ‘The Complaynt of Roderyck Mors . . . for the redresse of certen wicked lawes, euell customs, and cruell decreys, 1536’; and ‘The Lamentacyon of a Christen Agaynst the Cytye of London, for some certayne great vyees vsed therin, 1545.’
reckoned on to weigh much with regard to the question of authorship in a case like this, else we might direct attention to several such in this Preface. Three must suffice:

The Lamentacyon of a Christen.

And I thinke within fewe years they will (wythout thy greate mercy) call vpon Thomas Wolsey late Cardinall, & vpon the vnholy (I shulde saye) holy Mayde of Kent. 1. 4.

Accordyng to there office they barked vpon you to loke vpon the poore, so that then some relefe they had; but now, alasse, ye be colde, yea even those whiche saye they be the favorers of the Gospell. l. 9, bk.

London beyng one of the flowers of the worlde, as touchinge worldlye riches, hath so manye, yea innumerable of poore people forced to go from dore to dore, and to syt openly in the stretes a beggyngye, and many .... lye in their howses .... and dye for lacke of ayde of the riche. l. 9.

Ye abhorre the remedy ordayned of God [marriage], and mayntayne the remedy of Sathan. 1. 22, bk.

These are not worth much, but they may serve as a hint to those who care to go further in this direction.

The subjects embraced by the second and third Supplications are such as to justify their being placed in the same volume as Fish's more famous tract. That gained its celebrity as much from its early appearance in the great struggle, and the notice taken of it by the king, as by its own intrinsic merits. More than this, Foxe embalmed it in his

A Supplication of the Commons.

Now must we beleue that they can not erre ....... though they were baudes and fornicators with the holy whore of Kent. p. 75.

Although the sturdy beggers gat all the devotion of the good charitable people from them, yet had the pore impotent creatures some relefe of theyr scraapes, where as nowe they haue nothing. Then had they hospitals, and almshouses to be lodged in, but nowe they lye and starne in the stretes. Then was their number great, but now much greater. p. 79.

Fordome is more estemed then wedlocke .... amongst a great numbre of lycensious persons. p. 82.

1 When the Supplication of the Poore Commons first appeared, it bore on its title page "C Whereunto is added the Supplication of Beggers." This is now omitted, as the Supplication of Beggers contained in the present volume is printed from a copy of the original black-letter edition in the British Museum.
pages, so that while the *Supplication to the King* and the *Supplication of the Commons* have not been reprinted for more than 300 years, and are unknown except to a few, the *Supplication of the Beggars* has been reproduced as often as Foxe’s own immortal work.

The ignorance and immorality of the clergy are commented upon in severe terms. They, as usual, are charged with being the authors of every crime either by the suppression of the Bible, or by their false teaching. Their want of faith and neglect of preaching are said to be the cause of insurrections, commotions, popish blindness, idolatry, hypocrisy. It is said that many of the Abbots of the suppressed monasteries were admitted to have the cure of souls to the increase of all ignorance and to the damnation of those committed to their care. Of course. Having turned out these men, how could the virtuous patriots of the day do less than persecute them to the death? They had voluntarily or involuntarily resigned their livings into the hands of the Royal Defender of the Faith, and were willing to conform to the new order of things; but this was not enough. It was held that no good thing could come out of the Church as it existed a few years before, and so these men must submit to every indignity and be taxed with every crime. It was even considered dangerous to admit a man to the ministry who had studied the decrees and laws of the Church of Rome (p. 46).

But Church matters are not the only ones which gain attention. We hear of the extravagance which prevailed in fashions—now the French, now the Spanish, then the Italian, and then the Milan (p. 52), till many were brought to poverty by the foolish fancies and vain pride of men and women. The crimes of the rich make the writer apply Hosea’s words to his own country—“There is no truth, no mercy, no knowledge of God in earth; cursing, lying, murder, theft, adultery, hath broken in”—and yet, notwithstanding all this, “doo owre shepherdes holde theyr peace.”

The miserable poverty of the people, who expected great things from the expulsion of the monks, is clearly expressed. Under the old order of things there was some relief (p. 79), but under the new, instead of the monk there was the “sturdy extortioner.” The people
could get no farm, not even a cottage. Rents were raised, abbey
lands bought up, and the old leases declared to be void. Altogether
the picture is anything but a cheering one, and makes us curious to
know in what part of England 'free fare and free lodging, with
bread, beef, and beer,' were to be had, and no questions asked.¹

The last tract in this volume was copied from one then in the
Lambeth Library, but as that was mislaid when we went to press, our
text has been made to correspond² with the copy of another edition
in the Cambridge University Library. The date³ of this "Sheep-
tract" must be 1550-3 A.D.; but the name of its author is unknown.
It, too, is in the form of a petition or supplication, which seems to
have been a favourite mode of exposing the grievances under which
the people groaned. A noteworthy circumstance in connection
with this tract is that the clergy are not even mentioned! It
deals with rural troubles only. In cities men saw and perhaps
envied the rich; in large centres of population also, just as in our
own day, the clergy were the especial objects of the attacks of "re-
formers;" but this writer, whose style is far less effective than that
of the Supplications, confines himself solely to the misfortunes which
resulted from excessive pasture farming. His references to North-
amptonshire, Buckinghamshire, and Oxfordshire, lead us to believe
that his lot was probably cast in one of these counties. The com-
plaint is made in very homely language and manner, but they give to
it an air of truthfulness.

The calculations as to the losses sustained by the country are very
interesting. A single plow, it seems, was calculated to keep six
persons and leave thirty quarters of grain for sale annually.

¹ For further information on the subjects of these Supplications the reader
is referred to the Introduction to Ballads from MSS, vol. i. by Mr F. J. Fur-
nivall, and to the Preface to England under Henry VIII., a Dialogue, &c.,
by Mr J. M. Cowper.

² Mr Denis Hall of the Camb. Univ. Library collated the proofs with the
original.

³ Hugh Singleton's print of The vagaryon of Johan Bale is dated 1553, and
he died between July 1592 and 1593. Herbert gives the date of Singleton's
ed. of Fox's Instrucion of Christen Fayth as 1550. (Dibdin's Ames, iv. 290.)
The copy of the Sheep-Tract mentioned in Ames as among the Harleian
pamphlets is not now in the British Museum. It was the same edition as the
missing Lambeth copy, having an e in only and housholde in the title.—F.
Put into figures, the first calculation (p. 98) will stand thus:—

40 plows decayed in each county:
1 plow = 6 persons: 40 plows = 240 persons.

In addition each plow yielded 30 qrs. corn: 40 plows = 1200 qrs. Allowing 4 qrs. to each person, this shows a further loss of 300 persons.

Total in each county = 540 persons.

But if there be 80 plows less in each of these shires, "as we do think" (p. 99), this number will be doubled, and in each county 1080 persons are deprived of their means of support. In the writer's own touching language we may say, "Now these persons had need to have living: whither shall they go? into Northamptonshire? And there is also the living of an equal number of persons lost. Whither shall then they go? Forth from shire to shire, and to be scattered thus abroad, within the King's Majesty's Realm where it shall please Almighty God; and for lack of masters, by compulsion driven, some of them to beg, and some to steal" (p. 98).

These Reformation Tracts are submitted to the careful attention of all who wish to study this period of our history, in the firm belief that the only way in which Englishmen can form a correct estimate of the wonderful change the country then went through, the causes which led to it, and the means by which it was brought about, is by placing in their hands all the contemporary documents which are within our reach.

J. M. Cowper.

1 The calculation on p. 101 suggests a condition of things too frightful for belief:

1 Plow kept besides producing corn sufficient for
50,000 plows × 13\(\frac{1}{2}\) =

6 persons

7\(\frac{1}{2}\) "

thrown upon the country; which, supposing the population to have been 5,000,000, would be one-eighth of the whole population, and reveals a state of things worse than that which exists at the present day, when every twentieth person receives parish relief, exclusive of the "beggars" who swarm on our highways, tramping from Union to Union because they can't sleep in the same "house" two nights together.
A

Suplicacyon for the Beggers.

WRITTEN ABOUT THE YEAR 1529,

AND (AS IS BELIEVED) BY

Simon Fish.

NOW RE-EDITED BY

FREDERICK J. FURNIVALL.
TO THE KING OVR E

souereygne lorde.

Most lamentably compleyneth theyre wofull mysery vnto youre highnes, youre poore daily bedmen, the wretched hidous monstres (on whome scarcely for horror any yie dare loke,) the foule, vnhappy sorte of lepers, and other sore people, nedy, impotent, blinde, lame, and sike, that live onely by almesse, howe that theyre nombre is daily so sore encreased, that all the almesse of all the weoldisposed people of this youre realme is not halfe ynoch for to sustaine theim, but that for very constreint they die for hunger. And this most pestilent mischief is comen vppon youre saide poore beedmen, by the reason and1 there is, yu the tymes of youre noble predeceessours passed, craftily crept ynto this your realme an other sort (not of impotent, but) of strong, puissaunt, and counterfeit holy, and ydell, beggers and vacabundes, whiche, syns the tyme of theyre first entre by all the craft and wilinesse of Satan, are nowe encreased vnder your sight, not onely into a great nombre, but also ynto a kingdome. These are (not the herdes, but the rauinous wolues going in herdes clothing, denouring the flocke,) the Bisshoppes, Abbottes, Priours, Deacons, Archdeacones, Sufferaganes, Prestes, Monkes, Chanons, Freres, Pardoners and Somners. And who is abill to nombre this idell, suplication.
ravinous sort, whiche (setting all laboure a side) haue begged so importunately that they haue gotten ynto theyre hondes more then the third part of all youre Realme. The goodliest lordshippes, maners, loudes, and territories, are theyrs. Besides this, they haue the tenth part of all the corne, medowe, pasture, grasse, wolle, coltes, calues, lambs, pigges, gese, and chikens. Ouer and bisides, the tenth part of evey seruantes wages, the tenth part of the wolle, milke, hony, waxe, chese, and butter. Ye, and they like so narowly upon theyre proufittes, that the poore wyues must be countable to theym of evey tenth eg, or elles she gettith not her ryghtes at ester, shalbe taken as an heretike. hereto haue they their foure offering daies, whate money pull they yn by probates of testamentes, priuy tithes, and by mennes offeringes to theyre pilgremages, and at theyre first masses? Evey man and childe that is buried, must pay sumwhat for masses and diriges to be song for him, or elles they will accuse the dedes frendes and executours of heresie, whate money get they by mortuaries, by hearing of confessions (and yet they wil kepe therof no councyle) by halowing of churches, altares, superaltares, chapelles, and belles, by cursing of men, and absoluing theim agein for money? what a multitude of money gather the pardoners in a yere? Howe moche money get the Somners by extorcion yn a yere, by assityng the people to the commissaries court, and afterward releasing thapparauance for money? Finally, the infinite nombre of begging freres: whate get they yn a yere? Here, if it please your grace to marke, ye shal se a thing farre out of ioynt. There are withyn youre realme of Englond liij. thousand parisshe churches. And this standing, that there be but tenne houshouldes yn evey parisshe, yet are there fine hundreth thousand and twenty thousand houshouldes. And of evey of these houshouldes hath evey of the

THE EXTORTIONS OF THE MONKS AND FRIARS.

who work not, but have the third of the land in their hands;

with the tith of corn and wool, &c.,

and of every servant's wages,

as well as the good-woman's eggs, or else she has no Easter rights.

Then, they gain much by probates, private tithes and masses,

for which dead men's friends must pay; and from confessions (which they divulge), from cursing and absolving.

Then again, how great is the number of the begging Friars.

In England are 52,000 parish churches, 10 households in each parish;

from each household the
For the Beggers.

five orders of freres a peny a quarter for every orde, that is, for all the five ordes, five pens a quarter for every house. That is, for all the five ordes .xx. d, a yere of every house. Summa, five hundreth thousand and twenty thousand quarters of angels. That is .celx. thousand half angels. Summa .cxxx. thou and angels. Summa totalis .xliij. thousand poundes and .cccxxxiij. li. vi.s. viij.d. sterling. wherof not foure hundreth yeres passed they had not one peny. Oh greuous and your Highness's peynfull exactions thus yerely to he payed! From the whiche the people of your nobill predecessours, the kinges of the auncient Britons, euer stode fre. And this will they haue, or els they wil procure him that will not give it theim to be taken as an heretike, whate tirant etuer oppressed the people like this cruelle and vengeable generacion? whate subjectes shall be abill to helpe theire prince, that be after this facion yerely polled? whate good christen people can be abill to socoure vs pore lepres, blinde, sore, and lame, that be thus yerely oppressed? Is it any merueille that your people so compleine of pouertie? Is it any merucile that the taxes, fiftene, and subsidies, that your grace most tenderly of great compassion hath taken emong your people, to defend theim from the thretened ruine of theire comon welth, haue bin so sloughtfully, ye, painfully leuied? Seing that almost the utmost peny that mought haue bin leuied, hath ben gathere:ed before yerely by this rauinous, cruel, and insatiable genera-

five orders take 20 pence a year, or in round numbers, £13,353 9. 6d.

Your Highness's predecessors did not pay this, and no subjects can help their king if they are so fleeced; and none can give aimes to us.

How will the taxes, which you have so tenderly taken, be leked? for these raveners have not all beforehand.

Neither Dane nor Saxon could have won Britain, if they had had such a brood at home.

Nor could Arthur have resisted Lucius, with such extortioners.
among his people, nor the Greeks besieged Troy,

nor Rome won the world, nor the Turk so much of Christendom.

These men, then, have nigh half the substance of the realm,

and yet they are but one in a hundred of the lay-men, or with women and children added, one in four;

but yet they have half the property of the realm.

What do they with their exactions? Nothing, but claim all power; excite rebellions, as they did.

The few monks, etc., have half the realm.

yerely exactions had ben taken of his people. The grekes had neuer ben abill to haue so long continued at the siege of Troie, if they had had at home suche an idell sort of cormorauntes to finde. The auncient Romains had neuer ben abill to haue put all the hole worlde vnder theyre obeisauce, if theyre people had byn thus yerely oppressed. The Turke nowe, yn youre tyme, shulde neuer be abill to get so moche gTOunde of cristendome, if he had yn his empire suche a sort of locustes to denoure his substaunce. Ley then these sommes to the forseid third part of the possessions of the realme, that ye may se whether it drawe nighe vnto the half of the hole substaunce of the realme or not: So shall ye finde that it draweth ferre aboue. Nowe let vs then compare the nombre of this vnkind idell sort, vnto the nombre of the laye people, and we shall se whether it be indifferently shifted or not that they shuld have half. Compare theim to the nombre of men, so are they not the .C. person. Compare theim to men, wimen, and children; then are they not the .CCCC. parson yn nombre. One part therfore, yn foure hundreth partes deuided, were to moche for theim except they did laboure. whate an unequal burthen is it, that they haue half with the multitude, and are not the .CCCC. parson of their nombre! whate tongue is abill to tell that euer there was eny comon welth so sore oppressed sins the worlde first began?

And whate do al these gredy sort of sturdy, idell, holy theues, with these yerely exactions that they take of the people? Truely nothing but exempt theim silues from thobedience of your grace. Nothing but translate all rule, power, lordishippe, auctorite, obedience, and dignite, from your grace vnto theim. Nothing but that all your subiectes shulde fall vnto disobedience and rebellion ageinst your grace, and be vnder theym. As they did vnto your nobill predecessour
A SUPPLICACYON FOR THE BEGGERS.

5

king John: which, forbycance that he wolde hawe 
punished certeyn traytours that had conspired with the 
frenche king to haue deposed him from his crowne and 
dignite, (among the whiche a clerke called Stephen, 
whome afterward against the kinges will the Pope 
made Bisshoppe of Caunterbury, was one) enterdite his 
Lond. For the whiche mater your most nobill realme 
wrongfully ( alas, for shame !) hath stond tributary (not 
vnto any kind temporall prince, but vnto a cruell, 
duelleishe bloudsupper, dronken in the bloude of the 
sayntes and marters of christ) euuer sins. Here were an 
holy sort of prelates, that thus cruelly coude punishe 
suche a rightuous kinge, all his realme, and succession, 
for doing right !

¶ Here were a charitable sort of holy men, that coude 
thus enterdite an hole realme, and plucke awaye tho-
bedienc of the people from theyre naturall liege lorde 
and kinge, for none other cause but for his rightuous-
nesse! Here were a blissed sort, not of meke herdes, 
but of bloudsuppers, that coude set the frenche king 
vpon suche a rightuous prince, to cause hym to lose 
his crowne and dignite, to make effusion of the bloude 
of his people, oneles this good and blissed king of 
greate compassion, more fearing and lamenting the 
shedding of the bloude of his people then the losse of 
his crowne and dignite, agaynst all right and conscience 
had submitted him sille vnto theym! O case most 
horrible! that euuer so nobill a king, Realme, and suc-
cession, shulde thus be made to stoupe to suche a sort 
of bloudsuppers! where was his swerde, power, crowne, 
and dignite become, wherby he mought haue done jus-
tice yn this maner? where was their obedience become, 
that shuld haue byn subiect vnder his highe power yn 
this mater? Ye, where was the obedience of all his 
subjectes become, that for maintenance of the comon 
welth shulde haue holpen him manfully to haue re-

against that noble 
King John, when 
one of them 
interdited the 
land; 

and from that 
time the land 
has been 
tributary to a 
devilish blood-
supper.

A holy sort to treat 
a righteous king 
so!

Holy men were 
they! hating one 
who more feared 
to shed blood 
than lose his 
crown;

but they had 
translated all 
power to 
themselves.
sisted these bloudsuppers to the sheddinge of theyre bloude? was not all to-gither by theyre polycy translated from this good king vnto theim? Ye, and what do they more? Truely nothing but applie theym silues, by all the sleyghtes they may, to haue to do with every mannes wife, every mannes daughter, and every mannes mayde, that cukkoldrie and baudrie shuld be reigne over all emong your subiectes, that noman shulde knewe his owne childe, that theyre bastardes might enherite the possessions of every man, to put the right begotten children clere beside theire inheritaunce, yn subuersion of all estates and godly ordre. These be they that by theire absteyning from mariage do let the generation of the people, wherby all the realme at length, if it shulde be continued, shall be made desert and inhabitable.1

1 Sir Thomas More points out the seeming contradiction between this sentence and the last: for if the monks were such good begetters of bastards, they would increase the population, rather than diminish it. But this is answered in the next page here.
man, wife, and children, to ydelenesse, theft, and beggeri.

Ye, who is abill to nombre the great and brode bottomles oceean see, full of cuilles, that this mischeuous and sinful generacion may lauffully bring vppon vs vnponisshed? where is youre swerde, power, crowne, and dignite become, that shuld punisshe (by punishment of deth, euen as other men are punisshe)d the felonies, rapes, murdres, and treasons committed by this sinfull generacion? where is theire obedience become, that shulde be vnder your hyghe power vs this mater? ys not all to-gither translated and exempt from your grace vnto theim? yes, truely. whate an infinite nombre of people might haue ben encreased, to haue peopled the realme, if these sort of folke had ben married like other men? whate breeche of matrimonie is there brought yn by theim? suche truely as was neuer, sins the worlde began, emong the hole multitude of the hethen.

¶ Who is she that wil set her hondes to worke, to get .iiij. d. a day, and may haue at lest .xx. d. a day to slepe an houre with a frere, a monke, or a prest? what is he that wolde laboure for a grote a day, and may haue at lest .xij. d. a day to be bande to a prest, a monke, or a frere? whate a sort are there of theime that mari prestes souereigne ladies, but to cloke the prestes ynecontinency, and that they may haue a lining of the prest theime silues for theire laboure? Howe many thousands doth suche lubricite bring to beggery, theft, and idelnesse, whiche shuld haue kept theire good name, and haue set theim silues to worke, had not ben this excesse treasure of the spiritualtie? whate honest man dare take any man or woman yn his service that hath ben at suche a scole with a spiritual man? Oh the greuous shipwrak of the comon welth, whiche yn auncient time, before the coming yn of these rauinous
there were but few thieves, few poor, and those had given to them enough without asking.

Why wonder, then, there are so many beggars, thieves, &c.? You cannot make laws against them. They are stronger in Parliament than you.

Who dare lay charges against them?

If any one does, he is accused of heresy:

wolves, was so prosperons, that then there were but few thieves! ye, theft was at that tyme so rare, that Cesar was not compellid to make penalite of deth vpon felony, as your grace may well perceyue yn his institutes. There was also at that tyme but fewe pore people, and yet they did not begge, but there was given them ynowngh vnaxed; for there was at that time none of these rauinous wolves to axe it from them, as it apperith yn the actes of thappostles. Is it any merueill though there be nowe so many beggers, theues, and ydell people? Nay truely.

¶ Whate remedy: make lawes ageynst theim? I am yn doubt whether ye be able: Are they not stronger in your owne parliament house then your silfe? whate a nombre of Bisshopes, abbotes, and priours, are lordes of your parliament? are not all the lerned men in your realme in fee with them, to speake yn your parliament house for theim against your crowne, dignite, and comon welth of your realme; a fewe of youre owne lerned counsell onely excepted? whate lawe can be made against theim that may be aduaylatable? who is he (though he be greuned never so sore) for the murder of his auncestre, rauiishment of his wyfe, of his daughter, robbery, trespas, maiheme, dette, or eny other offence, dare ley it to, theyre charge by any wey of accion? and if he do, then is he by and by, by theyre wilynesse, accused of heresie. ye, they will so handle him or he passe, that except he will bere a fagot for theyre pleasure, he shal be excommunicate, and then be all his accions dasshed. So captuye are your lawes vnto theym, that no man that they lyst to excommunicat, may be admitted to sue any accion in any of your courtes. If eny man yn your sessions dare so hardly to endyte a prest of eny suche cryme, he hath, or the yere go out, suche a yoke of heresy leyd in his necke, that it maketh him wishes he that had not done it. Your
grace may se whate a worke there is in London, howe
the bisshoppe rageth for endytynge of certayn curates of
extorcion and incontinency, the last yere in the war-
moll quest.¹ Had not Richard hunne commenced ac-
cyon of premunire against a prest, he had bin yet a-
lyue, and none eretik, a tall, but an honest man.

¹ Dyd not dyuers of your noble progenitours,—
seynge theyre crowne and dignite rume ynto ruyne,
and to be thus craftely translated ynto the hondes of
this myschenous generacyon,—make dyuers statutes for
the reformatcyon therof, emong whiche the statute of
mortmayne was one? to the intent that after that tyme
they shulde haue no more gyuen ynto theim.

But whate avayled it? haue they not gotten ynto
theyre hondes, more londes sins, then eny duke yn
ynglond hath, the statute notwithstanding? Ye, haue
they not for all that translated ynto theyre hondes,
from your grace, half your kyngdome thoroughly? The
hole name, as reason is, for the auncientie of your kyng-
dome, whiche was bfore theyrs, and out of the whiche
theyrs is growen, onely abiding with your grace? and
of one kyngdome made twyne: the spirituall kyng-
dome (as they call it), for they wyll be named first,
And your temporall kyngdome. And whiche of these
ij. kyndomes (suppose ye) is like to ouergrove the
other? ye, to put the other clere out of memory?
Truely the kyngdome of the bloudsuppers; for to theym

¹ There is a custome in the Cytye, ones a yeare to haue a
quest called the warmnall queste, to redress vices; but alas,
to what purpose cometh it, as it is vsed? If a pore man kepe
a whore besides hys wife, & a pore mans wyfe play the harlot,
they are punished, as well worthie. But let an alderman, a
lenteleman, or a riche man, kepe whore or whores, what punish-
ment is there? Alasse, this matter is to bad.—The Lamenta-
cyon of a Christen against the Cyte of London (by Henry
Brinklow, A.D. 1542), ed. 1548, sign. b. vii. back.

Quest or Quest Men, Persons who are chosen yearly in
every Ward, and meet about Christmas, to enquire into Abuses
and Misdemeanours committed therein, especially such as re-
late to Weights and Measures.—Kersey's Phillips, ed. 1706.
is given daily out of your kingdom. And that that is
ones given them, cometh sooner from them again.
Suche lawes haue they, that none of them may nether
give nor sell nothing.

Whate lawe can be made so stronge against them
that they, other with money, or elles with other policy,
will not breake and set at nought? Whate kingdome
can endure, that eu er gyueth thus from him, and
receueth nothing again? O, howe all the substance of
your Realme forthwith, your swerde, power, crowne,
dignite, and obedience of your people, rynnet hedlong
yno the insaciabill whirlepoole of these gredi goulafres,
to be swalowed and devoured!

Nether haue they eny other coloure to gather
these yerely exaccions ynto theyre hondes, but that
they say they pray for vs to God, to deluuer our soules
out of the paynes of purgatori; without whose prayer,
they say, or at lest without the popes pardon, we coude
neuer be deluiered thens; whiche, if it be true, then is
it good reason that we gyue theim all these things, all
were it C times as moche. But there be many men of
greate litterature and judgement that, for the love they
haue ynto the trouth and ynto the commen welth, haue
not feared to put theim self into the greatest infamie
that may be, in abiection of all the world, ye, yn perill
of deth, to declare theyre oppinion in this mather,
whiche is, that there is no purgatory, but that it is a
thing inuented by the cuitousnesse of the spiritualtie,
oney to translate all kingdomes from other princes
yno theim, and that there is not one word spoken of
hit in al holy scripture. They say also, that if there
were a purgatory, And also if that the pope with his
pards for money may deliuer one soule thens; he
may deliuer him aswel without money: if he may

1 Fr. Goulfre, Gouffre: m. A gulfe; whirlepoole, depee
hole, or vnumeasureable depth (of waters) that swallowes vp
whatsoever approaches, or comes into, it.—Cotgrave.
A SUPPLICACYON FOR THE BEGGERS.

deliuer one, he may deliuer a thousand: yf he may
deliuer a thousand, he may deliuer them all, and so
destroy purgatory. And then is he a cruell tyrant
without all charite, if he kepe them there in pryson
and in paine, till men will give him money. ¶ Lyke
wyse saie they of all the hole sort of the spiritueltie,
that if they will not pray for no man but for them
that gyue them money, they are tyrannites, and lakke
charite, and suffer those soules to be punisshed and
payned vncheritably, for lacke of theyre prayers.

These sort of folkes they call heretikes, these they
burne, these they rage ageinst, put to open shame, and
make them bere fagottes. But whether they be heret-
ikes or no, well I wote that this purgatory, and the
Popes pardons, is all the cause of translacion of your
kingdome so fast into their hondes; wherfore it is mani-
fest it can not be of christ, for he gane more to the
temperall kingdome, he hym silfe paid tribute to Cesar,
he toke nothing from hym, but taught that the highe
powers shuld be always obeid: ye, he him silf (although
he were most fre lorde of all, and innocent,) was obed-
ient vnto the highe powers vnto deth. This is the
great scabbe why they will not let the newe testament
go a-brode yn your moder tong, lest men shulde espie
that they, by theyre cloked ypochrisi, do translate thus
fast your kingdome into theyre hondes, that they are
not obedient vnto your highe power, that they are
cruell, vnclene, vmmercifull, and ypochrites, that thei
seke not the honour of Christ, but their owne, that re-
misson of sinnes are not guen by the popes pardon,
but by Christ, for the sure feith and trust that we haue
in him. Here may your grace well perceyue that,
except ye suffer theyre ypocrisie to be disclosed, all is
like to runne vnto theire hondes; and as long as it is
couered, so long shall it seme to every man to be a
greate ympiete not to gyue theim. For this I am sure

Again, they pray
only for those
who give them
money.

They who cannot
pay, are called
heretics, and are
burnt.

Christ, on the
contrary, upheld
powers, and
paid tribute,

which is their
reason for
withholding the
New Testament
in the mother
tongue;

for they seek
their own honour,
not Christ's.
All are of my opinion, Lords, Knights, and yeomen; else the statute of mortmain robs us of salvation. All your people will thinke that your statute of mortmayne was never made with no good conscience, seing that it taketh away the libertie of your people, in that they may not as lawfully by theire soules out of purgatory by gyuing to the spiritualte, as their predecessours did in tymes passed.

Wherefore, if ye will eschewe the ruyne of your crowne and dignite, let theire ypocrisye be vtted; and that shalbe more spedfull in this mater then all the lawes that may be made, be they never so stronge. For to make a lawe for to punishe eny offender, except it were more for to giue other men an ensample to beware to committe suche like offence, whate shuld yt avayle? Did not doctour Alyn, most presumptuously, nowe yn your tyme, ageynst all his allegiaunce, all that ever he coude, to pull from you the knowlge of suche plees as long vnto your hyghe courtes, vnto an other court, in derogacion of your crowne and dignite? Did not also doctor Horsey and his complices most hey nously, as all the world knoweth, murdre in pryson that honest marchaunt Richard hunne? For that he sued your writ of premunire against a prest that wrongfully held him in ple in a spirituall court, for a mater wherof the knowlge belonged vnto your hyghe courtes. And whate punisshement was there done, that eny man may take example of to beware of lyke offence? truely none, but that the one payd fiue hundreth poundes (as it is said) to the bildinge of your sterre chamber; and when that payment was ones passed, the capteyns of his kingdome (because he faught so manfully ageynst your grace thinketh, (as the truth is,) I am as good a man as my father, whye may I not aswell gyue theim as moche as my father did? And of this mynd I am sure are all the loordes, knightes, squire, gentalmen, and yemen in england; ye, and vntil it be disclosed, all
your crowne and dignite,) have hpeped to him benefice upon benefice, so that he is rewarded tenne tymes as moche. The other (as it is seid) payde sixe hundredth poundes for him and his complices, whiche, forbicause that he had lyke wise faught so manfully ageynst your crowne and dignite, was ymmediatly (as he had opteyned your most gracyous pardon,) promoted by the capiteynes of his kingdome with benefice upon benefice, to the value of .iiiij. tymes as moche. who can take example of this punisshement to be ware of suche like offence? who is he of theyre kingdome that will not rather take courage to committe lyke offence, seyng the promocions that fill to this men for theyre so offending? So weke and blunt is your swerde to strike at one of the offenders of this croked and peruers generacyon.

¶ And this is by the reason that the chief instrument of your lawe, ye, the chief of your counsell, and he whiche hath youre swerde in his hond, to whome also all the other instrumentes are obedient, is always a spirituell man, whiche hath ever suche an inordinate loue vnto his owne kingdome, that he will mainteyn that, though all the temporall kingdoms and comonwelth of the worlde shulde therfore vitally be vndone. Here leue we out the gretest mater of all, lest that we, declaring suche an horrible carayn of euyll ageinst the ministres of iniquite, shulde seme to declare the one onely faute, or rather the ignoraunce, of eoure best beloved ministre of rightousnesse, whiche is, to be hid till he may be lerned by these small enormitees that we haue spoken of, to knowe it pleynly him sille. But whate remedy to relene vs your poore, sike, lame, and sore, bedemen? To make many hospitals for the relief of the poore people? Nay truely. The moo the worse; for euer the fatte of the hole foundacion hangeth on the prestes berdes. Dyuers of your noble predecessours,
MAKE THE STURDY LOOBIES WORK.

They are paid for masses, yet never say one.

Your Grace should build us a sure hospital, and send these loobies to work for their living.

Genesis iii. 19.

Whip them at the cart's tail that they take not our alms; so shall we decrease, and your power not pass from you;

your people will obey you, the idle work, people marry, be rich, have the gospel preached, none beg.

kings of this realme, haue gyuen londes to monasteries to giue a certein somme of money yerely to the poore people, wherof, for the aunciente of the tyme, they giue neuer one penny: They haue lyke wise gyuen to them to haue a certeyn masses said daily for theim, wherof they say neuer one. If the Abbot of westminster shulde sing every day as many masses for his founders as he is bounde to do by his foundacion, M. monkes were to fewe. wherfore, if your grace will bilde a sure hospital that neuer shall faile to releue vs, all your poore bedemen, so take from theim all these thynges. Set these sturdy lobies a brode in the world, to get theim wiues of their owne, to get theire lwining with their labour in the swete of theire faces, according to the commandement of god, Gene. iij. to gyue other idell people, by theire example, occasion to go to labour. Tye these holy idell theues to the cartes, to be whipped naked about every market towne til they will fall to laboure, that they, by theire importunate beggynge, take not away the almesse that the good christen people wolde giue unto vs sore, impotent, miserable people, your bedemen. Then shall, aswell the nombre of our forsaid monstrous sort, as of the haudes, hores, theues, and idell people, decreace. Then shall these great yerely exaccions cease. Then shall not youre swerde, power, crowne, dignite, and obedience of your people, be translated from you. Then shall you haue full obedience of your people. Then shall the idell people be set to worke. Then shall matrimony be moche better kept. Then shall the generation of your people be encreased. Then shall your comons encrease in richesse. Then shall the gospel be preached. Then shall none begge oure almesse from vs. Then shall we haue ynoough, and more then shall suffice vs; whiche shall be the best hospital that euer was founded for vs. Then shall we
daily pray to god for your most noble estate long to endure.  

*Dominus caelum fac regem.*

1 Sir Frauncys Bygod, about 1534, in his *Treatyse concerning impropriations of benefices* thus supports the last remedy of the *Beggars Supplication*:

But & as man might (saying their pacynce) be so bolde with them / what mater were it (vnder correction I spoke) if all these improytable sectes / and stronge sturdye route of idle paunches were a lytell poorer / to thede that the trew relygion of christ might thereby soumynge be sette vp and avaunse / and syfficient company of the ministers of goddes true worde prouyded for in all partes. I praye you / what an idle sorte be founde and brought vp in Abbeyes / that nener wyll laboure whyles they ben there / nor yet when they come thence to other mens seruice / in so moche that there gorth a comen prowerbe: That he which hath ones ben in an abbey, wyll euer more after be slonthe full / for the whiche cause they ben called of many men / Abbey loutes or lubbers. And some saye that many of our holye fathers spende nat a lytell vpon my coyn / Elisabeth and Marget (ye knowe what I meane) inso-moche that / that euer they be most popyshee of all / & knowe none other god almost than the gret drafsacke of Rome / can nat deny this to be trew.

Page 6. *Priests' immorallity.* The women were occasionally to blame. In a story told by the author of the *Menagier de Paris*, a young wife married to an old husband from whom she gets no solace, thus answers the question of whom she will love: "Mère, j'aimeray le chapellain de ceste ville, car prestres et religieux craingent honde, et sont plus secrets. Je ne vouldroie jamais amer un chevalier, car il se vanteroit plus tost, et gaberoit de moy, et me demanderoit mes gages* à engager." Compare Robert of Brunne's complaint in his *Handlyng Synne* of these women who *will* have priests. But the lechery of the monks, &c., is continually complained of throughout Early English Literature; see the series of extracts on this subject in my *Ballads from Manuscripts*, p. 59—86 (Ballad Soc. 1868), and *The Image of Ypocrisye*, lb. p. 194-5, &c.

Page 6. *Check to the increase of Population by the not-marrying of the Clergy.* This is complained of in the Record-Office MS Dialogue between Cardinal Pole and Lupton, written by Starkey, one of Henry VIII'S chaplains, which Prof. Brewer has recommended us to print, and which we have had copied. Lupton is made to say: "I have thought long & many a day a gret le to the increse of chrystyn pepul, the law of chastyte ordeynyd by the church, whych byndyth so gret a multytude of men to lyue therafter, as al secular prestys, monkys, frerrys, chaunyonys, & nunnyys, of the wych, as you know, ther ys no smal nondar; by the reson wherof the generatyon of man ys marvelousy leyd & myny-shyd. Wherfor, except the ordynance of the church were, (to the wych I wold never gladly rebel,) I wold playlyne luge that lyt schol be veryn convenyent somethyng to relese the band of thys law; specially consyderyng the dyfficulty of that gret vertue, in a maner aboue

* Peut-être faudroit-il bagnes, effets, joyaux.—J. Pichon.
nature...” Pole answers “... in this matter I thinkke hyt were necessary to tempur thy law, and, at the last, to gyue and admynt al secular preists to mary at theyr lyberty, consyderyng now the grete multytude and nowmbur of them. but as touchinge monksy, chanonsy, freysy, and munysy, I hold for a thyng very commenyt and mete, in al wel-orderyng commyn weyys, to haue certayn monasterys and abbeys, to the wych al such as, after laulful proue of chastyte before had, may retyre, and from the besynes and vanye of the world maywithdray themselfe, holly gyuing their myndys to prayer, study, and hye contemptlyon. thysh occasyon I wold not haue to be taken away from Chrystyan pollycy, wych ys a grete comfort to many feby and ery soulys, wych haue bryn oppressyd wyth wordly vanye. but as touching the secular preists, I ttyrlyllye agre wyth you, and so that obstacle to take away, wych lettyth by many ways the increse of our pepul, as many other thyngys dow more also; among the wych a nother chefe, after my mynd, ys thys:—that grete multytude of servyng men, wych in servyce spend theyr lyfe, neuer fyndyng mean to marry commenytently, but lyye alway as commyn corruptarys of chastyte.”

Page 7. The good luck of a wench who is taken as a priest's concubine is noticed in the Poem on the Exit Times of Edward II. (Camden Soc. Political Songs, 1839; Percy Soc. 1849), “And wel is hire that first may swich a parson kacche in londe,” ib. p. 62.

Pages 9 and 12, Richard Hunne’s case. “In the year 1514, a citizen of London, named Richard Hunne, a merchant tailor, fell into a dispute with the parson of a country parish in Middlesex, about a gift of a bearing-sheet, which the clergyman demanded as a mortuary, in consequence of an infant child of Hunne’s having died in his parish, where it had been sent to be nurset. Hunne made some objection to the legality of the demand; but it is probable that he was secretly inclined to the new doctrines, and that this was the true cause of his refusal. Being sued in the spiritual court by the parson, he took out a writ of premiumire against his pursuer for bringing the king’s subjects before a foreign jurisdiction, the spiritual court sitting under the authority of the pope’s legate. This daring procedure of the London citizen threw the clergy into a fury, and, as the most effectual way of crushing him, recourse was had to the terrible charge of heresy, upon which Hunne was apprehended and consigned to close imprisonment in the Lollard’s Tower at St Paul’s. After a short time, being brought before Fitzjames, bishop of London, he was there interrogated respecting certain articles alleged against him, which imputed to him, in substance, that he had denied the obligation of paying tithes,—that he had read and spoken generally against bishops and priests, and in favour of heretics,—and lastly, that he had ‘in his keeping divers English books prohibited and damned by the law, as the Apocalypse in English, epistles and gospels in English, Wycliffe’s damnable works, and other books containing infinite errors, in the which he hath been long time accustomed to read, teach, and study daily.’ It appears that Hunne was frightened into a qualified admission of the truth of these charges; he confessed that although he had not said exactly what was asserted, yet he had ‘unadvisedly spoken words somewhat sounding to the same; for the which,’ he added, ‘I am sorry, and ask God mercy, and submit me unto my Lord’s charitable and favourable correction.’ He ought upon this, according to the usual course, to have been enjoined penance and set at liberty; but, as he still persisted in his suit against the parson, he was the same day sent back to his prison, where, two days after, namely, on the 4th of December, he was found

* Foxe, p. 737.
suspended from a hook in the ceiling, and dead. The persons in charge of the prison gave out that he had hanged himself; but a coroner's inquest came to a different conclusion. According to the account in Burnet, the jury "did acquit the dead body, and laid the murder on the officers that had the charge of that prison;" and, by other proofs, they found the bishop's sumner* and the bellringer guilty of it. It may be suspected that the excited feelings and strong prejudices of the coroner's jury had perhaps as much share as the weight of circumstantial evidence in winning them to the belief of this not very probable story; but, be that as it may, the violence and indecency shown on the other side were fully equal to any they can be thought to have displayed. While the inquest was still going on, the Bishop of London and his clergy began a new process of heresy against Hunne's dead body. The new charges alleged against Hunne were comprised in thirteen articles, the matter of which was collected from the prologue or preface by Wycliffe to the English Bible that had been found in his possession. He, or rather his dead body, was condemned of heresy by sentence of the Bishop of London, assisted by the Bishops of Durham and Lincoln, and by many doctors of divinity and the canon law; and the senseless carcasse was actually, on the 20th of December, committed to the flames in Smithfield. This piece of barbarity, however, shocked instead of overawing the public sentiment. The affair now came before the parliament, and a bill, which had originated in the Commons, was passed, restoring to Hunne's children the goods of their father, which had been forfeited by his conviction. This, however, did not put an end to the contest. When the Bishop of London's chancellor and sumner had been charged on the finding of the coroner's jury as both principals in the murder, the convocation, in the hope probably of drawing off attention to another part of the case, called before them Dr Standish, who had asserted the claims of the civil power in a debate before the king, and put him upon his defence for what he had said on that occasion; and an appeal was made to the conscience of Henry, that he would not interpose to shield the delinquent from justice, as he regarded his coronation oath, and would himself escape the censures of holy church. Henry's headstrong and despotic character had scarcely yet begun to develop itself; his pride as a true son of the church had received no check from coming into collision with any of his other selfish and overmastering passions: when the convocation, therefore, assailed him in this manner on the one hand, and the parliament on the other likewise addressed him "to maintain the temporal jurisdiction, according to his coronation oath, and to protect Standish from the malice of his enemies," he was thrown into great perplexity. So, to free his conscience, he commanded all the judges, and the members both of his temporal and his spiritual councils, together with certain persons from both houses of parliament, to meet at Blackfriars, and to hear the matter argued. This was done accordingly; and the discussion was terminated by the unanimous declaration of the judges, that all those of the convocation who had awarded the citation against Standish had made themselves liable to a presumine. Soon after, the whole body of the lords spiritual and temporal, with all the judges and the king's council, and many members also of the House of Commons, having been called before the king at Baynard's Castle, Cardinal Wolsey, in the name of the clergy, humbly begged that the matter should be referred to the final decision of the pope at Rome. To this request, however, Henry made answer, with much spirit, 'By the permission and ordinance of God, we are king of England; and the kings

* Or summoner, the officer employed to cite parties before the ecclesiastical courts, more commonly called the apparitor.
of England in times past had never any superior, but God only. Therefore, know you well that we will maintain the right of our crown, and of our temporal jurisdiction, as well in this as in all other points, in as ample a manner as any of our progenitors have done before our time.' The renewed solicitations of the Archbishop of Canterbury, that the matter might at least be respi led till a communication could be had with the court of Rome, had no effect in moving the king from his resolution; and Dr Horsey, the Bishop of London's chancellor, against whom warrants were out, on the finding of the inquest, for his trial as one of the murderers of Hunne, seemed to be left to his fate. At this point, however, the clergy, or perhaps both parties, saw fit to make advances towards an accommodation: it was agreed that Horsey should surrender to take his trial; that he should not stand upon his benefit of clergy, but plead not guilty: and that, satisfied with this concession, the attorney-general should admit the plea, and the prisoner be discharged. This form was gone through, and Horsey immediately left London, where, it is said, he never again showed his face. Dr Standish, however, was also, by the king's command, dismissed from his place in the court of convocation, so that the issue of the business by no means went altogether against the clergy. But, besides the augmented popular odium to which they were exposed, from the strong suspicion that was entertained that Hunne had been murdered, a heavy blow had been undoubtedy dealt at their favourite pretension of exemption from the jurisdiction of the civil courts in criminal cases."—Macfarlane's 

Page 12. Doctor Alyn. By the sayd power Legantine, he [Wolsey] kept also generall visitations through the Realme, sending Doct. John Alein, his Chaplein, riding in his gowne of Veluet, & with a great traine, to visite all religious houses.—Foxe, 1576, 3rd edit., p. 960. 

Page 2. The tenth part of every servauntes wages. "Then the proving of testaments, the prizing of goods, the bishop of Canterbury's prerogative; is that not much through the realm in a year? There is no servant but that he shall pay somewhat of his wages."—Tyndale's Obedience of a Christian Man, Parker Soc.'s edit. of Tyndale's "Works," vol. i. p. 237.
A Supplycation

to our moste Soueraigne Lor-
de Kyng Henry the Euyght /, Kyngge of En-
gland, of Fraunce, and of Irelannde /, & moste
eruest Defender of Christes Gospell /; Supre-
me Heade under God here in Erthe /,
next & immediatly of his Chur-
ches of Englannde and
Irelannde. :

(Matthei .ir.

The harweste is greate, but the laborers are sowe. Wherfore praye the
lorde of the harweste to sende forthe laborers into his harweste. :: :: ::
A Supplication to our moste Soueraigne Lorde Kynge Henry the Eyght, Kynge of England /, of Fraunce /, and of Irelande, &c.

1 M Ost dreade Soueraigne Lorde & most Christen Prynce, / when I remembre the lamentable & wonderfull great blyndnes wherein the most parte of all Englande, not onely of the layete, called the temporaltie /, but also of the clergie, / haue pytously erred and wandered many hundereth yeres /, acceptinge /, reputyng /, & most vngodly, / erronyously /, and blyndely /, estemyng the bysshop of Rome to be supreme head ouer & above all Christen congregations; and in dyuerse other poyn tes suche as be touchynge the necessarype articles of our fai t he; I coulde not but meruell how, and by what meanes, suche pestilent errors and horrible darke blyndenes coulde, or myght, entre /, invade, & ouerflowe this your realme /, & to contynewe so longe in the same /, not espied /, per ceyued /, nor repelled. Consideringe, that by all that tyme and space, this your realme (as the most parte of men dyd then iudge and esteame) was well endowed /, replenyshed /, and furnyshed with many profounde lerned clerkes /, wherof some were bysshops, archedeacons /, deanes /, prebendaries /, parsons /, doctours /, bachelars in deuinite /, & other profounde

1 A six-line ornamental initial letter in the original.
lerned clerkes in bothe the Vniuersytees, which were /
graue /, sage /, & auncyent fathers. Contemplatinge
and revoluinge these things in my mynde—not a lytle
moued /, troubled /, and vexed with the same /—I
applied me with all my powre & dyligence, exquysyteley
to serche & to knowe the originall grounde & cause
thereof. And, in conclusyon, amongst other things it
channeed me to reade in the .v. chapter of Ezay a pro-
position that muche lamenteth the captuyte and bond-
age which commeth & groweth to all people for lacke
of knowleage in Gods Worde /; sayeng /, “Therfore
commeth my flocke also into captuyte /, because they
have not understandinge /; their glory is famyshehd
with hunger /, & their pryde marred with thyrste.
Therfore gapeth hell and openeth her mouthe meruel-
ously wyde.” By this text, gracieouse Lorde, it
appeareth that all myserable blyndenes, captuyte, &
bondage vnder synne /, commeth for lacke of knowleage
in Gods Worde. I had forgotten, at that tyme /, that
Christ reproued the Pharasees /, sayeng /, “You erre
not knowinge the Scriptures;” which repreone and re-
buke shulde haue ben a suffycient admonycyon and
doctrine to me, and to all other; wherby we myght
haue knowne that all errore commeth for lacke of
understandinge & knowleage in the Scriptures. But
by what reason, then, coulde there be suche errore and
blyndenes for lacke of knowleage in Gods Worde in
this your realme, most gracyouse Lorde /, seing there
were suche profounde clerkes, & auncyent fathers /,
byssshops, and studentes in the same /, which dyd
teache & preache vnto the people contynually? The
Apostle Paul, in the .vi. chapter to Timothe, descrybeth
two kyndes of doctrynes /; the one he calleth a godly
doctrine & a doctrine of helth /; the other he calleth
a proude doctrine, full of unprofitable questions /;
stryuynge more for wordes than for godly knowleage /;
WANT OF KNOWLEDGE.

"wherof spryngeth envy /, stryffe /, raylings /, cuyll surmysyngs /, & vayne dysputacions of men with corrupte myndes, destytute of the trueth /; which thinke that lucre is gellynes." This kynde of lemynge and subtle dysputacyons vnto this daye we call scole matters /; from the which Paul commaundeth all Christyans to separate them selues. Soche clerkes, sayeth Paul /, be "euer lemynge /, but neuer atteyne to the knowleage of the trueth;" With suche wayne, vngodly, and vnprofitable leminge /, this your realme, most re-lorded Soueraigne, was euer moche replenished through the preachinge and teachinge of suche scole men & subtyll disputers /; otherwise called deceyuers. Which was one of the causes of our myserable blyndnes /, and of dyuerse errors and abuses spronge vp and crept into this your Graces realme. For certeynely, if the clerkes, of this your Graces realme /, had bene endowed with true knowleage of Gods Worde /, and had also syncrely preached the same /, although he suche errors and blyndnes had entered into this realme /; yet they shulde neuer have so longe con-tynewed in the same /, but we shulde have bene deleyuuered through the Worde cleryly from them. As Christe saieth: "If you continewe in my wordes /, then are you my very disciples /, & shall knowe the trueth /, & the trueth shall deleyuer yow /, and make you free." Therfore, most dread Soueraigne Lorde /, seinge that all erreoure /, spyrtyuall blyndnes /, myser-able captiuyte /, and seruyle bondage vnto synne, com-meth for lacke of knowleage and syncre understaundinge in the Holy Scriptures /; and, of the contrarye parte, through the knowleage & syncre understaundinge of the Holy Scriptures, we knowe God our Father and his Sonne, Ihesus Christ, our Lorde /, which is eternall liffe /; we be also become free from all condemninge of synne. And through the syncre and true know-
And become His children, league of the Word we be newly regenerate, & become the childerne of God, the habitation and dwellinge place of the Holy Ghoste, which moneth & steareth vs ever to mortefye the flesh, & all her synfull lusts and concupsiscence, [and] to abhor and resist vice. What is then so necessary, good, and profitable for the Christian people, bothe spirituall and cyuile wealtie, as the Worde wherby we receyue faithe, & by faithe, the Holy Ghoste? What troubleth all commen wealthes, but treason, murder, thefte, couetousnes, adulterye, extorcion, whordome, dronckenes, periurye, & suche other synne? as saythe the Prouer. xiiiij. Holy Ghoste: "Justice and rightoussnes maketh the people wealthy; but synne maketh the people most myserable." And all these the faithfull, through the true and syncere understandinge of Gods Worde, doo euer studye and labour to overcome, and ytterly to abholyse by faythe. As Paul sayeth: "They which be Christes, doo cruycyfe the fleche, with her lustes and concupsiscence." All good workes and councyelys [be] increased and stabylshed through faythe. There is no study, strife, nor laboure agaynst synne, but through faythe. All conscyences that be quyet from synnes, onely through faythe be made quyet. As Paul sayeth: "Because we are justyfied by faithe, we are at peace with God, through our Lorde Ihesus Christ." What counforte hathe any Christian man in aduersyte, temptacions, desperation, but onely by fayth in Gods Worde? The Christyan man hathe noo refuge nor helpe to resyst synne, but onely by Gods Worde, as our Saviour Christ dyd; wherein he must fyxe a sure and constant faythe. Faythe causeth vs and all ours to be acceptable in the syght of God. For a conclusion: "What souer is not of fayth that same is synne." And withowte a constante and sure fayth, it is impossyble to please God. All
men maye well perceythe / that, by the lawes, and by
the inste execution of them /, although synne may be
for a tyme cohbyted and restrayned /, yet it can not
be suppressed and abholyshed /, but onely through
fayth. For there was neuer more godly lawes made
for the punyshmente of synne /, nor neuer more inste
and godly executyon of lawes admynistred /; and yet
there was neuer more synne raynynge. For cyyyle
lawes made by man / can not be of greater effycyce or
strength /, nor worke greater perfectyon, vertue, and
good wyll in man /, than the lawe of God: but the
lawe of God not onely worketh no obedyence or vertu-
/; but rather, through occasyon taken of the in-
firmyte of the fleshe /, steareth vp synne, / as sayethe
Paul: “I knowe not what luste dyd meane /, except
the lawe had sayed, thow shalt not luste. But synne
toke an occasyon by the meanes of the commande-
mente /, and wrought in me all maner of concupiscence:/
for verely, withoute the lawe, / synne was dead.” “I
ones,” sayth Paul /, “lyued without lawe; but when
the commandement came /, synne reuyued, / and I was
dead /: and the very same commandement, which was
ordyned vnto lyffe /, was founde to be vnto me an
occasyon of death.” But nowe, gracieouse Lorde /, for
asmoche as it appeareth / that the lawe of God was not
guen to take awaie synne /, but rather to declare and
to punyshe synne; moche lesse any lawe made by man /
can auoyde and put away synne. But faythe is the
ture instrument appoynted by God /, wherby synne is
ouercome & exiled. As the Scripture sayeth /, that
“God through faythe / dothe puryfye & make cleane
all hartes.” Also Christ sayethe /: “Nowe are yow
cleane /, by the meanes of the worldes / whiche I haue
spoken vnto you.” This faythe shall cause /, noryshe,
and breade / true obedyyence /, and all other vertues
in your Graces subiectes hartes /; wherby they shall be

Sin cannot be suppressed except through faith.

There never were more godly laws made, and
lawes never were better enforced than now; and yet there
was never more sin.

God’s law does not bring obedience, but rather stirs
men up to sin, as St Paul says it did with him.
Re. vij.

The Law of God was given, not to take away, but to punish, sin.

Act. xvi.

Faith will produce and nourish true obedience to the laws of God and man.
enforced to labour, not onely to observe & kepe Godes lawes /, but also all your Graces ordynances, commandements, and lawes /, without grudge or murmuracyon. This sayth, as the Apostyle sayeth, "commethe by hearinge" of Gods Worde preached /; wherof byshops, parsons /, vicars /, & suche other, called to haue spirituall cure /, be, or shulde be, dylygent ministers /; to whose vocatyon iustely parteyneth to declare and publyshe Gods Worde, sincerely & truely, / to all the people commyttted to their spirituall charge. Most myghty Prynce, wherfor, if the pastours appoynted to preache & teache Gods Worde /, within this your Graces realme, / doe not dylygently instructe & teache the people commyttted to their spirituall charge with the sayd Worde, / accordinge as they be commaundedy in the Scriptures, Act. xx., i. Pet. v., and Malache. ii.¹; all kynde of synne shall increase and abonde, / & the people vtrerly be devyded. As sayeth the Holy Ghoste: "When the worde of God is not preached, the people perysheth." Also the Wyse Man sayeth: "All men be vayne in whom there is not the knowleage of God." Wherfore, without any doubt, the wante and lacke of preaching of Gods Worde synecerely and truely hathe bene the very originall grounde and cause of all the insurrection, / commotion /, [and] dyscension /, which hathe rysen, or begone, within this your Graces realme, or any parte thereof. For through the want of preaching of Gods Worde synce[re]ly, haue entered in all popyshe blyndenes /, vayne & dead ceremonyes /; menes tradycyons be crept into the consenyences of the symple innocentes, in the steade of the laue of God. Yea, ydolatrye, and all hypercysye, with detestable superstycyon, for lacke of the lyght of Gods Worde /, is become Gods seruyce. And yet, notwithstanding this wante & lacke of knowleage in Gods Worde & the

¹ Orig. xx.
euyll which commethe manyfestly therof, (the more it is to be lamented/) there be many popishe monckes, which late were abbottes, (to whom not onely vnworthely/, but also vnjustely/, were given greate pen-syons) and many of their convent monckes, hauinge nother lernynge nor other godly qualityes, (apte, meate, or convenyent to be in spirituall pastours) be nowe admytted to have cure of soules. And some suche which ded neuer knowe what is a soule/, nor yet be able to have cure ouer one soule, / be nowe admytted to have charge ouer an hundreth and many moo/, to the in-crease of all yngnorancye, and all popishe blyndnes/; the hyghe waye & meanes to let in all kynde of synne/, to the ytter dampncacion of all the soules commytted to their spirituall charge. Alas! doo nother the patrones of suche benefyces/, nor yet the incumbentes, ponder, or regarde, Gods threatenyngs by his prophete Ezechieell, sayeng: / "As truely as I lyue, sayeth the Lorde, for asmuche as my shepe are robbed, and deuowred of the wilde beastes of the felde, hauynge noo shepherde, / and seing that my shepherdes take noo regarde of my shepe/, but feade them selues onely, / and not my shepe: Therfore, here the worde of the Lorde, O ye shepherdes: / thus sayeth the Lorde God, Beholde, I my selfe will [be] ypon the shepherdes/, and requyre my shepe from their handes/, and make them cease from feadinge of my shepe; yea, the shepherdes shall feade them selues nomore:/ for I will delyuer my shepe owte of their mowthes/, so that they shall not deuoure them after this." If this threatenynge be not suffi-cient warnyng & moncyon to suche blynde shep-herdes/, yet, at the lest, let them feare Goddes curse pronounced in the same chapiter agaynst suche negly-gent and ignoranct shepherdes; / sayenge: "Woe be to the shepherdes of Israel that feade them selues ! /

1 Orig. xiiiij.
shulde not the shepherdes feade the flocke /? yow haue eaten vp the fatt, / yow haue clothed yow with the wolle /, the best fedd haue youve slayne /: but the flocke haue yow not noryshed /." Heauen and erthe shall muche rather perishe /, than these worde, wherwith God threatened suche pastours,shalbe found vntrue /; that is /, "I will requyre my flocke of the handes of the shepherde." Suerly, most myghty Prynce, it is to busye an office /, to muche and laborous, for one spirittuall shepherde, (although he were very expert and conynyng) to guye, ordre /, and kepe /, two or thre flockes of shepe /, specially beyng so farre dystant one from an other /, that the sayd shepherde can not be dayly present with them /, to se the governaunce of them /, whose nature is dayly to falle into dyuers offences and spirittuall dysenses. For the office of a good shepherde is, not onely to feade his shepe in good pasture /, but also to seke the lost shepe /, to call agayne the strayed shepe in-to the ryght waye /, to salue and to make hole the broken which is broken by aduersyte /, the weake and sycke shepe in the faythe /, with the comfortabole promyse of God /, declared in the Gospell /, to make stronge & constant; and, in conclusyon, to aduenture his lyfe (if nede requyre) for the defence of his shepe /. Ever circumspecte, lyeng in waye / to resyst the roringe lyon /, whiche neuer slepeth /, "goinge abowe and seakynge whome he maye devour." Suche, I saye, shulde be their diligent and dayly cure over their flocke shewed /, that, not onely their shepe /, but also all other /, seing and perceyvinge¹ their great paynes and labours sustayned and taken for the helpe and cōnforte of their shepe /, the gentle entertaynyinge with all pacyence /, humyle, & meakenes /; the fatherly love /, cure /, and affection, which the said byshöps and other pastours shulde

¹ Orig. seing and preceyvinge.
daylye shewe /, exercyse, & practyse towards Christes flocke, commytted to their spirituall charge; shall judge them, not onely good shepherdes, which enter in by the dore, / but also shall receyue & take them to be most gentle /, prouydent, kynde, / & loyvinge spirituall fathers. But, most prudent Governoure, how shall this fatherly cure /, love /, zeale /, & affection /, be shewed by the pastoure to his spirituall shepe, which daylye cowcheth and wayteth in your Graces house, and in other noble & worshipfull mennes howses /, attendinge to please men which is called onely to serue God? And, not withstandinge his callinge to be a shepherde to feade Christes flocke, / yet he will sease se and visyte them ones in the yere. And when he visyteth his shepe /, what ghostely counsell he geveth them /, God knoweth. But, for the more parte /, he loketh more to his owne profett than to their wealthe. Alas! the ambicyouse appetye & burnynge covetuouse desyre of the yerely commodityes /, profettes, and advauntages of the benefyces /, hathe vtterly extyngyuished and supped vp the spirituall love /, zeale, and affectiion which ought to be in the spirituall shepherdes. So that nowe it is strange and wonderfull to se, or knowe, one iustely to execute his offyce. Is this the honowre of any kynge, or of any other gouernowe /, that, under the cloke and coloure of hys seruyce /, a byshope or pryste, called to feade the flocke of Christe /, shall leaue the same vntaught /, and so transgresse the commaundement of Christe for the pleasure of men? Haue not kynges and other rulers sufficyent to endowe their chapelaynes /, without retayninge suche which haue receyued lyninge and stypende to be in their churches feedinge Christes flock? This is tomoche dishonoure to the higher powers /, agaynste Goddes commaundement & word, to retayne an other mans seruauent. But certenly although he does not visit his flock above once a year, and when he does what counsel he gives them, God knows.

It is wonderful to find one shepherd who does his duty.

Should a king so transgress for the pleasure of men?

Kings and rulers keep chaplains who have other livings, which is a great dishonour to the commands of God.
your Highnes, or other rulers, wolde nother call nor retayne suche ambycious e blynde guydes and ouetous pastours /, yet they their selfe will, by their fryndes, make importunate sute, and laboure to be in service with youre Magestye, and with other rulers. The cause is thys / (one inconuenyence graunted /, many folowe): there is a lawe made in this your noble realme /, that all spirituall parsons of youre counsell maye haue thre benefyces with cure. And all the chaplaynes of the Kynge, / Quene /, prynce /, prynces, or of any of the Kyngs children /, brethren, / sisters /, vncles and aunte /, maye haue lycence to haue two benefyces with cure. Every duke /, marques /, erle /, vycounte /, archebysshope /, bysshope /, with dyuers other estates, aswell men as women, maye haue two chaplaynes which maye haue two benefyces with cure /, And also dyuerse other degres of scole maye have euery one two benefyces with cure /; so that one of his cures, although he take the profyttes, yet from that he muste neades be no[n] resydent ; and, peraduenture, to bothe he wilbe no teacher. And also, in the same estatute, all attendaunce in the courte and all other attendaunces vpon suche noble and worshipfull men which be lycenced to haue chaplaynes, maye be not resydent ; / yea, pylgrymes, in the tyme of goynge and commyng from their pylgrymage, be by that estatute dyspenced to be non resydent. O Lorde, where was the light of thy worde /, which shulde haue bene written in the hartes of the makers of that estatute ? If there had ben godly shepherdes, which had dyligently executyd their office and callynge /, we had never wandered so blyndely to agree or consent to the makynge of any suche estatute. Doo we, which thinke vs Christen men, esteame spirituall benefyces to be nothinge els but lyvinges to be geuen at owre pleasure to prystes for servyce done ? Is not the benefyce geuen...
in respecte of a spirituall offyce to be executyd & done? Doth not God commaunde straytely shepherdes to feade their flocke dyligently? Can man, or any lawe made by man, dyspence with Gods commaundement? O Lorde, in thy handes be the hertes of all kynges and other rules;/ enlyghten theyr hertes, Lorde, with the light of thy worde, that they maye knowe and see this pestylent yll blyndenes/, which so longe hathe caused thy shepe to wander in darckenes. And, when they perceyue it, they maye haue grace and tyme to reforme the same, to thy glory and the helpe of this realme. And I shall euer desyer of God, and wishe in my harte, to all suche as be called to be attendaunte nere youre Magestie, and all other gouernowres/, that for any carnall loue/, favoure/, or affectyon whiche they beare to any man for kyndred/, frendshipe/, luker/, or otherwise/, they doo not make any suche vngodly suytes, petycions, or requestes to your Highnes, or to any other gouernoure, for any parson to be admytted to any offyce, other spirituall or temporall/, whome they doo not certeynly knowe, by most certeyne and sure proues and witnesses/, to be apte/, meate/, and conuenyent, aswell in lernynge as in condycions/, to exercexe, vse, and to occupyse suche offyce and rone/, wherunto he, by suche their sute m[ade]/, shulde be called/, appoynted, and admy[tt]d (not onely for the shame, rebuke, and troble whiche, vpon dewe examynacion had, and founde contrary to their vntrewe sute) myght come and growe to them/; but also for the cuyll incommodyte and pestilent myschef which shall ensewe to all suche which shalbe commytted to his or their gouernaunce & charge. Alas, that euer amongst the Chrysten flocke, shulde be knowen or sene that suche office, which in Christes churche shulde be the most godly/, most necessary/, most spirituall, and most proftyable, bothe to the bodlye and sowle/, nowe is become livings to be given at pleasure? God commands shepherds to feele their flocks, and man's law cannot dispense with God's.
and the possessor have neither virtue nor godliness!

It is needful to be circumspect in the choice of ministers,

and to deprive such as are unfit, because they either cannot or do not execute their office,

and put others into their places,

Such as do not their duty

are images, bearing only the name and appearance of bishop or pastor,

a worldly honowre, a lordely dignyte, a riche, carnall prowde lyuine, estate, and countenance; and the possessor thereof, hauinge onely the name of a spiritual minyster, but no vertue nor godly qualyte, which of right ought to be in euery suche minister. If this be well pondered and remembred, most mercyfull Gouernowre, it is most to be lamented. But seynge this blyndnes hathe so longe contynewed, & somoch ewill hathe ensewed & folowed thereof, in the defaulte of godly pastours1; it is not onely nedefull above all things to be circumspect in chosynge earnestly tried, experte, and well lerned ministers to preache Gods worde syncreely, but also to compell the same to be demurante, abydinge, and resydent vpon their cures. And all suche whiche be crepte into benefices for laker & aduauntage, vpon vntrewe suggestion and false fayned sutes made, which can not or doe not feade their flocke, to depryue them of suche benefyces, because they other can not or doe not execute the offyce to that belonginge. Suerly no wyse man lyghteth a candell and putteth hym vnder a bushell. And if he set vp a candell (which, other for lacke of talowe or for other cause, can not gene light) shortly he taketh hym downe and putethe an other which can gene good light in his place. So all godly wyse men will order all spirituall lightes, which in dede can not gene godly lighte for lacke of spirituall grace which shulde be in them. For byshops and other pastors, which be chosyne & instytuted contrary to the ordynaunce appoynted & prescribed by Gods Worde, which other doe not or can not execute the offyce perteyninge to his or their callynge, be not godly & trewe byshops, but rather images & idolles, hauinge and bearinge onely the name and outwarde apperance of a byshoppe or pastor. But as concernynge the lernynge, vertue, &

1 Orig. postours.
other godly qualitie whiche parteayne & be of greate necessyte and justyce requysyte to be in every godly pastor, / they haue nothynge lesse. For if Christ (which sayed to Peter "from henceforth I make the a fysher to catche men") doo not endowe the officer wyth lernynge /, grace, / power, & good will to preache his worde, before patrons present hym to any suche spirituall office; / the electe and admytted, notwithstanding the admyttse and patrons presentment, / shall continually abyde and remayne an hypocryte /; and suche one, which dothe not enter in by the dore /, but presumeth to enter withowte a weddynge garment, / whom Christ condempneth to owtwarde darckenes /, and also callethe hym a thief /, whose rewarde, withowte doubt /, shalbe, at the daye of the laste judgmente, with thefes /; if he repent not, and reasygne vp hys offysce, which he can not execute, fulfyll, and performe.

Wherfore I mystrute not but that all suche which have power to present and to admyttte theyr clerkes to spirituall offfices, readynge this lytle booke for the dyscharge of theyr consayence, and for the glory of God /, the commodye and vtylite of the common wealthe (which will ensewe the godly presentacyon and admysson of well lerned /, approvned, & godly clerkes to spirituall offfices) will, from thenceforth, applye and conforme them to the forme and maner of electyon of spirituall mynysters appoynted, prescrybed, and lymytted by Godes Worde /, which is this:—That every man chosyn to vse any spryrituall offfysce /, shulde be fyrste well proved, aswell for theyr lernynge as also for theyr other vertuouse condycions. Fyrst for theyr lernynge, wherwith they muste not onely be able to enstruce and teache the people commytted to theyr spyrytuall charge /, but also able to reproofe other which resyst the same doctrine /, with many other godly qualitie. As it appereythe in the fyrste Epistle suppliance.

MUST BE DEPRIVED.
of Paul to Tymothe and also to Tyte. Nowe, moste myghty Defender of the Christyan religyon /, seinge that Gods Worde hathe prescroyled and declared that every man, which shalbe called and appoynted to be a spyrituall mynister, muste fyrste be proued and knowen howe godly and spirytually he hathe enstructe and teached the people /; what lernynge he hathe in the Scriptures /, and not in the lawes /, to reprove erroours and to condempne heresyes; what paynes he hathe taken in preachynge Gods Worde /; and also whether he hathe genen good example of lyuinge accordinge to his doctryne. In this maner every Christian ought to proue his clerke before he other present or admynyt hym. But nowe also, moste benygne Lorde /, consydra of the contrary j)arte, & remembre for what causes the kynges, your noble progenitors in tymes paste, haue chosen bysshoppes /, & other patrons haue presented theyr clerkes to personagyes & vicaragyes to haue cure of sowles. These bothe causes well consydered, no man wyl greatly menuell that we haue wandered so longe in blyndenes. For, in tymes paste, kynges haue genen theyr byshopyrcks to theyr counsellers / chap-laynes, whiche haue bene daylye attendauntes in the courte /; which also haue done to them good seruice / as enbasadoures /; or to suche which haue taken paynes in theyr household /, as amners & deanes of the chap-pell /, clerkes of theyr closett, & suche other officers /; where Gods Worde dothe not approue any byshopricke to be genen to any man for any suche seruice done /, or for any suche paynes taken /; but onely for the gifte whiche he hathe from God to preach his worde /, & for the paynes & labours susteyned in preacheinge of the sayd worde. And as kynges, in tymes paste, haue abused their gifts of byshoprikes /, so noble men & worshipfull men, aswell of the clergie as of the layete, haue abused their presentacions to their prebendes, per-
sonages, & vicarages; geuing them to their chap-
yynes, or to other, for kyndred in bloude, or for 
alyaunce; or els to suche as haue ben surveyours of 
their landes, receyuoures of their rentes, stuardes of 
their housholde, faconers, gardyners, or to suche 
other whom they faunoure for suche worldly service & 
qualyties. To suche they geue their benefyces as re-
wardes or wagies to hyrelynges, for suche seruice done, 
or to be done; hauinge lytle or noo regarde to the 
great charge and spirituall cure which, by Gods 
Worde, belongeth to all suche spirituall offices. For 
kynges and rulers, in tymes paste, had noo lesse know-
leaage of any thyngye then of Godes Worde, which the 
subtyll byshops & crafty prystes were ener studione 
and desyrouse to kepe secrete from the hygher powers. 
For sO lONGE as Godes Worde was kepte secrete and 
hyden from gouernours, so longe the clergye dyd 
leade, not onely the kynges, but also, all gouernowres 
& the commons, whyther they wolde. Thys was the 
crafty polycye of the clergye, to kepe the knowledge 
of Gods Worde from all men, that they myght un-
lawfully and vnworthely be promoted to spirituall 
cures and vse the profettes of them vngodly; and 
that they myght also contynually exercise their lustes 
and iniquyties. As Paul sayth: "They be agaynste 
all men; forbyddinge vs to speake to the people 
wherby they myght be saued, that they myght fullfyll 
their iniquyte and synne contynually." Haue not some 
of the byshops, with their retynewe, at this daye prac-
tysed their olde polycy to extingyuyshe the light through 
all Englande, that they myght ones agayne leade vs 
quetyly in darckenes? Is not there a lawe made, 
through their crafte & subtylte, which geneth power to 
certayne commyssioners, wherof the byshoppes chau-
celler or commyssarye shalbe named to be two of the 
commyssioners, which shall haue full power to take 

and haue pres-
ented livings 
to surveyors, 
receivers of rents, 
falconers, 
gardeners, and 
such like, as 
wagestohirlings, 
or as rewards.

Kings and rulers 
were ignorant of 
God's Word in 
times past; 
the bishops were 
ever anxious 
to keep it secret.

This was the 
policy of the 
clergy to keep 
this knowledge 
from all men 
in order that 
they might be 
promoted to 
spirituall cures.

A law is made 
through their 
craft appointing 
commissioners
to receive & burn all books which are contrary to the Six Articles, according to their discretion.

The intention is to take away all books against the primacy of the Pope, because no one can write against this without touching some of the Six Articles. They punish all who have any learning, calling them heretics.

lest the iniquity of the clergy should be known.

No man who knows the Scriptures will marvel at this, Joam. iiij.

because he who does evil hates the light.

And since they have contrived to

into their custodye all suche bokes wherin is conteyned any clause or artycle repugnaunte to any of the Syx Artycles, / and the same bokes to burne and dystroye, as to the discretion of thre of them shalbe thoughte expedyent? Marke well what they purpose by this estatuate. Are there any bokes which write agaynste the Popes prymacie /, but they also write agaynste some of the Syx Artycles? Their colour is to take awaye all bookes which wryte agaynste the Syx Artycles /; but their very intente, purpose, and mean-ynge is to take awaye all bookes, whiche conteyne any godly lernynge, that write agaynste the Byshop of Romes prymacie. Howe cruelly doe the byshops punyshe all them which pretende to haue lernynge, and specially in Godds Worde? Suche they call here-tyques, and persecute with puttynge them to open shame /, with enprysonmente /, and, in conclusyon, with deathe most scarcefull and paynefull. All this they doe to dyscourage all men from the studye of Godds Worde / fearinge leaeste that, by suche studiouse braynes which lerne Godds Worde and publyshe the same, their iniquyte shuld be made manyfest. What studye and paynes they take to kepe the light from the people! But no man, which knowethe the Scriptures, will meruell of this their polycyne and crueltye. For Saynt Iohan dekarethe their practyse playnely, sayenge: "He that doth euyl hateth the light" /; and why? because his works, whiche be euil, shulde not be reproued by the light. And, for asmuch as our byshops countenance of lyninge /, their greate possessyons /, and lordely demuyons in them, agreeth with Godds Worde /, as deathe with lyffe /, God with the deuill /, light with darekenes /; threfore they hate the light which dekarethe the same /, and studye to suppresse the same by all craft and polycye. And, seinge they can so craftely jugge, and haue suche frendshipe
ARTICLES TO BE BURNT.

and fanoure\(^1\) to convey /, [&] brynge to passe / that all bookes shall come into their handes vndre the colore of the Syx Artycles /, it is to be feared that, shortly; they will, by lyke crafte, subtylte and frendshipe, procure the Byble in Englyshe to be taken from the layete /; & then we shalbe ledd in darckenes by our byshops and other blynde gydes, and not pastoure, at theyr pleasure and will /; which is the effecte of all theyr study, laboiu’e, and purpose. Nowe, most vale-aunt Defender of Christ /, it appearethe playnely howe many myseryes we be wrapte in /, through the vngodly electyon of suche as be admytted to haue spirytuall cure and oflyce to teache Godds Worde /; whiche not onely haue lytle lernynge /, but also they be enemyes to all men whiche can and doo preache Gods Worde sy[n]cerely and trewly, / because they lyue contrarye to the same /, as I haue before declared /. And this is the origynall grownde and cause of the abundance and increase of darckenes and of synne /; as also of the longe contynuaunce of popishe blyndnes whiche hathe raigned in this realme so longe. Wherfore, yf the byshops, and other elected and appoynted to be shepherdes accordinge to theyr vocatyon and callinge /, be not fyrste knownen and well proued to haue suche knowleage & godly doctrine /, so that they can, & also doo, instantely & dyligently preache Gods Worde, whiche is the light expellinge all darckenes of synne /, then muste nedes synne encrease & abounde, without any restraynte or brydle. “For if the light whiche is amongst yow be darckenes /, howe muche shall the darckenes be!” Youre Grace and your cyuile power doo punmyshe synne /, when it is done and commytted /, accordinge to the iustycye of lawes /, as to your vocatyon & office of right belongethe to doo. But the office and dewtye of the pastor is to preache Goddes Worde /,

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\(^1\) Orig. fanoure,
disposed to commit sin;

so that, through him, there is less sin,

the higher powers have less occasion to execute the justice of the law, and men's lives are preserved.

Wherefore it appears the good order of the realm depends upon the ministers of religion.

It behoves patrons to be very careful in the bestowal of their patronage.

If they present unfit pastors, such as do not feed the flock committed to them, Ezek. xxxiij.

they consent to the death of souls,

wherby he shall convert the hart of the synner /, which is willinge & disposed to doo synne /, so that he shall not breake fourth to doo synne in the acte /, which the eyyle powre, for the example of other, by equyte and iustye is bounde to punyshe. Therfore the dylygent execytyon of the office of the pastoure shalbe the pryncipall meane and occasyon that lesse synne shalbe coommityted ; / and so the higher powers shall haue lesse occasyon to execute the extreame iustye of lawes /, and, consequently, many mens lynes, whiche nowe for lacke of the knowleage of Gods Worde shuld be loste for coommitytinge murder /, felonye /, and suche other offences, / shall then be preserved that they shall not coommityte suche offences /, which the hygher powers, by the lawes of equyte & iustye, be compelled to condeempe and to punyshe with deathe. Wherfore, the godly tranquyllyte, reste, and peace of all this your realme, soueraygne Lorde /, and the good order of the same, hangeth and resteth moche vpon the godly and dylygent executyon of the office of pastors and of the spirituall shepherds, dewly called and admymted accordinge to Gods Worde. Therfore it behoveth the presenter of the clercke to a benefyce and cure of sowles, to be cyrcumspect and well ware what clerke he doth present /; and that he have good knowleage, experience, and proue of his clercke before he present hym. For, if a pastour doo not feade the flocke of Christe coommityted to his charge /, the deathe of their sowles shalbe required of his handes. As the prophete Ezechiel sayeth in the .xxxijj. chap.: And if the patron willingly /, other for kyndred /, fanoure /, frendshippe /, service, or money /, present a clerke which he knoweth not to be so lerned in Gods Worde /, that he be able to instructe and teache the people coommityted to his charge, bothe with the lawe of God and withe the Gospell /, every suche patron consenteth to
the deathe & damnacion of the soules commytted to the charge of suche vnlearned preste. And therefore suche a patron shall also be punyshed with lyke payne; which is eternall, as the Apostell sayeth: "Not onely they that doo euill, but also they whiche consent therunto, shalbe punyshed with lyke payne." What wyse man liuynghe wolde hyer a shepherde to gonerne hys beastly & worldly shepe, which nother wolde nor coulde feade, handle, salue, nor ones see his shepe commytted to his charge? Suche a wyse shepherde wolde shortly make his masters profet come to lytle aduauntage. Surely, a wyse man wolde choose no suche shepherde. And if he were deceyued through the persuasyon of some of his frendes, yet, when he hathe proved that he hathe no connynghe nor dyligence, he will shortly dyscharge hym of his cure and service. Shall we be estemed Christen men whiche have more tender loue and affectyon to owre corruptyble profett, than we have to the honowre of God & the eternall wealthe of the immortall sowles of owre Christen bretheren, whom Gode commaundeth [vs] to loue as owre selve? Christ ded not commytt to Peter the cure and charge of his shepe, before he asked thryse of Peter whether he loued hym. As who shulde saye, I wolde not commytt my best beloued ioywell and treasure vnto the, vnsesse thowe lone me hartely. I wolde wysehe that all gouernowres and rulers in this case wolde take example and folowe Christ, whiche, knowynge the good wyll of Peters harte, yet as one ignoraute therof, ded demaunde this question of Peter before he ded commytt the cure of his flocke to hym; therby to gene example & commondoctrine to all his faythfull folowers, that they shulde have suche tender and feruent loue towards the Christen sowles, that they wolde not commytt the gouernaunce and cure of them to any man, but vnto suche of whom they have

and will be punished with eternal pain. *Rom. i.*

What man would hire a shepherd who would not feed his sheep?

If a wise man were deceived by his friends' persuasion, yet he would soon discharge him from his service.

*Io. xxi.*

Christ asked Peter whether he loved Him, before He committed His sheep to his charge;

and patrons should follow this example. He knew Peter's good will, but He asked the question to give example to all His faithful followers.

Surely, a wyse man wolde choose no suche shepherde. And if he were deceyued through the persuasyon of some of his frendes, yet, when he hathe proved that he hathe no connynghe nor dyligence, he will shortly dyscharge hym of his cure and service. Shall we be estemed Christen men whiche have more tender loue and affectyon to owre corruptyble profett, than we have to the honowre of God & the eternall wealthe of the immortall sowles of owre Christen bretheren, whom Gode commaundeth [vs] to loue as owre selve? Christ ded not commytt to Peter the cure and charge of his shepe, before he asked thryse of Peter whether he loued hym. As who shulde saye, I wolde not commytt my best beloued ioywell and treasure vnto the, vnsesse thowe lone me hartely. I wolde wysehe that all gouernowres and rulers in this case wolde take example and folowe Christ, whiche, knowynge the good wyll of Peters harte, yet as one ignoraute therof, ded demaunde this question of Peter before he ded commytt the cure of his flocke to hym; therby to gene example & commondoctrine to all his faythfull folowers, that they shulde have suche tender and feruent loue towards the Christen sowles, that they wolde not commytt the gouernaunce and cure of them to any man, but vnto suche of whom they have
prone & sure knowledge /, that, aswell by their preaching & sincere teachinge of Gods Worde /, as also by their vertuouse lyuinge consonante to the same Worde, they had vnfaynedly a faithfull hardy lune towards Chrystes flocke. A blynde eye, which can not dyrecte and leade the bodye, is a blemyshe and a burden to the natural bodye /, and noo commoditye. In lykewyse a man, chosen to be a spyrytuall pastour, which hathe not the knowleage and grace to preache the lawe and the Gospell /, is but a blynde eye, not able to dyrecte and leade the spyrytuall bodye. Wherfore, if any patron chose any suche ignora?2te man to be a pastoure /, a spirituall eye and light to leade the spirituall sowles /; he not onely deceuyeth them, but also, asmoche as lyeth in hym, kyllethe the bodye / and dothe greate inuurye to Chrystes bloode. Now it maye please yowre Highnes to note and marke what myschef and inco/zuenyence folowe the electyon and admyssion of an igngorante pastour.1 Fyrste, if an igngorante byshope in Gods Worde be admytted /, he can not execute his office because he knoweth not the Scruptures whiche teacheth hym what shulde perteyne to liis owne office. And as the byshop is ignorante in Godes Worde /, so he admytteth suche as be vnerlerned in Gods Worde /; evyn suche as by noo possybyleite can execute the office of their callinge; idle parsons /, vnhappy / dronckerdes /, swerers /, common players at all vnthryftye games /, in whom there is no chastyte, / noo humlyyte /, instyee /, nor temperance. For a conclusion, / suche they admyttte in whom there is noo holynes /, godly doctryne /, nor good example of lyuinge. To suche they commytte the healthe of sowles /, the flocke of Chryste, dearely bought with his bloode /; by suche ylle and wicked harlottes the enheritaunce of Chryste is troden vnder fote. All euyll condycions, maners, 1 Orig. pastour.
and doctrine by them be taught; so that in the stead of Holy Scripture is crept in the doctrine of lies, all superstitions, dead and vayne ceremonies, and licence to do all kynde of synne. Some of the blynde ignorante prestes teache the people that God is honowred, and soules releued of their paynes, through the ringinge of belles, painting of postes, and setting vp tapers and candelles before the sayd postes, whom the blynde prestes doe bothe sence and sprynclle with holy water. An other sorte of blynde shauelings teache the people to gett heaven with fastynge; this by fasting on this or that day, and keeping Holy Days. They say much holiness stands in holy oil, holy chrism, holy water, and such like, and in keeping church ales.

Thus the blind lead the blind, and both fall into the ditch.

Some of them teach that souls are relieved by the ringing of bells, painting of pillars, setting up candles; by fasting on this or that day, and keeping holy days. They say much holiness stands in holy oil, holy chrism, holy water, and such like, and in keeping church ales.

Thus the blind lead the blind, and both fall into the ditch.

What honest louinge harte doth not bewayle the habundance of synne, the longe myserable blyndnes, wherin this realm hath ben ledd and wrapped in through the yngnorancye and neglygence of suche blynde guydes? But is there any Chrysten harte which can forbere contynuall syghinge and mornyng, remembringe the multytynde, yea, the infynyte number, of sowles (whiche without the great mercye of God, passinge all his worckes) through ing-

Such things make all Christians mourne when they remember the huge number of souls which are utterly damned.
The country is overburdened with priests of one sort or another.

These idle parsons are no good, but a harm to the State; they are robbers of the king's subjects, who are deprived of the alms of many in the hope that prayers avail for the dead.

Many are encouraged to live wickedly by an ungodly trust in masses and dirges.

norancye & negligence of suche blynde shepherdes /, be ytterly cast awaye & dampened? What good eyyylte harte wolde not, I saye, lament and bewayle the greate burden wherwith this your realme (gracyouse Lorde) is overcharged through the greate multytude of chaunterye prestes /, soule prestes /, chanons /, resydensaryes in chathedrall churches /, prebendaryes /, muncke pen-cyons /, morowe mas prestes /, vulnered curattes /, prestes of gyldes and of fraternytees, or brotherhedes /, rydinge chaplaynes / and suche other ydle parsons /; whyche yf they be well noted /, and also what frute spryngethe of them, indyfferejitely valewed /, consydered /, and pondered, / it will appere manystely to all reasonable and godly wyttes /, that they do brynge noo maner commodyte, profett, or vtylyte, other spyrituall or temporall, to this your publycke wealthe. No /, no /! They be not onely no commodyte nor profett to the common wealthe /, but rather moche hynderance. And truly no lytle wasters /, spoylers /, and robbers /; and that of the most poore /, indygent, and neadye of youre louinge subiectes /, which be most craftely /, subtelly /, and vnrightuousely depuyed of the charytyable succoure and almes of many symple, vulnered innocentes /, through a vayne hope and false confydence that theyr sowles shulde be releued and released of theyr paynes and tormentes dewe for theyr synnes /, when they be departed this worlde /, by the none prayers of prestes. And (the more it is to be lamented) noo lytle nombre of your subiectes, through suche vngodly truste and confydence in masses and dyryges to be songe and celebrated for them when they be dead /, be greatly encoraged to lyue both wickedly towards God /, and also vnfrutefullly towards the worlde /; lytle remembrynge and estemynge their vocacion & callinge, wherin God hath appoynted them to walke /, and moche lesse the extreame necessyte of
their Christen bretheren. This vayne hope in the
longe prayers of prestes (no doubt, gracious Lord) is
a greate occasyon of moche pouerte amongst the poore
and neady of this yowr realne. For the spedy remedy
of this pouerte amongst your louinge subiectes /, and
the utter suppressyon of suche vayne hope in the
prayers of prestes to be made for your subiectes when
they be deade /, whiche is the greate cause of this
myserable pouerte /, it may please your Magestye, of
your accustomed goodnes, to call to your gracious
remembrance that all the people, of this your regyon,
be subiect vnto yowr grayouse power /, rule /, and
dominion, as vnto their supreme hedd and gouernowre,
dewly by God appointed to gouerne them onely duryng
their naturall lyues /; but when it pleaseth God to take
their sowles owt of this myserable worlde, / than yowr
Grace is dyscharged of all gouernance /, cure, & charge
ouer them /, as of suche which, after their death, doe
not appertayne to yowr Grace /, nor be of your kyngedome
/; but onely of the kyngedome of God /, vnder
his gouernance, prouisyon, and rule. Into the whiche
kyngedome, nother your Grace nor noo other ertheiy
prynce, maye lawfully usurpe or take any rule, prouisyon,
care or gouernance /, for the sowles entered therunto.
Seinge that your Grace haue no auctoryte nor power
ouer the sowles departed /, yow be not onely dys-
charged to gouerne, to care, or to prouyde for them,
beinge deade /; but moche rather to prouyde that they
maye not be deceyued so vnder the coloure of longe
prayre /, but that they maye be taught syncredely Gods
Worde, whyle they be lyuinge vnder your subiection,
so that they maye beleeue constantly and lyue godly /;
and then, by Christes promesse, hell gates shall not
prevayle ageinst them /: moche lesse they shall haue
any neade of suche strange succoure and helpe of
men /, nothinge appointed nor tawght by Godds Worde,
to be profitable or necessary for their souls after their death. Wherefore, I mistrust not but that your Majesty, when you shall next intreate for the reformation of the enormities & abuses sprung up in the Christen religion, yow will godly reforme suche abuse and dissembled covetousenes, and certeynely beinge no godly remedy nor helpe for souls departed, which hathe noo strength nor effycacy of Gods Worde, which is the very trew foundacion of all the Christen religion and helpe for souls. And, in the meanseason, I doo no lesse thynke, and also pray hartely to God, that your Majesty will provide and make ordinanece, that all suche landes and possessyons, whereupon so many ydle hypochrytes and deceuyers be greate burdeyn & charge to your realme, which hythethane lyned vngodly and vuprofytablybly, maye, from henceforth, be partly connected to the supportation and maintenaunce of common scoles, wherby erroors crepte vp through ignoraunce maye be through knowledge repressed, and godly lernyngge and knowledge more plentuously planted and adynistred; and partly that your poore louing subiectes maye be more mercyfully releued & succoured, whyle they lyue under your subiection, charge, and gouernaunce. This godly dystrybution (most prudent Soueraigne) of the landes and possessions, ordeyned and appoynted for the counforte, soccoure, and helpe of your poore louinge and lyuingge subiectes, is moche more consonante and agreeable to Godds Worde, and more certeyne dyscharge of your Graaces conscience, then to suffer the same possessyons to be vngodly caste awaye and consumed under suche false colowre and pretence to releue sowles departed; of whom your Majestye haue nother cure nor charge, nor can not assure to them, by Godds Worde, through suche longe prayers of prestes, relese of paynes after their death, or any other ayde, coun-
forte, or succoure. For, with owt any doubt (grae youse Lorde) ye suche hyred prayers had ben godly and necessary for the sowles departed /, other Christ or his Apostelles wolde haue taught it /, or, at the leaste, haue prayed or practysed it /; & not so manifestly reproued & threatened it /, sayeng:—"Beware of them whiche
dououre wyddowes howses, vnder colour of longe prayers /; theyr judgment shalbe moche longer." In all the Newe Testament there is no mençon made of any suche offyeer, nor offyece instytuted, nor appoynted, to praye for the deade. And yet all men, I thynke, will confesse that the trueth of Godes Worde was most sincerly set forthe and preached in the tyme of Chryste & of his Apostles /; in whose tyme there was no suche craftye kemonyge publyshed nor tawght by them /, nor longe tyme after. But then men stablysshed and grownded their religion and hope of healethe vpon Godds Worde /, whiche teacheth vs that who so be-
leueth is saued, and hathe no neade of longe, prystishe prayers /; and who so belenueth not /, shallbe con-
demned. Betwene these extreame contraries there is no meane /; as Saint Augstijn saieth. Wherfore I exhorte all them (whiche contrary to all Holy Scrip-
tures) truste to the thyrde place, and there to haue release of paynes through the longe prayers of prestes; /
that they wolde gene ouer suche fayned fantaseye of men (subtillyly ymagined only through insaciable conet-
uousenes of ambiçious prestes, to gett mony therwith to mainteyne their vngodly lustes /, and to lyue ydlely and delvately) and to truste rather to the sure and infallible trewthe of Godds Worde /, which, without double, is to repent and beleue /; and utterly to forsake all synne /; and than constantly to trust to Goddes promesse of mercy. Here manifestly apperethe, soueraygne Lorde /, in what miserable blundnes the most parte of this your realme haue longe tyme be[n]
DANGER IN STUDY OF POPERY.

All men must lament the miserable blindness of such shepherds.

I trust the punishment with which the world was threatened Amos, viij. is past—a punishment of hunger and thirst for God's Word.

It is dangerous to admit for ministers such as have studied popish laws;

they will poison the flock and increase popish power. [* leaf 22]

It is hoped all men will now see the evil of admitting unlearned and carnal priests to spiritual offices.

led, yea, and almost drowned, through the longe custome used theryn. Who is it that can not lament (I saye) this deplorat & miserable sorte of blynde shepherdes? Be not they bowght with the same pryce wherewith we be bought, to be members of one bodye, wherof Christ is heade? If we be members of one bodye, certeny we can not then but taste and feale, not onely their eull, but also the lamentable estate of all other caste awaye through them. Lorde, I truste the punyshement is past wherwith thow haste threatened the worlde to be punished with hunger and thryste; not with hungre and thryste of breade and drinke; but for lacke of hearinge thy Worde. Yt is nowe tyme, Lorde, to shewe thyne accustomed goodnes & mercye; for the whiche we doo dayly and hartely praye; sayenge: "Through the tender mercy of God, wherewith he hathe vsyted vs, gene light to vs which sytt in darcknes and in the shadowe of death, to guyde our feate into the waye of peace." Also it is a daungerous thinge to admitte one to be a spiruall pastoure, whose professyon and study all his youthe hathe ben in decrees and popishe lawes. For suche a study, for the most parte, ingendereth a popishe harte. If any suche be admitted to be a pastoure, he shal not onely, other secretly in confessyon or by some other crafty means, poysen his flocke with mans tradycions & popishe doctrine; but also shall augment the popishe power; for the abrogacion wherof your Grace and your honorable Counsell haue taken greate paynes & travayle. Nowe, eftsones, I truste that all men, which reade this lytle boke, shall perceyue therby what in-conuenyence & damnable eyll enseweth the vugodly presentacyon and admysyon of the vnlearned in Gods Worde, and carnall prestes to spyrituall offices.¹

¹ This page is transposed in the orig., and stands where the next one should be.

² Orig. officers.
And although suche patrons have lytle zeale and lome to the common and publike wealtthe, yet for the sunguler and carnall lome which they beare to their clerkes (whom they addycte and bynde surely to eternall Damnacion, if they gene them suche spirituall offyce, whiche they neyther can nor will execute and perfourme) or for the tender zeale and lome which they have to the sowles so derely bought with Christes bloode, they wyll, wyth all circumspection, proue theyr clerkes that they be not onely well lerned in Gods Worde, but that they also haue taken greate paynes in preachynge the same, and that they have also lyued accordinge to their preachynge. Suche experymet and proue was commaunded to be made of weddowes, before they were admytted to lyue vpon the charge of the congregacyon, as it appeareth in Tymothy. *Muche more than cyudent and sure proue of pastours (whose offyce is soo necessarie) shulde be made and made before they be admytted to their spirituall offyce and charge. And, although the election of the byshop and of other spirituall pastors in every poynte be hade and done accordinge as I haue before wyrten, yet (moste dread soueraigne Lorde) I see two fowle deformytes and grete lamentable myschefes annexed to the vocacyon & offyce of byshops, which, not reformed, will poyson and ytterly corrupte the godly vocacion and electyon of the sayd byshops. The one infection and pestylent poyson is there greate lordships and domynions, with the yerely prouentes of the same. Whiche hath so fasshyoned them in proude countenaunces and worldly behanoure, that nowe they be moste lyke to heathen prynces, and moste vnlyke vnto Christe, although he they wolde be esteamed of all men to be his trewe successours; yet poore Christ

Although patrons have little zeal.

1. Their great lordships, and the rents arising from them.

They live like heathen princes,

1 This page from here is transposed; in the original it precedes the one just given.
sayeth:—"The foxes have hooles /, the byrdes of the aye have neastes /, but the sonne of man hathe not wherin to laye his head." But our byshops have gorgeous & sumptuous buylded howses, maners, & castelles, pleasantly set abowte with parkes, well replenished with deare /; warrens swarminge full of conyes /, and fyshe pooles well stored with dyuerse kyndes of fyshes. And not onely these commodities and pleasures /, but also dyuerse other pleasures. Howe this lordely and worldely byshoplike estate agreeth with Christes wordes /; I thinke a man can not reasonably conyecture or ymagen, by theyr countenaunce and lyuinge /, that they be Christes trewe disciples. The other myschefe and euill is, that they haue to many too much worldly cures and busenes. For to these maners and lordeshipes belonge many teneuntes /; for whose leases to be made, fynes and haryottes to be appointed and taken /, amercyamentes to be assessed, taxed, & also forguen and dispenced /, there be noo fewe sutes made to my lorde byshope /; also the hearinge of testamentorye causes /, dyuorses /, causes of matrimonye /, of selaunders /, of leacherye, / adultery /, and punishshement of bawdrye /; and suche other bume courtes matters, wherof not one belong to his office & vocation appointed by Gods Worde. My Lorde Byshope is so occupied & vnquyeted /, that he hathe noo leasure to studye nor to preache Gods Worde. But suche afferayes and worldly busynes, nothing perteyninge to his vocation, be very greate hynderance and lett to my Lorde Byshop, that he can not applye hym to exercise his owne office. "For no man can serve two masters," sayeth Christ. The Apostles thought it not iuste and equall to proide for the necessary lyuinge of the poore /, leauinge Gods Worde vntawght. But my Lorde Byshoppe, doinge these things, nothing perteyninge to his office /, thincketh
that he hathe exactly done his office. From these
greate maners commeth yerely, greate rentes, pleasures,
& profettes; which, althowgh he they be the good crea-
tures of God; yet thabundaunce of them (beinge
where they be more impedymment than helpe) be a
greate occasyon of corrupcion in the vser of them.
And, peraduenture, they wolde allure and intyse a
byshops harte to truste in them and so corrupte hym,
as the Scripture sayeth:—"Blessed is the riche,
which is founde without blemish, & hathe not gone
after golde, nor hoped in money and treasures; where
is there suche a one and we shall commende hym and
call hym blessed; for greate things dothe he amonage
his people." And if my Lorde Byshoppe shulde gene
the superfluyte of his goodes to the poore (whose
goodes instely they be) as the prophete Ezay sayeth,
than my Lorde shulde lacke them to furnyshe his
lordely countenaunce; and so my Lorde shulde loose
his lordely honour and prayse of the worlde. Wher-
fore, as these superfluouse possessions be annexed to
estates of byshops, by mans vayne fantasye and not
by Gods Worde, so my Lorde Byshoppe wyll other
keape them to make hym more fryndes, remembrynge
that "ryches make the many fryndes, but the poore
is forsaken of his neyghbowre"; or denyse the exspence
of them contrary to Godes Worde, other to make
sure fryndes in the courte aboute the kynge, to obtyne
more promociouns & beneficies, or in curiouse byycl-
inge, sumptuouse and delyecte fare, well appareled
seruantes, tryme decked horses, to ryde pompecusely
lyke a lorde. Althoughe there were no auctorite to
prone this, yet the lordely countenaunce & fasshyon
of byshops, yea, their common exercyse and also
pratyse, can well prone and testyfye this playnely be-
fore the face of all men, which knoweth the lordely-
nes of byshoppes. As the prophete Ezay sayeth:—

His great income
might entice his
heart to trust in
it and so corrupt
him.

"Blessed is the
rich who is
found without
blemish, and has
not gone after
gold:

for he does
great things
among his
people."

Esa. iiij.

The bishops use
their riches to
make friends,
or to bribe those
about the court;
or else in building,
fine living,
servants, horses,
and riding like
lords.

Esa. iiij.
All which are opposed to the saying of the Apostle, i. Ti. vii.

"When we have food and raiment let us be content."

Lu. xxvij.

Peter tells bishops to feed the flock of God;
taking the ocersight willingly and with a godly mind.

But the proud countenaunce of our bishops is contrary to all this.

Math. xij.

And so long as this is so,
they cannot sincerely and truly preach.

Ioan. xx.

Christ was sent to preach, and He sent His disciples to do the same.

"The chaungynge of their countenaunce bewrayeth them /, yea they declare theyr owne synnes them selfes as Sodomytes /, and hyed them not." Doo not these things fayntely agree with the sayenge of theyr predecessour, Paule the Apostle, which sayeth:—"When we haue foode and raymende we muste be contented?"

Is not this lordely honoure dyrectely agaynst Chrystes wordes /, which sayethe:—"The kynges of nacyous raygne ouer them / and they that haue auctoryte ouer them are called gracious lordes. But yow shall not be so." Also Peter speakethe to his trewe successors sayenge:—"Feade yow Christoph flocke as-muche as lyeth in yow /, takyne the ouersyght of them; not as compelled themunto /, but wylyngelye /, after a godly sorte /; nor for the desyer of fylthy lukre /, but of a good mynde /; not as thouȝhe yowe were lordes ouer the paryshes /, but that yowe be an example to the flocke /, and that wtih good will."

But owre lordely byshops estate, and proude countenaunce of lynynge (as it is nowe vsed) is contrarye to Godes Worde /, as it appeareth by these wordes:—"But yow shall not be so." And also by these sayengs:—

"Not as thouȝhe yowe were lordes ouer the paryshes."

And Chryst sayethe:—"He that is not with me /, is agaynst me." Wherefore, so longe as they raigne so lordely in the clergie, contrary to Gods Worde /, so longe be they againste God. And so longe as they be agaynst God /, they be not sente from God /, and then can they not preach trewly and syncrely his worde.

"For howe can they preach excepte they be sente?" sayeth Paul. Christe was sente to preach, as it appeareth. Marc. i., Luæ. iiiij., and Ezay. lxi. And Chryste sayeth to all his trewe disciples:—"As my Father sente me /, so I do sende yow." And commaundeth also all his Apostles, & trewe successors of the Apostles, to

1 Orig. ij.
preach the Gospell to the holle worlde, and not lordely to raigne in the clergye. Whom Paul teacheth to be as mynisters /, sayeng : "Lett a man this wise esteame vs /, euyn as the mynisters of Christe and the stewarles of the secretes of God." To preach the Gospell therefor (most graciously and prudente Lorde) is the trewe vocacyon and offyce of all godly byshops /, parsons /, vycars, and of other shepherdes /; and not to be embasadours to pynces, / nor to be iudges to here matters of contencyon, / testamentarye causes /, dynorses /, sclaunders, / bawdery /, and suche other. Your Grace hathe, of your laye fe, suffycient bothe in lerninge, There are plenty of lawyers, and wysedome, and of good conscyence, to here and judge suche causes and varyaunces /; remytyynge byshops to attende their offyce and vocacyon by God (and not by man) appoynted. And therefor they shulde not exerçye any other offyce than God hathe appoynted to them. For "no man can serue two masters." And if byshops and other pastoures wolde dylygently execute their vocacyon and offyce /, moche fewer of these matters of contencyon shalbe in vre and experience, other to be harde or judged. Seinge the Scriptures commandeth so ernestly every man to walke as he is called, many Christen men meruell grely why the byshops desyre and procure so greedly to exerçye the offyce perteyninge to an other vocacyon /, and to leue their vocacyon and offyce (appoynted by God to them to be exerçysed) not executed nor performed and done. Verely bycause they loue the glorye of men / more then the glorye of God. And surely euyn as Cayphas and Annas, beinge byshops, and exerçysynge the offyce of seculer and temporall judges, ded iudge Christ to be crucifyed /, so owr byshops, so longe as they, contrarye to their callynge, doo exerçye the offyce of temporall judges /, so longe shall they persecute Christe and his

\[ \textit{i. Cor. iiiij.} \]

To preach the gospel is the vocation of all bishops and parsons, and not to be ambassadors or judges.

\[ \textit{Mat. vi.} \]

There are plenty of lawyers, learned and wise enough to hear and judge such causes, leaving bishops to attend to their own duties.

\[ \textit{Joan. xii.}^1 \]

Verily it is because they love the praise of men more than the praise of God.

\[ ^1 \text{Orig. ix.} \]
The is business enough to employ them in their own office.

Sin reigns everywhere.

Costly apparel and change of fashions have made men who once could maintain 20 or 30 yeomen, and comfort many poor, now scarce able to maintain their own households.

These two things, costly apparel and varying fashions, especially of the women, are the chief cause of this altered state of things.

Men are compelled to sell their lands, or get in debt.

They have to burden their lands with provision for children who should have been provided for during life.

membrs/, and studye to suppressse his worde/, and not to preache the same. Have not they busynes suffycyent, wherwith to occupye them in their owne offyce? If they wold loke well therunto/, doo not they see on euery syde detestable symne raigne through-wott all this your realme? Is there not suche exesse and costelynes of apparell/, bycause of dynersyte and chauenge of fashyons, that scare a worshipfull mans landes, which in tymes paste was wonte to fynde and maynteyne twenty or thirty tall yowwemen/, a good plentyfull howsholde for the releuyfe and comforte of many poore and needye/; and the same nowe is not suffycyent and able to maynteyne the heyre of the same landes/, his wiffe/, her gentle woman or mayde/, two yowmen/, and one lackey? The pryncypall cause herof is their costly apparell/, and specially their manyfolde and dyuersse chauenges of fasshyons whiche the man, and specially the woman, muste weare vpon bothe heade and bodye. Somtyme cappe/, somtyme hooode/; nowe the Frenshe fasshyon/, nowe the Spanyshe fasshyon/; than the Italianan fasshyon/, and then the Myllen fasshyon/; so that there is necende of consymynge of substaunce, and that vaynely, and all to please the prowde folyshe man and womens fantasye. Hereof spryngethe the great myserye and neade. The fathers consymynge theyr goodes in vayne/ pryde/, and wanton lustes (called vpon by yourr Grace to serue yourr Magestye for the defence of this yourr realme) haue not to doo their dewtye/; wherby they be compelled to sell theyr landes/, or els to burdeyne their fryndes/, or els to daunger them selve in dette to many. Hereof rysethe it that the father is compelled to declare his will vpon hys landes to be executed after his death (when he can not occupye the same hym selve) for the advancement and helpe of his children, and the payment of his dottes/, whom easely he myght in his lyfe
VICES AMONG THE PEOPLE.

haue aduaunced, holpen, and dyscharged, yf suche ryotuouse expenses had ben auoyded. The prophete Osee sayethe:—"There is noo trewethe, no mercy, no knowleage of God in earthe; cursynge, lyenge, murdre, thefte, adulterye, hathe broken in"; and yet doo owre shepherdes holde theyr peace. What com-


Drunkenness, swearing by Christ's Body, "hunting oaths," pride, and vice reign in the realm, against which bishops and pastors should cry aloud and Esai. liii.3 spare not.


But, alas! they are blind and dumb, Esaye lvi.2 and shameless.


Why don't the bishops execute their office?


1 Orig. v. 2 Orig. lxvi. 3 53rd in A. Version.
They love their possessions;

they will not displease men;

they will maintain their pride, and will continue in it;

*Esa. [Le]v.*

and so long as they continue in wealth and honour they will not do their duty, but rather persecute the Bible which declares what their duty is.

When the Pope was first endowed with great possessions, a voice was heard—

"Now poison is cast into the Church of God."

So long as honour and wealth are annexed to bishoprics, because the Lord dispyseth them." Notwithstandinge, our byshops lose so well their great dominions, whereby they maynteye their lordely honour, that they will not displease men with preachinge the treuth, lest they shulde then loose their great possessyons; and, consequently, their lordely glorye. But surely as longe as they possesse theyr greate dominyons, so longe they wyll contynewe and maynteye their prysde. And so longe as they contynewe in prysde, so longe they shall not receyue the Holy Ghoste, which shall teach them to speake the treuth. "For vpon whom shall my Sprete reaste" (sayeth the Prophete Esaye) "but vpon the meake and lowely, and vpon hym which fearethe my sayengs." Also the Prophete sayeth: "God resysteth the prowde, and vnto the meake and lowely he geneethe his grace." Wherfore, so longe as the byshops contynewe in this worldely wealthe and honowre, so longe will they never do their dewtye and offyce; but rather persecute the Worde of God which declarethe and shewethe what is their offyce and their dewtye. And so longe as they do not exercise their offyce and vocacyon, but doo persecute the Worde and suche as syncreely preache the same, so longe shall synne increase. "For if the eye be wicked, all the body shalbe full of darcknes." For even as at suche tyme when the Byshoppe of Rome was fyreste endowed with greate possessyons, a voyce was harde, seyinge:—"Nowe venom and poysone is caste and shed forthe into the churche of God." In lykewyse, no doubt, most godly Gouernoure, semblable voyce and sayenge maye be veryfye in and vpon all the churche of Engylande, sythen yowr byshops were endowed with so greate possessyons and lordely domynions. No doubt, gracious Lorde, so longe as grete lordely domynions, worldly honours and wealthe, be annexed and knyt to the vocacyon and
offyces of byshops and other pastours /, these myschene & inconuenyences shall ever ensue & folowe. Fyrste the moste prowde and amblycouse /, the moste countuouse and wycked, / which other by money, frendshyp, or flattery, can obtayne the benefyce /, wyll laboure with all study and polycye to gett the benefyce, / only for the worldly honoure, and not for the zale and longe which he shulde haue to enstructe and teache the people commytted to his cure and charge. And for the profett which belongethe and apperteynethe to the same benefyce /, they wyll dyssesemble humylyte and despeceyon of all worldly profettes and pleasures /, so colorablye and subtelly /, that yt shall be very harde for youre Magestye, or any other hauynege authoryte, to gene benefyces, to perceyue them. And when they haue obtayned the benefyce /, than every Christen man shall well perceyue that he hathe not entered in by the dore ; that is, for the zale and longe, to doo and execute the offyce /, but hathe elymned vp and assended by a nother wanye ; / that ys, for the lucker and honoure annexed to the offyce. And than certenly, whoseouer assendeth and entereth in by a nother wanye /, can not be but a thefe /, by daye and by nyght ; / whose study and laboure muste be to steale /, kyll /, and to destroy. As Christe (whose wordes muste eruer be true) sayethe: —"The thefe commeth not but to steale, / to kyll /, and to destroy." So that, so longe as so moche worldly profett and honoure belongethe to the benefyce, so longe wyll he that, for wante and lacke of lernynge can not doo the offyce /, and also the moste countuouse and proude, / wyll laboure to haue the offyce /, whereby the people commytted to his cure /, shall not onely be vntawght¹ /, and not lerned in Gods Worde /, but also all they which can preache and teache Godds Worde and louse the same, / by suche these mischiefs will follow.

The proudest will seek the benefice for its honours,

and not to teach the people;

he will feign humility, and seem to despise all worldly profits and pleasures.

But when he has obtained it every Christian will perceive he has not entered in by the door,

and is therefore only a thief and a robber, whose study must be to steal, kill, and destroy.

Joan. x.

The people will be untawght, and those who would teach

¹ Orig. vntawght.
will be persecuted and tormented.

It is easier to gather grapes of thorns than of such greedy thieves to have any Christian religion.

Seeing all these things, the king is bound to take away from bishops and other spiritual ministers all their superfluous possessions and worldly cures;

and, this done, to appoint such as can preach and have preached;

and to remove all such as will not.

The poison being removed, faith shall increase and sin decrease;

a worldly wolfe, shall be extremely persecuted and tormented. For he can not but steale, kyll, and destroye, and utterly abhore, and hate the godly, as Christe sayeth:—"Yf you were of the worlde, the worlde wolde loue his owne. But because you be not of the worlde, but I haue chosen you from the worlde, theryfore the worlde dothe hate you." No doubt a man shall moche rather vpon thornes gather grapes, and vpon brambles and bryres gather fygges, than of soche gredy themes to haue any Chrysten releygyon, other setforthe, preached, or stablyshed. Wherfore (moste redoubted Prynce) seinge that their greate pos- sessyons, ryches, worlde offyces, cures, and busyne, be the impedymnt and let that they do not execute their vocaeyon and offyce, which is so godly, profitable, and necessery for this yowr common wealth; yowe beinge ovr soueraigne Lorde and Kynge (whom God hathe called to gouerne this yowr realme, and to redresse the enormytyes and abuses of the same), by all instyce and equyte are bounden to take awaye from byshoppes and other spirytuall shepherdes suche superfluyte of possessyons, and ryches, and other seculer cures, busynes, and worlde offyces, which be the cause of moche synne in them; and no lesse occasion whereby they be letted to execute their offyce, to the greate losse and hynderance of moche faythe, vertue, and goodnes, which myght be admynistrd to your subiectes, through the trew precheye of Godes Worde. And that done, than circumspecktly to take heade that none be admytted to be pastoures, but suche as can preach, and haue preached syncreely Godes Worde. And all suche as will not, to remoue them from their cures. This godly ordre observed in the electyon of spirytuall pastoures, and the pestylent poysone moued and taken away from their vocayon, faithe shall increase, and synne shall decrease; trewe
obedience shall be observed wyth all humylite, to your
Majestye and to the hygher powers
by your Grace appoynted in office.
Cyuile quyetnes, reste, and pea-
ce shalbe stablyshed /, God shal
be feared, honoured, and lo-
ed /, whiche is theeffec-
t of all Chri-
sten lyuin-

g.

O Lorde, saue our moste soueraygne Lorde, Kynge
Henry the Eyght /; and graunte that he may ones
throughly feale and perceyue what myserable calamyte,
sorowe, & wretchednes we suffer now in these dayes a
brode in the countre /, by these vnlerned /, popyshe /,
and moste cruell tyrauntcs /, even the very enemyes of
Chrystes crosse /; whose payne shall be withowt ende /,
whan we shall lyue in ioye for ever. Graunte yet
ones agayne, I say, goode Lorde, and moste mercyfull
Father, through thy Sone Ihesus Christe /, that whan
his Grace shall knowe and perceyue (by thy gyfte &
goodnes) theyr most detestable wayes in mysusynge thy
heretage /, that he wyll ernestly go a boute to se a
redresse a monge them /; and to the penytent and con-
tryte in harte to shewe his accustomed goodnes /, and
to the other his iustyce /, accordinge to Saynt Paules
doctrine /, and his Graces lawes.

And, moste dreade Soueraygne (with all humylyte and
humblenes of harte), I beseech your Grace / (accordinge
to your accustomed goodnes), to take this my rude

peace shall be
established, and
God shall be
honoured.

O Lord, save
the king;
may he once feel
what we suffer
from these
tyants.

Grant that when
he knows their
ways he may
redress them.

I beseech your
Grace to accept
my supplication
as a fruit of my obedience,
and not of malice to any spiritual shepherd.

I speak for the glory of God.
supplycacyon to the beste /, as a frute of my obedy-
ence /, wheryn I haue not dyssembled /, but haue
opened fully vnto your Grace the grounde and very
bottome of my hart ; / not of any grudge, eyll wyll, or
malyce that I beare to any spirytnall shepherde (God I
take to recorde), but onely for the glory
of God /, the honoure of your Gra
ce /, and the wealthe and profett
of your moste naturall
and louinge
subiec-
tes.

FINIS.

\[ Enprynted in the yeare of our\]
Lorde .M. CCCCC. xliij.
in the moneth of\[ Decembre.\]
(££")

\[ . . . \]
A Supplication of the Poore

Commons.

Proverbes xvi. Chapiter.

Who so stoppeth his care at the criyng of the poore, he shall crye hym selfe, and shall not be heard.
To the most victorious
Pynce Henry the viii. by the Grace of God
Kyng of Englande, Fraunce, & Ireland;
Defender of the Fayth, and Supreme
Head of the Churche of England,
and Ireland, immediatly next
vnto God: hys humble and
most faythfull Subiectes
of the Realme of En-
gland, wysh lyfe
euerlastyng.

PITUOUSLY complaineth the pore commons of this
your Maiesties realme, greatly lamentyng their
owne miserable pouertie; and yet muche more
the most lamentable and more then wretched
estate of their children and posterite. Whose myseric,
orsene and throughly considered, is and ought of very
nature, to be more dolorous and sorowful vnto euerye
naturall hert then that which we our selues feale and
sustaine. Not many yeres tofore, your Highnes poore
subiectes, the lame, and impotente creatures of this
realme, presented your Highnes with a piteful and
lamentable complaint, imputyng the head and chiefe
cause of their penury and lacke of reliefe, vnto the
great & infinite nombre of valiant and sturdy beggers
which had, by their subtyll and crafty demaner in
begging, gotten into their haules more then the third

The commons complain of their miserable
condition, especially of their extreme poverty.

Some years ago
the poor, lame,
and impotent
presented a
petition
against valiant
and sturdy
beggers,
who had got into
their hands more
than a third of
part of the yearly renewenwse and possessions of this your Highnes realme. Wherupon (as it seemed) your Highnes (sekynge a redresse and reformation of thys greate and intollerable enornitie,—as a mercifull father ouer this your natural country; mowed wyth pitie towards the miserable and pitifull nombre of blind, lame, lazar, & other the impotent creatures of this your realme) hath, wyth most ernest diligence, supplanted, and, as it were, weeded out, a greate nombre of valiant and sturdye monckes, Fryers, chanons, heremites, and nunnnes. Which disguised ypoorites, vnder the name of the contempt of this world, wallowed in the sea in the worldes wealth. And to the entent your loning & obedient subiectes might the better be able to relee the needie & impotent creatures, you toke from them the greate nombre of gilded beggers, whose holines was so fast roted in the hertes of vs your pore commons, through the false dilusions of the forsayd sturdy & valiant beggers, that we wold not stick to go an C. myles on our bare fete to seke one of them, that we might not only bestow our almes vpon them, but also do them reverence and honour none other wise then if they had bene very gods. Yea, when your Highnes had ordeyned that al these forsayd beggers shulde be vterly abolisshed, neuer to deceyue vs of our almes anye more, we, like men alwaies brought vp in folish supersticion of those false Phariseis & flatering hypocriztes, knewe not the obedience that we owe to you, our natural and most rightful Prince, but in-continent fel in an vprore cryng, "Our holi dayes, abbayes & pylgrimages!" None o[ther wise than the Ephesians dyd agaynst the elect vessell of God, Sancte Paule, when he sayd, "They are not godes, which be made with handes," and as the Jewse did against holy Steuen, when he sayd that "God dwelleth not in an house made with mans hand." Yea, had not God wrought
on your parte, in appeasing that sturdy thronge, this realme had, even then, ben like to have bene utterly decayed. For even those whom your Highnes had called to-gither to assiste you in that daungerous tyme, were (for the moste parte) so bene to the opinion of the other, that many of them woulde not stike to say, "When we shal come to the battaile,—we know what we have to do." But nowe (the Lorde be thanked therefore) that your Highnes hath finished that your godly purpose, without bloodshed of your poore commones, and that the Worde of God hath ben so set furth & taught by your comand[ment], that every man that lusteth may therin learne his dutie and office; we are fully perswaded, that all such as resiste the pours, whom God hathe ordyned and appoynted to rule & gouerne the multitude of thys worlde, do not resyste man, but God. Be you certayne therfore (most gracious Prince) that we (your most obedient subjectes) walkyng in the fear of the Lord, wyl not from hense forth (so long as the knowledge of Godes Worde shall reigne amongste vs) attempt any such so diuilishe enterprise, as to rebel agaynst your Highnesse, our most natural Souerayne and Leage Lorde; either for our for-fathers popyshe tradicions, or other our owne fantastical dreams; not withstandyng that the remenaunt of the sturdy beggers (not yet weaded out) do daylye, in theyr writynges, counsels, and preachynges, stere vs thereunto. For what meane they in their sermons when they lament the greate discord and myserable estate of this our tyme, wishyng that all thynge were nowe as it was xx. yeares since, but that they woulde have a Pope, pardons, lightyng of candel to images, knockyng and knelyng to them, with runnyng hither and thither on pilgrimage; besides the infinit number of purgatory horseleches, on whom the vengeance of God is so manifestly declared for their beastly buggery,
They tell us that vice has prevailed since we had the Scriptures in English, but their aim is to make us abhor the Bible. They would have us as blind as we were when we would have fought against our king, for the maintaining of their popish traditions.

They have procured a law that none shall have the Bible in his house, unless he can spend £10 a year, but they only wish to famish men's souls by withholding spiritual food.

Are the rich only in possession of souls? Christ said the Gospel was preached to the poor, and the Gospel, which they would shut that the very places where they dwelt, ar not thought worthy to be the dwellinges of men, but the caues of bruit bestes and venemous wormes? They tell vs what vice, uncharitablenes, lacke of mercy, diuercitie of opinions, and other lyke enormites, haue raigned ever since men had the Scripture in Englyshe. And what is thys other then to cause mens consciens to abhorre the same, as the onely cause and originall of all thys? They say that it sufficeth a haye man to beleue as thei teach, and not to meddle with the interpretation of the Scriptures. And what meaneth that, but that thei would haue vs so blynd agayn, as we were when we would haue fought agaynst owre naturall Prynee, for the mayntenance of their popyshe traditions and purgatory patrimony? They cannot abyde this name, "the Word of God;" but thei wold haue the Scripture called the commaundement of God. And what meaneth this, but that thei are the same enemies of God, whom that two edged sword shall destroy? Finally, thei haue procured a lawe, that none shal so hardy haue the Scripture in his house, onlesse he maye spend x. pound by yere. And what meaneth this, but that they would famysh the soules of the residue, withholding theyr food from them? We appeale to your Highnes judgement in this behalfe, whither this lawe be indifferent or not. If none shoule be alowed meat in your Highnes house, but suche as were clothed in veluet, with chains of gold about theyr neckes, what seruantes wold your Maiestie haue shortly? What stervelynges would your seruauntes be abowe all other! For no man within your realme may refuse to do your Grace servyce. Hath God put immortall soules in none other but in such as be possessioners of this world? Did not Chryst send word to Ihon the Baptist that the pore receyued the Gospell? And the Gospel that thei shutte vp from vs, was it not the writynges of poore fysher men and
symple creatures, even taken for the dregges of the worlde? Were not the setters furthe of it and the prophetes also, persecuted, tormented, and slayne? And why do these men disable them for readers of the Scriptures, that are not indued with the possessions of this worlde? Undoubtedly (most gratious Souerayn) because they are the very same that shut vp the kyng-dome of God before men; thei enter not them selues, nother suffer thei them to entre that wolde. They are lyke to a curre dogge liyng in a cocke of haye. For he wyll eate none of the heye hym selfe, nether suffer any other beast that commeth to eate therof. But some wyl peraduenture say, they were not all sturdy beggers that were in the Parlament when this lawe was stablished. For many of them, and the most parte were seculer men, and not of suche habilite that this lawe would permyt them to haue the Scripture in their houses. Wherfore, this lawe is in-different, and taketh not the Worde of God from vs; but we wyth owre ful consent haue committted it to them, in the sayde lawe limytted. Where vnto we aunswer, that, if we haue genen it ouer from vs to the possessioners of this worlde, we may well be lykened to the Gedarites, Marke v., which desired Christ to departe from theyr countrey, and the lurking night birdes, which can not abyde the bryghte beames of the son. We may boldly affirme that what man sooner doth wyttyngly and willingly forsake the knowlidge of the lyuely Worde of God (the foode of our solles, and lyghte of owre footesteppes,) is none of the flock of Christ, forasmuch as his shepe haere his voyce, & reioyce in the same. Did thei that toke their names ofanye philosopher, shut vp theyr masters doctrine from them selfe? Did thei not thynke them selues vnworthy to be named after their masters, vnlesse thei knewe their preceptes and rules? Did not the monkes, friers, and other the supersticious religious, employe all theyr SUPPLICATION.
study to knowe their rules and statutes? Do not the Coelginers at this daye set the boke of theyr statutes at libertie, streightlye commaundynge echelowe vnder payne of punishemente to employ them, to haue the through knowledge of the same? And shold we glory to be the flocke of Chryst, and to be called of him Christians, when we do willingly and wittyngly exclue our selfe from the knowledge of the rule which he hathe commaunded vs to folowe, on payne of dampoo-
nation of oure soules? Would your Hyghnes thynke that man were willingly to do your commaundement, that would not diligentlye reade over your Highnes letters sent from you to certifie hym of youre wyll and pleasure in hys office? And what other thynge is the whole Scripture then the declar[at]ion of the wyl of
God? Wer it lykely therfore, that we, excludyng our selues from the knowledge therof, shold be willingly to do his wyll? If we haue therfore reected this mercifull profer of our moost mercifull Father, when he vsed youre Hyghnes, as hys instrumente, to publyshys and set forthe hys moost lyuelycke Worde, wherin is declared the inestimable loue that he beare towards vs, in that he gane hys onelye Sonne to be an acceptable sacrifice for oure synnes; and the unspekeable mercy which caused hym to accept vs as iust, even for his Sonnes sake, without our workes or deseruinges; let vs now humbly fal downe prostrate before his Maiestye, wyth perfecte repentance of this, the contempte of his mercifull gyfte; moost humbly beseking hym, of his infinyte goodnes, tenderly to beholde the dolours of our hertes, for that we neglected so mercifull a profere; and to forget oure obstinacie ther in, genyngye your Hyghnes suche desire of oure salvation, that you wyll as faouorably restore vnto vs the Scripture in oure English tonge, as you dyd at the fyrst translation ther-
of set it abrode. Let not the adueraries take occasion
to say, the Bible was of a traytours settinge forthe, and
not of your Hyghnes owne doyng. For so they re-
porte, that Thomas Cromwell, late Earle of Essex, was
the chyfe doer, and not youre Hyghnes, but as led by
him. All thys thei do to withdraw the mindes of vs
(your Hyghnesses subiectes) from the readyng and
study therof. Which thynge doth easely appere by the
diligence they shewe in settyng furth and execution of
your Hyghnes proclamations and injunctions conserv-
yng the same. For when youre Highnes gane com-
maundement that thei shoulde so that there were in
every parysh churche, within thys your Highnes
realme, one Byble at the least set at libertie, so that
every man myght frely come to it, and read therin;
suche thynge as should be for his consolation, manye
of this wicked generation, as well preystes as other
their faithful adherentes, wuld pluck it other into the
quyre, other elles into som pue, where pore men durst
not presume to come. Yea, ther is no smale numbere
of churches that hath no Byble at all. And yet not
suffised with the withholding of it from the pore of
their owne parishes, they never rested tyl they had a
commandement from your Highnes, that no man, of
what degree so ever he wer, should read the Bible in
the tyme of Goddes service (as they call it); as though
the hearyng of thyr Latin lyes, and conjuring of
water and salte, were rather the service of God, then
the study of his most Holy Worde, the onelye food of
our soules, and lyght of our fote steppes; wythout
whiche no man can walke vpryghtly in perfect lyfe,
worthy our name and profession.

This was thyer diligence in settyng forthe the
Byble at your Hyghnesse commandement. But when
your Highnesse had diuised a proclamation for the
burnyng of certen translations of the Newe Testament,
they were so bold to burne the whole Bibles, because
A NEW TRANSLATION PROMISED.

they burnt the whole Bible because the same men translated it.

See how they play bo-peep with your Highness's commands, suppressing, where they dare, what you have allowed.

In this they were like the criminal who saved his life by promising to teach an ass to dance in 11 years.

They trusted that in that time your Highness would be dead, or the Bible forgotten,
they them selues out of your Highnes reache, so that you should not have had like power ouer them as you have nowe. Wel, go to, we trust ere the vii. yeres be past, God shall remaile vnto your Highnes moch more of theyr subtyll imaginations then we are worthy to know of. Moreover, wil your Highnes se howe faithfully they dyd youre commandement, when you appointed two of them to ouer loke the translation of the Bible? They sayd they had done youre Highnes commandement therin, yea, they set their names there unto; but when they sawe the worlde som what lyke to wrynge on the other syde, they denied it, and said they never medeled therewith, causyng the prynter to take out theyr names, which were erst set before the Bible, to certifie all men that thei had diligently perused it according as your Highnes had commaundde. One other poynct of theyr diligence your Highnes may note in the settyng furth and vsyng of youre Hyghmes Primer both in Englysh and Latin. And in the diligent readyng vnto the people, the exhortation to prayer, which you ordeyned and commaundde to be redde alwaies before the Prossession in Englysh. We thynk no man can blameles say, that euer he heard one of them reade it twyse ouer. Yea, when your Highnes was returned from youre victory done at Bullyn, they dyd what they coulde to have called it in agayne. In so much that they caused all such parishes as they myght commaunde, to vse theyr olde Kyre Eleyson agayne. And yet to this daye, thei vse, on solemne feastes, to folow theyr olde ordinary, not withstandyng your Highmes commaundement. But when thei katch any thyng that soundeth to the contrary, it shall not escape so, we warrant you. It shalbe swynged in every pulpyt wyth, "this is the Kynges gratious wyll; and yet these heretickes wylbe styll doyng in the Scriptures. A shomaker, a cobbler, a tayler, a boy not
They say how well disposed the people used to be;
how many hospitals were built, and colleges founded;
and would add, abbeys and chantries were then founded, if they dare.

If they had their way, building would be the best trade going.

We pray that their subtleties may always come to light before they prevail;

that these sturdy beggars be rooted out;

and that the tenth of every man's increase may go to the poor, as it was long before Christ, and long before the Law.

yet xx. yeres of age, shal not stycke to reproue that a lerned manne of xl. yeares studye shall assyryme in the declaration of Gods Word. O how godly wer the people disposed, when thei knew nothyng of the Scripture, but as thei were taught by profound clerkes and well lerned men! Then were there hospitals buylde for the poore. Then wer there coleges buylde for the maintenaunce of lernyng." Yea, if they dyrst they would say, "Then were abbayes & chauntries founded for the realyfe of the pore soules in the bitter payns of Purgatory. Then were our purses filled with the offerynges of the deuout people that vsed to seke the blessed images, and relickes of our Sauior Christ, & of his Blessed Mother Mary with the residue of his saints." If your Highnes would rayse vp but one abbe, chauntry, or pilgremage, you shuld easely perceine which way thei are bent. We dout not but for these vii. yeres folowyng, masons occupation, with other belonging to byldyng, would be the best handy craftes within this your royallme. We praye God their subtill imaginations maye alwaies come to lyghte before thei preuail to the hinderance of Gods veritie. And that it may please hym alwaies to assist your Highnes in the defendyng and settyng furth of the same, to hys glory, and the soul helth of vs, your Highnes most faithful & obedient subiectes. And that you leave not of, tyll you haue roted out al these sturdy beggers, that the pore members of Christ may haue that porsion to lyue vpon, which was from the beginnyng apointed for them. We meane the x. part of every mans yerly increase. For though, at the commynge of Christ, and long before, these tenthes were geuen to the pristes of the lawe, yet was it not so from the beginnyng; for at the fyrste, because the world was not so replenished with people, but that every man was a great possessor, it was thought good to take of the best of their increase and
to offer it to the liuyng God in sacrifice, as it appereth by the storie of Abel and Cain. But when the people grewe to so greate a nombre that euerye man could e not haue a sufficient porsion to lyue vpon, vnlesse he were able to laboure and tyll the grounde; then was it provided that euery possessioner shoule set the tenth of his yearlye increase in the porche of hys house, that the lame, blinde, sycke, and diseased, myght be there releued. This order continued tyl the time that Moyses, by the commaundement of God, gave a lawe to the Israelites, and appoynted that a certayne kynred amongst them, that is, the Leuites, shoule be always theyr priestes, and mynisters of the Tabernacle; vnto whom he appoynted certayne partes of euery sacrifice, that they myght lyue therby. For as yet there was no tenthes to be paiied, for then they were in their iornte from Egypt, which iornte continued ful xl. yeres; but after that they wer once settled in the Lande of Promesse, and gathered the fruytes of the grounde, they thought good to gene the tenthes of theyr increase to the priestes that ministred in the Tabernacle, that they myght lyue ther vpon, accordyng to the wordes of the prophet Mal. iii:— "Bring in euery tenth into my barn, that ther may be meat in my house." But then ther was an other pronysion for the poore, Lui. xxiii. For no man myght lease, rake, or gleane his grounde after he had gathered of his croppe. Noo, they mighte not gather their grapes nor frutes twyse, but must leue the latward fruit, with the scateryng of theyr corne, for the poore to gather, that they myghte haue some relyefe therby; this order continued to the commyng of Chryst. After whose commyng, the Christian sort had all thynge commune, so that no man knewe of any increase, for as much as no man toke anye thynge for hys owne, Actes iii. But when the nombre of Christians encreased so muche that they possessed hole cyties,
But no tenths were paid to the ministers.

After this, when the Christian religion was established, and men spent their time over the Scriptures, it was thought good to provide for the poor, by reverting to the old law.

In the apostles’ time, deacons were appointed to distribute to the poor, according to their need; and these deacons received the tithes.

countreys, & kyngdomes, it was thought good that every man should knowe hys owne, to the intent that such as other wyse woldde haue lyued ydly sholde therby be prouoked to laboure, as apear eth by the rule that Saint Paul gane to the Tessalonians, ii. Tessaloni. iii.1, which was thys:—“Who so laboureth not, let hym not eat.” Yet was ther no tenthes payd to the ministers, for Paull wrytinge to the Corinthians, i. Corin. ix., desireth them to be good to such as laboure in the ministration of the Gospell, affirminge that it is but mete that suche as serue the aulter, should haue a linyng therby; and that it were farre vnedesent to musell the oxe that trauaylleth all the daye in treadyng the corne out of the strawe, Deutro. xxv. Which thinge he neded not to haue done, yf the tenthes of ech mans encrease had as than ben geuen to them; for that myght haue sufficed them well ynough (onlesse they had ben as gredye asoure ministres bee, whiche be neuer satisfied;). Yet after thys, whan the Christian religion was thorowly stablyshed in many congregations, & many men had laboured over the Scriptures, they thoughte good to pro-

provide for the poore impotent creatures accordinge3 to the example of the auncient fathers of the olde lawe. And bycause they were perswaded that Christ, offering vp him selfe vpon the crosse, had ended all sacrifice, Hebre. x., so that the ministers amonge them neded not to bee pestered with any other thing then preaching, they agreed to adde vnto the preachers an other sort of ministers, which myght supplie the office of holy Steuens, and the other which, in the primatiue church, were ap-

pointed to distribute the goodes of the congregation, accordinge as euerye man shoulde stand in neade, Actu. vi. To these men they gane the tenthe of theyr yerlye encrease, to the intent that they shoulde there vpon

1 Orig. iii.  
2 Orig. satisfieth.  
3 Orig. accordigne.
minister all necessaries, as well to the preachers, as to the poor impotent members of the church.

But after that persecution began to cease, & the preachers of the words of God lived in peace, and that the people were fully bente to learne & followe the doctrine of Christe; they dyd by the preachers, as the Israelites wolde haue done by Christe, when he had fede so many of them wyth so lytle bread, Iohn vi. They made them their rulers, thinkynge that those men which had broughte them out of the darkenes of erroure, and instructed them in the true knowledge of God, coulde best gouverne the publike\(^1\) weale. And woulde walke most vperyghtly in example of lyfe, compellinge the people ther by, to embrace all godlye & honest lyninge, and to detest and abhore the contrari. This was their intent (most gracious Prince) whan they gaue rule to the preachers of Goddes truth and verite. And in very dede the thinge proued according to their expectation, for a season.

But alasse, after the true shepherdes were departed out of thys lyfe, there entred into the fouldre most rauening wolves, of whom Saint Paule gaue vs warnynge, whan he said "I know for a certenty, that immediatly after my departinge from you, there shall enter in amonge you certen in sheppes clothing, but inwardly they are rauening wolffes," Act. xx.

The lyke thynge dyd Sainte Peter forsee, when he premonished the elders, that they shold not behaue themselves toward the people, as men haung dominion over them, i. Pe. v.

These hierlinges intended not to maintain & increase the spiritual treasure of the congregation, but to fyl their owne coffers with golde and vayne treasure; to bringe them selues aboue kinges and emperours, yea to be taken for Goddes vicars vpon earthe. And

\(^{1}\) Orig. publike.
that they myght the soner bringe this their purpose to passe, they persuaded the people that it should be much more convenient that they had the tenthes & patrimony of the church (as they call it) then the deacons, whom the people had elected there vnto. And that it should be more beseeing that the deacons were at theyr fyndinge, then that they should be at the deacons findinge; for they woulde kepe hospitality for the poore, accordinge as the institution of the Apostles was that they should; whiche thynge they could not do onles they had wher withal to maintain it. By these meanes were the people some persuaded to gene vnto them not onely the tenth, but certein possessions also, that they might be more hospitable.

Then came traditions, or church lawes, which were supposed to have as much authority as the commands of God.

Now they may command us to build churches with high steeplest and bells;

to believe their masses,

and Pope's pardons:

They promised to keep hospitality for the poor,

and the people not only gave them tenthes, but possessions also, that they might be more hospitable.

Now they may command us to build churches with high steeplest and bells;
lease vs both from payne and faute, but Christ releaseth the faute only. Now must we beleue they can make of two creatures one, that is to say, coniure water and salte that it be made a medicine both for bodye & soule; and of such force that it may be able to roote out the devell him self with all hys anguels and ministers. Nowe must we beleue that repentance auayleth vs not, onles we declare all our synnes, with the circumstaunce therof, to one of them, and do such satisfaction as they shal appoint vs to do. Now can we not denye but that the outragiouse belonging of a sorte of sodomi
ticall bulls, myngled with the proud pipying of organs, is the service of God, and worthy to be preferred before the redyng and preching of Godes Worde. Now must we beleue that God wyl not heare our prayer onles we be in fauoure with some of the deade saintes which wyl be our advocate. Now must we beleue that the making and gilting of ymages, building of abayse, churches, chauntries, gyldes, hermitages, and guyninge of boke, bell, candelsticke, basen, yower, erwetes, pax, chalyse, corporace, vestimentes, aulter clothes, curtens, hanginges, towels, torches, tapurs, shep, sensoures, pixese, coopes, cannebes, & running on piligrimage, is more acceptable to God then the vii. workes of mercy. Now must we beleue that they can not erre, though they set vp the bloude of a duncle to be honored for the verye bloude of Christe, though they made the Roode of Kente to wagge hys yses, though they were bandes & fornicators with the holy whore of Kent. We maye not thinke they ought to marye wyues, though we take them dayly abusinge other mens wyues. We muste not saye that they are ravenynge woules, but the true shepherdes of Christ; although we see them bothe bye & sell the congregacions of Christ; & when they hau them, loke for nought els but what yeardye rentes may

that holy water may become a medicine for body and soul;
that repentance avails nothing, unless we confess to a priest.
We must believe that church music is the service of God;
that He will not hear our prayers unless we are in favour with certain saints.
We must believe that the gilding of images, the building of religious houses, the giving of ornaments and vestments to the churches, is more acceptable than works of mercy;
we must have faith in the infallibility of the clergy, though they set up the winking rood of Kent.
We must think celibacy is right;
we must not say priests are wolves, though we see them buy and sell the congregacions of Christ.

\[1\] Orig. af.
Your Highness knows their desire to feed the flock;

how a law was passed compelling them to preach four times a year.

But they pleaded for the chaplains of your Majesty, and the law was relaxed for all such as held office, either under the king or the nobles.

We are compelled to forget we are your subjects, and claim to be brothers with you in God's household.

Ahab when he intended to go against Ramoth, consulted the four hundred false prophets,

and they told him he should prosper;

be clearlye reased therof. Youre Hyghnes knoweth ryghte well what desyre they haue to feed the flocke, for it is not yet many yeares sense youre Hyghnesse, in your hygh Courte and Parliament, was, by theyr negligence, constrayned to establishe a lawe, that, vnder payne of a forfayte, they shoulde preache in euer of theyr parishes foure tymes in a yeare at the lest, and that none shoulde haue moe benefices then one, wherenpon he shoulde be reasidant. But here they put your Highnes in mynde of all such chapelyns as do seruice to youre Hyghnes, and to other your nobles of this your realme, besides other, certein graduates of the universities. Wherevpon it was prouided, by the authorite of the sayd parliament, that euery such chaplayn myght haue many benefices, and be non residence, to lye at the univercitie, or els where, at his pleasure, so he wer in any of your nobles seruice. Oh gratious Prince, here are we, your natural, and most obeisa?;t people, constrayned to forget (with all humble subiection we speke it) that we are of nature & by the ordinaunce of God your most bounden subiectes, and to cal to remembrance that by our second byrth we ar your brothers and felowe seruauntes (althoughe in a much inferior ministery) in the houshold of the Lorde our God. Most humble beseking your Highnes to forget also in thys poynte that you are our Leage Lorde and Souerayne, taking our wordes as a token of the feruent desire that we (your most faithful subiects) haue of your solles saluation. Achabe kyng of Israel, when he intended to make a viage, and to take by force the country and inhabitantes of Ramoth Giliade, he caused hys prophetes, to the nombre of CCCC. false prophetes, to be brought before him, that he might know by them whether the Lord wolde prosper his iorney or not. These false prophetes, standing in the syght of the kynge, & beinge demaunded of him,
whether he sholde make expedition against Ramoth or not, answered with one voice, "Make expedition, the Lord shall give it into the hands of the king," iii. Reg. xxii. In lyke maner (most dread Soueraynye) your Hyghnes & youre most noble producissours, have alwaies consulted a great nombre of false prophete, which, as Achabes prophete dyd, prophesied unto you lies; wringly & wrystynge the Scriptures to stablishe your Hyghnes in all such thynges as they perseyued you bate unto. And if at any tyme anye true Micheas habe prophesied unto you the trueth of Gods Worde, one Sedechias or other boxeth him on the cheke that he remeth streight into the fyre. So that hitherto they have led your Highnes in this detestable erroure, to giveth that you thyncke it lawfull for you and your nobles, to reward those false flattering Babilon[i]call prophete wyth that porcion which, by the ordinance of God, is due to the poore impotent creatures, the lame, blynde, lazer, & sore membres of Christe. We beseeke you (most deare Soueraine) even for the hope you have in the redemption by Christ, that you call to remembrance that dreadfull daye, when your Highnesse shall stande before the judgement seat of God in no more reputation then one of those miserable creatures which do nowe daylye dy in the stretes for lack of theyr dwe porsion, wherewith you & your nobles do reward those gnatonical elbowhangers, your chaplaines. If theyr ministrie be so necessary to your Highnes that you can not lacke them, yet let not the vsasiable dogges denouer the bread that was prepared for the children; let them be appoynted lyninges worthy their ministration. What reason is it that a surveuer of bildinges or landes, an alckmist, or a goldsmith, shoulde be rewarded with benefice vpon benefice, which of very reason oughte to be committed to none other but such

\[1\] 1 Kings xxii. in the Authorised Version.
which ought only as, through godly learning and conversation, were able, and would apply them selues, to walke amydes theyr flocke in al godly example and purtie of lyfe? Howe greate a number is there of them that, vnder the name of your chaplynes, may dispend yerly by benefices, some one C., some CC., some CCC., some CCCC., some CCCCC.; yea, some M. markes and more! It is a comone saiyng among vs, your Hyghnes pore commons, that one of your Highnes chapplene, not many yeres synce, vse, when he lusted to ride a brode for hys repast, to cary wyth hym a scrowle, wherin wer written the names of the parishes wherof he was parson. As it fortuned, in hys iourney he aspied a churche standynge vpon a fayre hyll, pleaasuntly beset with groues and playn feldes, the godly grene medowes liyng beneth by the banckes of a christalline ryer garnished with wyllouse, poplers, palme trees, and alders, most beautiful to behold. This vigilant pastoure, taken with the syghte of this terestial paradise, sayd vnto a seruaunt of his (the clerke of his signet no doubt it was, for he vse to cary his masters ryng in his mouth) "Robin," sayd he, "yonder benefice standeth very pleasantly, I would it were myne." The seruaunt aunswered, "Why, syr," quoth he, "it is your owne benefice;" and named the parish. "Is it so?" quoth your chaplen. And with that he pulled out his scroule to se for certentie whether it were so or not.

Se (most dread Souerayn) what care they take for the flocke. When they se theyr parysteh churches they knowe them not by the sittuation. If youre Highnes had so manye swyne in youre royalme as you hane men, would ye commyt them to the kepyng & fedyng of such swynherdes as did not know theyr swyneseetes when thei sawe theym? Oh merciful God, how far wide is this our tyme from the primatie church! Defer not (moost deare Soueraine) the reformation of this
mytse; for the day of the Lord is at hand, and shall come upon vs as a thefe in the nyght, ii. Peter iii. Discerne not your selve through the false glosses of these flatterynge ipocrtes. Turne them out after theyr brethren, the pyed purgatory patriarches; and restore to the poore members of Christ theyr due portion, which they trusted to haue receiued, when they sawe your Highnes turne out the other sturdy beggers. But alas! thei failed of theyr expectation, and are now in more penurye then ever they were. For, although the sturdy beggers gat all the devotion of the good charitabe people from them, yet had the pore impotent creatures some relefe of theyr scrappes, where as nowe they\(^1\) haue nothyng. Then had they hospitals, and almeshouses to be lodged in, but nowe they lye and storue in the stretes. Then was their number great, but nowe much greater. And no merueil, for ther is in sted of these sturdy beggers, cret in a sturdy sorte of extorsioners. These men cesse not to oppresse vs, your Highnes pore commons, in such sort that many thousandes of vs, which here before lyued honestly vpon our sore labour and trauayl, bryngyng vp our children in the exercise of honest labore, are now constrayned some to begge, some to borrowe, and some to robbe & steale, to get food for vs and our poore wifes & chyldren. And that whych is most lyke to growe to inconueniencie, we are constrained to suffer our chyldren to spend the flour of theyr youth in idlenes, bringyng them vp other to bear wallettes, other eles, if thei be sturdy, to stuffe prisons, and garnish galow trees. For such of vs as haue no possessions lefte to vs by oure predicessours and elders departed this lyfe, can nowe get no ferme, tennement, or cottage, at these mens handes, without we paye vnto theim more then we are able to make. Yea, this was tollerable, so long as, after this extreme exaction, we wer not for the residue of our yeares oppressed with

\(^1\) Orig. thye.
rents are raised much greater rentes then hath of ancient tyme bene paied for the same groundes; for than a man myght within few yeres be able to recover his fyne, and afterwarde lyue honestly by hys travel. But now these extorsioners have so improved theyr landes that they make of xl. s. fyne xl. pounde, and of v. nobles rent v. pound, yca, not suffised with this oppression within theyr owne inheritaunce, they buy at your Highnes hand such abbay landes as you appoint to be sold. And, when they stand ones ful seased therin, they make vs, your pore commons, so in dout of their threatynge, that we dare do none other but bring into their courtes our copies taken of the coentes of the late dissouled monastaries, and confirmed by youre Hygh Court of Parliament, thei make vs beleue that, by the vertue of your Highnes sale, all our former writings are voyde and of none effect. And that if we wil not take new leases of them, we must then furthwith avoid the groundes, as hauyng therin none entrest. Moreover, when they can espy no commodious thyng to be boughte at your Highnes hand, thei labour for, and optayne, certayne leases for xxi. yeres, in and vpon such abbay landes as lie commodiously for them. Then do they dashe vs out of countenaunce with your Highnes authorite, makyng vs beleue that, by the vertue of your Highnes leas, our copies are voyde. So that they compell vs to surrender al our former writings wherby we ought to holde some for ii. and some for iii. yues, & to take by indenture for xxi. yeres, oueryng both fynes & rentes, beyonde all reason and conscience. This thinge causeth that suche possesserions as here tofore were able and vsed to maintaine their owne chyldren, and some of ours, to lernyng and suche other qualites as are necessarye to be had in this your Highnes royalm, are now of necessite compelled to set theyr owne children to labour, and al is lytle inough to pay the lorde rent,
Help us in our extremity, and do not suffer the hope of the realm to perish!

Study to leave your son, Prince Edward, a Commonwealth, not an island of beasts. Remember you are the defender of the innocent, and the punisher of the oppressor.

If you will redress our grievances you are sure of aid;

if not, the blood of those who die by your negligence will be required at your hands.

Remember your hear hairs are a token that your life must soon end, and prevent the imaginations of them that gape, and loke after the crowne of supplication.
SIMONY, USURY, AND VICE.

such as gape for your death.

We pray you may live to see the confusion of all such traitors, and see your son able to govern the realm.

Vice is rampant in the land.

Simony has lost its name, and usury is lawful gain. Unless these things be redressed, they will bring the wrath of God upon us. By our example we are worse than Jews or Mahometans.

this realm after your daies. For what greater hope can thei have as concerning that\(^1\) detestable and deuylysh imagination, then that they might wynne the hertes of vs, your Hyghnes commons, by the delieryng of vs from the captinite and mystery that we are in? We beseeke God, your Highnes maye lyue to put awaye all such occasions, and to se the confusion of all suche trayterous hertes; and that youre Grace may se that worthy Prynce Edward able to gonerne and defend this your realme, vanquishyng all his enemys, bothe far and nere, as your Highnes, by the ayde of Almighty God, hath done hitherto. Defer not, most dread Souerayne Lorde, the reformation of these so great enormities; for the wound is euuen vnto death, if it continue anye whyle lenger. A prynce welbeloued of his people is muche more ryche then he that hath houses full of gold. And yet is he much more ryche that is beloued of God. For if God bee on your part, who can preuayle agaynst your Hyghnes? By thys we meane the great and myghtic abomination of vyce, that nowe rayneth within this your Highnesse realme this day. For hordome is more estemed then wedlocke, although not vniversally, yet amongst a great nombre of lyeuous persons. Simoni hath lost hys name, and vsery is lawfull gaynes.

These thinges, onlesse they be redressed, wyl bringe the ire of God vpon the realme. For what doth it lesse then declare vs to be cleane fallen from the doctrine of Christ, who taught vs to lende, lokinge to haue no gayne therby? What example of lyfe is in vs this daye to declare, that we rather bee the people of God then the Iewes or Maometans? Certes (most renomed Prince) none but that we confesse hym to be God. And that were sufficient, yt our deedes dyd not denye him. Yf the rulers haue geuen the occasion of these thynges, alas for them; they had ben better to haue had mylstones hanged about theyr neckes, and haue

\(^1\) Orig. than
ben cast into the sea. But if the people haue taken it of them selues, and be not punished of the rulers, but be permitted frelye to vse it; the blud of them that perish shalbe requered at the watchmans hand, Ezeki. xxxiii. Thus princes are punished when the people offended. But now (most deare Souerayne) your Highnes may in this matter try your prelates whether they be of God or nat; for yf they were of God, they woulde, accordinge to the wordes of the prophet, neuer sease, but openly and with a criyng voyce, declare vnto the people their faultes, Esai. Iviii, and not be hushed wyth an acte in parliament; for that declareth them to be the setters forthe of mans tradicyons and not of Godes lawes, so that this saying of our Saviour Christ is veriified in them:—"This people honoreth me with their lyppes, but their herte is fare from me: they teache the doctrines and commaundementes of men," Math. xv. But here they thynke to stopoure mouthes wyth the feare of youre Highnesse displeasure; they say youre Highnesse lawes are Godes lawes, & that we are as moch bounde to obserue them as the lawe of God geuen by Moyses. Trueth it is (most deare Lorde), that we are bounde by the commaundement of God, to obey your Highnesse, & all youre lawes set forth, by your Hygh Court of Parliament, but yf they dissent from or be contrary to anye one iote of the Scripture, we muste, with Ihon & Peter, say, Actu. iiiii. "Judge you whether it be better for vs to obeye God or man." We speake not this because we think by this, that we may rebel agaynst you, our naturall Prince. But that yf youre Hyghnes would enforce vs by a law to do any thing contrary to that God hath commaunded vs, that then we ought manfully to cleaue to the truth of Godes word, boldly confessing the truth therof, fearing nothing the death of this body; and yet moost humble submittingeoure selues vnto you, redy to abyde and pacientlye to suffer what kynde of torment so euer
should be leyd vpon vs, knowing for certeynty that we are happy when we suffer persecution for the truths sake, and that he is faythfull that hath promessed to be revenged of oure injuries. But these dombe dogges haue lerned to faigne vpon them that vse to bringe them bread, and to bee wonderful hasty when they be mantayned and cherished; but yf they be but ones byde cowche, they know their liripope so well that they draw the tayle betwine the legges, and gette them selues streyght to the kennell. And then come who so wyll, and do what they wyll, these dogges wyll stere no more till they heare thayr maister saye, “hye cut and longe tayle.” So frayd they are of stripes, and lest they shoulde be tyde vp so short that they myght not raynge a brode and worie now and than a simple lambe or two. Before it was passed by Acte of Parliament that men myghte take x. li. by yeare for an hondreth pound lone, how vehement were they in the matter? All theyr sermons were lytle other then inuictiues agaynst vsery. Then they could aileage both Christ and the Psalmist to proue that Christen men ought to lende what they may spare, & to loke for no gaynes therof. But nowe they do not onlye holde them selues styll as concernynge thys matter, but also they endeoure to imitat, yea, and to passe the example of the extorsyoners and vsersers. For even the laste yeare they opteyned by thayr importune sute, a graunte whych, yf it be not renoked, wyll in continuauce of tyme be the greateste impourishment of vs your poore commons (and chyffly in the citie of London) that ever chantes sence the fyrst beginnyng therof. They haue obtayned, and it is enacted, that euery man wythin the sayd cytie, shall yearly pay vnto them accordynge to the rentes they are charged wyth xvi. d. ob. of euery x. s. So that yf the lordes of the groundes do double & triple the rentes, (as they do in dead) then most the pore tenantes paye
also double & triple tenthes as dwe encrease of their riches: this is not vnylke vnto that which is practised in the county amongst vs your Highnes poore com- mones. For when it hath pleased God to punish vs with the rote of our shepe, so that perhapes some one of vs hathe hylded C. shepe, then haue some of the persons constrained vs to geue them x. of the felles, for they cal it increase so longe as we sell them. And therefor must they (as Godes debities) take the tenth thereof. Haue compassion vpon vs (most gracius Soueraine); suffer not these vnsatiable dogges thus to eat vs out of al that we haue; considire that it is against al reason & conscience, that we, your pore comonens, should be thus oppressed; that where the landlorde taketh of vs doubler & triple rent, that then we shall pay also to the person doubler or triple tenthes. But see (moost dere Souerayne) howe craftely they haue wroughte thyse feate; they require not the tenthes of the lande lordes that haue the increase, but of the tennautes, whych of necessitye are constrained to pay to the lordes theyr askynge, other elles to be without dwellinge places. They know right well that yf they shoulde haue matched them selues with the landelordes, they happe-lye shoulde haue bene to weake for them at the lengthe. But they were in good hope that we (your poore commons) shoulde never be able to stande in theyre hands, as in verye deed we shall not onles your Hyghnes wyll voultysafe to take our cause in hand; for yf we haue not wherwith to pay them, they mai, by the vertue of the acte distresse suche implementes as they shal fynde in our houses. They know our condi-tions of olde, sence they toke theyre mortuaries. We had rather, in maner, famyshoure selues for lack of fode, and to make right harde shyft besydes, then that we woulde be troubled for anye suche thyng. And doultlesse (most remonded Prince) yf the oppression were not
not been so unreasonable, we should have borne it.

We would rather fast three days a week than seem slack in keeping the law.

People beg at Easter to pay for the Sacrament; they beg to bury the dead.

A naked corpse was carried to be buried in the city of London, and sent into the street again till the poor could beg enough to pay the priest's due.

The men who profess to teach the ignorant, and to be the light of the world, act thus, and call the latty brute beasts.

to moch beyond all reason and conscience, we woulde never haue troubled your[e Highnes with all. Yea, yf there were any hope that they would be satisfied by this, we woulde rather fast iii. dayes euery weake, then we woulde seame to be slack in doyng all such thynges as the lawe byndeth vs to. But we se daylye so great increase of theyre unsatiable desire, that we fear lest in processe of time they wil make vs all begge an[d] brynge to them all that we can gette. It is no rare thinge to se the poore impotent creatures begge at Easter to pay for the Sacrament when they receive it. And it is no lesse commune to se men begge for such dead corpses as haue nothinge to paye the pristes duitie. Yea it is not longe sence there was in your Highnes cytie of London a dead corps brought to the church to be buryed, beyng so poore that it was naked wythout any cloth to couer it. But these charitable men, whiche teache vs that [it] is one of the workes of mercy to bury the dead, woulde not take the paynes to bury the dead corps, onlesse they had theyr dutye, as they call it. In fyne, they caused the dead corps to be caried into the strete agayne, and there to remayne tyll the poore people, whych dwelled in the place where the poore creature dyed, had begge so moch as the pristes call theyr dwe. O mercifull Lord, who can be able worthily to lament the miserable estate of thys tyme? When those men whiche in all thyng professe to be the light of the worlde, the teachers of the ignoraunte, & the leaders of the blynd, are so fare withoute mercy (whyche Christe preferred before sacrifice) that they wyl not do so moch as wast a lytle of theyr breathe in readinge ouer a fewe psalmes at the buryall of one of the poore members of Christ, onlesse they have money for theyr laboure! And whan those persons whom the other, called spiritual, do compt but as brute beastes, callynge them temporall, shall showe more mercy, the badge of

1 Orig. duitie.
the Christian soldiers, towards the poor members of Christ, then they which glory to be the true prophets of Christ, and successors of the Apostles! Yea, when those painted sepulchers be so merciful that they pitie not them, whom the very unfaithful woulde pitie! Where is theyr so little mercy showed as amongst them? In so much that theyr covetousness is growne into this proverb, "No penny, no pater noster." For they will not do that thyng which every Christian is bounde to do for other, unless they may be waged for money; they wedde and bury, and syng ful mery, but all for money. If your Highness would call a compt of them, and cause them to shewe the bokes of the names of them that haue ben buryed & married with in this yeare, conferringe that number wyth the summe of money they take for euery such burial & mariage, you should easily perceave howe lytle neede they have to oppress vs with double & triple tenthes. Judge then (most victoryouse Prince) what an unreasonable summe the whole & grosse summe of these enhanced tenthes wyth other theyr pettyt bryburye, draweth to. They receave of euery houdreth li. xiii. li. xv. s., & of the thousande, one hundreth, and xxxvii. li. x. s. Then may youre Highnes sooner be certifie what they receyue of the whole rentes of the citie. No doute (gracyouse Prynce) they receyue of vs yearely more then your Hyghnes dyd at anye tyme when you were besette on euery syde wyth mortall enemies. And yet their conscience woulde seerve them wel ynowgh to take three tymes as moche as they do, yf your Hyghnes woulde suffer them. For they use to saye that, for as moche as it is establisshed by a lawe, they may, wyth good conscience, take it yf it were more. Yea yf your Hyghnes woulde suffer them, theyr conscience woulde seerve them to lye wyth our wives euery tenthe nyghte, other els to hauue euerye tenthe wyfe in the paryshe at theyre

Their covetousness has growne into a proverb:

"No penny, no pater noster."

The fees they receive for marriages and burials render tithes unnecessary.

Of every £100, they receive £13 15s.

They receive more than your Highness did when beset by mortal enemies; yet they wish for more.

They would tithe our wives, if they were permitted.
pleasure. But our trust is that your Highness will tye them shorter, and to saye the true thet it is tyne; for ye you suffer them a whyle they will attempt to make your Highnes pay the tenthes vnto them as longe as they have payed them to you. For they have already soughte oute our ware houses, store houses, stables, warffes, and barnes, causyng vs to paye, not onely the tenthe for that we never payd before; but also the vii. peny of the whole rentes, raised throughout the whole cytie. Who can judge other therfore (moost drede Souerayne) but that they wold, ye thei wist how, cause your Highnes to pay vnto them not only the tenth of your yerely reveuines, but also the tenthe peny of all such spoiles as youre Highnes shall take in warres; for they carp moch vpon Abraham geuinge of the tenth of his spoile to Melchisedech. Wherfor most merciful Prince, consider with mercy this pitiful complaint of vs your most faithful subiects, deliueringe vs from the mouthes of these vnsaciable beastes, which do daylye employ them selues to deoure vs, our wyues and childerne, even as we were fode prepared for them to deoure. Let the order that Paule toke withe the faythfull of the primate church, take effect in these our days, the last days of this miserable world. Let none eat that laboureth not, ii. Thessa. iii.¹ Let them also that be called to be preachers, haue the rewarde of preachers; overlode them not with the possessions & ryches of this world, for the cares therof do choke the worde. Let not eche rauneyngge woulfe that commeth wyth a shepehoke in hys hande be recued as a shepherde. Let not the simple lambes of Christ be committed to the tuition of these so rauninge woulfes. Let not the porcion of the poore be committed to them that distribute not, but rather gather and heape vp. coumptyng euery fyshe that cometh to the net. Let the

¹ Orig. iii.
worthy prophets that walke diligently in their vocation, be called to the governance of the spiritual flocke of Christ, and let them be repelled that come uncalled, we meane suche as sue to beare the name of youre Hyghnesse chaplaynes, onelye because they trust to optayne therby lordlyck lininges out of the porson of the poore. Take pity (mooste mercifull Prince) upon vs your poore, and faythful leage people; take pity vpon youre owne soule, which shall at the laste daye be charged wyth all abuses that your Hyghnes suffereth frely to raygne. Beleue not those gnatonicall adherentes that wyll not sticke\(^1\) to affirme and denye, so that they may trust to please you therby. Let them not perswade your Highnes that al is good that is concluded in your Hygh Court of Parliament. Remembre, O, howe they ledde your Hyghnes when you sent forthe your letters vnder your broode scale, streightly commandinge euery and singuler your Highnes subiectes, vnder Payne of youre Highnes displeasure, to ayde, supporte, and forther all and singular prockters & pardoners. Remembre in what case they had brought iour Highnes when you thought it godlynes to viset in your owne parson the graues, images, & relikes of dead saintes, doing to them diuine honour & reuerence.

Let them not perswade you that God is or can be better serued in the Latine tong then in the Englysh; consider what great folly Saynte Paull counteth it for men to pray, which is to talke wyth almighty God, in a tong they understand not, i. Corin. xiii. Yea and how much greater folly it is to thynecke holynes in hearyng a tale told in a strange tong. Your Hyghnes commanded that none should receaue the Sacrament at Easter,\(^2\) but such as coulde and dyd vse the Lordes prayer wyth the articles of the fayth in the Englysh tong. But they byd vs vs that which is most ready to vs.

\(^1\) Orig. stickt. \(^2\) Orig. Erster.
They baptize our children in the Latine tongue, beding vs say, 'Volo,' and 'Credo,' whan we know not what it is that they demande of vs. By this meanes is it broughte to passe that we know not what we profess in our baptisme, but superstitionly we think that the holynes of the wordes whych sound so straungly inoure eares, & of the water that is so oft crossed is the doyng of all the matter. Yea we thynke that yf our children be well plunged in the fonte they shalbe healthful in all theyre limbs euer after, but yf they, by any misadventure, receyue any hurt in any of theyre membres, incontinent we ley the faute in the prist, sayinge, that member was not wel christened. Oh mercifull God, what hert can be able worthely to lament this more then Jewdaical superstition? The thing that is mere spirituall, we applye whollye to the flesh. Was there euer any vayne yدولours that woulde honour theyrgoddes in a language they vnderstode not? Were the moncke, friers, and chanons, wyth other superstitionly religions, professed in a straunge tongue? Is not the oth of obeyssaunce that we your leage people take vnsto you, ministred in the English tongue? And for what other purpose but that we may therby knowe our mooste bounden deuitie toward you oure naturall Prince and Leage Lorde? Is it then becaseynge that we, takynge an oth of obeye-saunce to the Kyngge of all kynges, the God of al the world, and Maker therof, shulde not know what is demaunded of vs nor what we answere agayne? Yf we hold vs styl as concerning this more then hell darke-nesse, the very stones of your pallayce woulde make exclamacion. Preuent therfore, most gracious Prince, the yre of God whiche hangeth ouer thys your royaume. Remember that his long sufferance shalbe recompened wyth the extremitie of the punyishment. Wherfore, most worthy Prince, we humbly beseeke oure heauenly
MAY GOD BLESS THE KING.

Father, the Gener of all goodnes, even for the Lord Iesu Christes sake our Sauyoure and Redeamer, that he preserve you alwayes, geninge you grace to walke circumspectly in your vocation and ministry, that, at the last day, you may receaue the incorruptible crowne of glory, and reigne with our Elder Brother the first begotten Sonne of God the Father Almighty; to whom wyth the Holy Gooost be all honore and glory for euer and euer. All true Englysh hertes saye, Amen.

Psalme. xl. 1

Happy is the man that pitieth the poore: for in tyme of trouble the Lord shal deliuer hym.

Thus have we (your most obeisant subiectes) declared the feruent desire we have not only of your prosperoues succes in the affaires of this life, but also of your eternal reign with the Lord Iesu in the celestial kingdom, of whose fayth ye are, in earth, Defender, and of the faythfull congregacion, in thys lyttle angle of the earth congregate, the Supreme Heade immediatlye nexte vnto him, by whose mighty hand you haue hytherto vanquished, not onely the externe enemies of this moost noble royalme, but all such as haue most dyuilyshly ymagined, conspired, & attempted treason against youre Hyghnes, theyr moost naturall Leage Lord and Gouernour. What histories should we reade to know of so many and so daungerous conspirations, so wonderfully detect & auoyded? Who myghte so sone haue wrought the most detestable purpose of treason, as she that slept in your bosom? What mighty princes haue ben betrayed by them that they haue loued aboue all creatures? And howe wonderfullye, even at the verye poynt, and in the time of most

1 xli. in Au. Ver. 2 Orig. yoyn.
That abominable idol, the Pope, who was so high in the consciences of us all,

he is become your footstool. Rejoice, for the Lord is your right hand.

Go forth to conquer; and return not till you have purged the Lord's vineyard.

Let not Prince Edward be oppressed in his youth,

but eait to mind your own youth, when these evils were too strong for you. There are many who would be glad to see the old times come again.

The wisdom of God lead you into all truth. Amen.

danunger, hath the myghtye hande of the Lorde de-lynered you? Besydes this, that moost abominable ydoll of Rome, which sate so hygh not only in the con-
sciences of vs your most bounden subiectes & poore commones but also your nobles (euen from the highest to the lowest) were all hys faythfull adherentes; in so moche that som of them would not styck to sheade the best bloude of theyrr bodyes in hys quarel. And yet how wonderfully hath the Lord our God, made him ioure fote stole? Reioise (deare Souerayne) reioyce. The Lord is your right hande, he hath found you faythful in a lytle, & shall ordeyne you ouer mocch more. Onely beware that you, puttyng your ha?zde to the ploughe, do not loke backwarde. Go forthe manfully to con-
quere, and turne not agayne tyll you haue purged this vineyard of the Lorde, so that there remayne not one lytle impe besides those that our Heauenly Father hath planted. Let not that noble Prince Edwarde be op-
pressed in the dayes of hys youth, with the combrouse weadynge oute of suche rotten and fruyteles trees, lest perchaunce they take deeper roote then that his tender youthe may be able to mooue. Forget not your owne youth, when these adulterine trees were to stronge for you. Thyinke not but that you shall leave behynd you a great nombre that wolde be glad to se the old stompes of these fruitles trees sprynge agayne. The Lord bringe them all to confusion, genyng your Highnes long lyfe, with assistence of hys grace, to performe that whiche you haue begonne. The wysdom of the Lordeoure God leade you into all trueth. Amen.

¶ Your moste faythfull and obeyesaunt subiectes, the Pore Commones of the Royalme of Engelande.

Anno, M. ccccc. xlvii.
A Certayne

causes gathered together,
wherin is shewed the decaye
of England, only by the great
multitude of shepe, to the bi-
ter decay of household keping,
mantenaunce of men, dearth
of corne, and other notable
dysecommodityes approp-
ued by syxe olde
Proverbes.

Prover. 20

A Kyng that sitteth in judg-
ment, and loketh well about
him, dryueth away all enell.

[The title of the Lambeth copy had Causes, onely, multytude, housholde
kepyng, Kyngge, euyl.]
To the Kynges moste honorable Counsell,  
and the Lordes of the Parlametn house.

The fyrst Article & poyn, as we do thynke, it is\(^1\) \text{great pyttye} \text{(so the will of God it were)} \text{that there is not}\(^2\) corn ynoough within this Realme of Englande, at all tyme necessary to certify & suffyce the Kynges subiectes for the space of one yere, two, or thre, yf there were no corne sowyn in this Realme by the sayde space.

We do saye that the Kinges Maiestie, mercifully hearing the peticiow of these his graces poore subiectes, maye at al tyme remedy it, when it shall *please hys Maiestie, being for a common wealth for his graces subiectes, & to the greate encrease of this noble realme of England.

We saye, as reason doeth leade vs, *that shepe & shepemasters, doeth cause skantyte of corne, whiche we do thynke\(^3\) it maye be well approved, by reason of six proverbes; for & yf all our lyuynges, and all our commodities, were diuyded in partes, by reason of the same syx proverbes, we that be the Kynges Maiestyes poore subiectes, do lose syx of our commodityes, then haue we thre losses, whiche make nyne; by reason of the same thre losses, we, the Kynges Magestyes\(^4\) subiectes, do lose the third part of our lyuinge, then haue we the tenth part, which we cal a remedy, beseeching your noble grace, to remedye when your Maiestye shall please.

\(^1\) is it—C(ambridge copy), \(^2\) no—C, \(^3\) thincke—Lambeth copy; and with a c elsewhere. \(^4\) mayestyes—C.
As touchyng the fyrste proverbe of the syx, we do thynke

The more shepe, the dearer is the woll.
The more shepe, the dearer is the motton.
The more shepe, the dearer is the beffe.
The more shepe, the dearer is the corne.
The more shepe, the skanter is the whit meate.
The more shepe, the fewer egges for a peny.*

In the fyrst proverbe, the more shepe, the dearer is the woll. Our complaynt is for Oxford-shyre, Buckyngham-shyre, & Northampton-shyre; and as for all other shyres, we refer it to the playntyues¹.

We shal desyre you, and al other that reade and se the true ententes & meanynges of this our doinges, to pardon our ignorance; yet not withstandyng, we desyre you sumwhat to attender the premisses, seinge it is done, and put forth, for the commoditye of the Kings Magesties realme, and for the welth of his graces poore subiectes.

In the sayde Oxford-shyre, Buckyngham-shyre, & Northampton-shyre, there be many men of worship dwellyng within the sayde thre shyres, and hath great landes to lyue vpon, the which we praye to God to geue them ioye of, and well to occupye it. Many of these worshipful men, sette no store, nor pryse, vpon the mayntenaunce of tyllage of theyr landes, as before tyme hath been vsed, neyther breadyng nor feadynge of catle, but many of them doeth kepe the most substaunce of theyr landes in theyr owne handes². And where tillage was wont to be, nowe is it stored wyth greate vumberment of shepe: & they that haue great vumberment of shepe, muste nedes haue great store of woll, and we cannot thynke † who shulde make the pryse of woll, but those that haue great plentye of shepe. And we do partly knowe that there be some dwellynge

¹ playntyunes—C. ² L(ambeth copy) repeats des by mistake.
within these thre shyres, rather then they wyll sell
theyr wolle at a lowe pryse, they will kepe it a yere or
twayne, and all to make it deare, and to kepe it a deare
pryse. And by this meanes the fyrst prouerbe to be
true: The more shepe, the dearer is the wolle.

In the seconde prouerbe, as we do thynke: The
more shepe, the dearer is the motton.

As by reason, the most substaunce of our feadynge
was wont to be on beffe, and now it is on motton. And
so many mouthes goith to motton, whiche causeth
motton to be deare.

In the third prouerbe, as we do thinke: The more
shepe, the dearer is the beffe.

As by reason that bredyng and fedynge, is not set
by as it hath bene in tymes past; and where as shepe is
kepte vpon the pasture groundes where bredyng &
fedynge of beffes was wont to be kept1, And now there
is nothyng kept there but motton.

The fourth prouerbe: The more shepe, the dearer is
the corne.

By reason tyllage is not vsed, occupyed, and
mainteyned as it hath bene before tyme, but shepe
kept vpon the grounde, where tyllage was wont to be
kept and mainteyned.

The v. prouerbe: The more shepe, the skanter is
the weyte meate.

By reason tyllage is not vsed, occupyed, and maynt-
teyned, nother mayntenaunce of houses and hosp-
talitye, where as catele was wont to be fede and bred;
by reason of kepyng of catele, shulde increase whty meate;
and now there is nothyng kept there but only shepe.

The syxte prouerbe: The more shepe, the fewer
egges for a penny.

1 The Cambridge copy repeats ' & where as shepe is kept
vpon the pasture groundes, where bredyng and fedynge was
wont to be kept,'
NINE LOSSES. THE PRODUCE OF ONE FLOW.

By reason cottages go downe in the contre, where as pultrye was wont to be breade and fedde, nowe there is nothynge kept there but shepe, which cause the egges to be solde for fower a penny.

Thus be the syx proverbes true, as we do thyinke, desyrynge you to gene hearynge vnto them, and that it may be wel amended, for the common welthe of the Kynges poore subiectes.

Then haue we thre losses, that maketh nyne.

The fyrst losse, as we do thinke, there is not so many plowes vsed, occupied and mainteyned within Oxforthshire as was in Kynge Henry the Seuenth tyme, and sens hys fyrste comming there lacketh xl. plowes, euery plough was able to kepe vi. persons, downe lypinge and vprisynge in hys house, the whiche draweth to twelf score persons in Oxfordsyre.

And where that the sayde twelf score persons were wont to haue meate, drynke, rayment and wages, payinge skot and lot to God & to our Kyng, now there is nothynge kept there, but onlye shepe. Now these twelfscore persons had nede to haue lininge:—whether shall they go? into Northhamptonshyre? and there is also the lyuinge of twelf score persons loste: whether shall then they goo? fourthe from shyre to shyre, and to be seathered thus abrode, within the Kynges maiesyes Realme, where it shall please Almighty God: and for lacke of maisters, by compulsion dryuen, some of them to begge, and some to steale.

The seconde losse, as we do thinke: That there is neuer a plough of the .xl. plowes, but he is able to tyll and plowe to certifie syx persons, and euery ploughe to sell .xxx. quarters of grayne by the yeare, or els he can full yll paye, syx, seuen, eyght poundt by the yeare. xl plowes, .xxx. quarters euery ploughe, draweth to two¹

¹ This "two hundreth" must mean twelve hundred: $40 \times 30 = 1200$. 
hundredth quarters in Buckingham shyre, two hundredth quarters in Oxfordshire, & two .cc. quarters in Northampton shyre, & so forth from shyre to shyre in certayne shyres within the Kinges Maiesties Realme of Englande. what shall the twelf two hundredth quarters of corne do in Oxfordshire? we do thynke it wyll mainteyne the Kynges markettes, and sustayne the Kynges subjectes; and lykewyse in Buckyngham shyre, & also in Northampton shyre and so from shyre to shyre, in certayne shyres wythin the Kynges Magesties Realme. Furthermore it is to be consydered what thys twelf hundredth quarters of corne is able to do within Oxfordshire, it is able to certifye & suffyce xv. score people by the yeare, bread and drynke, & allowe to euery person ij. quarters of weate, and two quarters of malt, by the yeare; where as in the fyrst the hole lyuinge of twel waste persons, meate, & drynke, and rayment, vprys-yng & downe lyinge, payinge skot and lot to our God, and to our Kyng. And the seconde losse, bread and drynke for .xv score persons by the yeare, whiche the hole nombre draweth to .v. hundredth and .xl. persons in Oxforth shyre; and 1 so in Buckyngham shyre, & so lykewyse in Northampton shyre, and so forth from shyre to shyre wythin the Kynges Maiestyes Realme.

And yf it be as we do think, that there be .iiij. score plowes in euery one of these shires les then there was, then is there the lyuyng lost of a thousand & iij. score persons in euerye one of these foresayde shyres. Thys is the seconde losse, as we do thynke, and call for remedy for it.

The thirde losse, as we do thinke: We do lose in the sayd thre shyres kepynge of houehold and hospitalitye, & maintayning of tyllage and houshold kepyng; we do lacke corne, and also lese our cattell; for where any housholde is kept, there is kept kyne

1 C omits 'and'.

These 1290 quarters of corn would keep 360 persons a year.

The whole second loss in Oxfordshire draws near 540 persons.

It is thought there are 80 plowes lost in each shire.

Every house kept kine.
and calves; and of our kine there commeth mylke, butter and cheese; and all this doeth sustayne the Kynges Mayesties subjectes; and for thyse we haue nothynge but shepe.

And furthermore, where householdes be kept, there is hoggges, pygges, and bakon, capons, henes, duckes, egges, frute, and many other commodityes, that is necessary & nedefull to be had for the maintenaunce and lyuynge of the Kynges Maiesties poore subjectes to lyue by; and for that we haue nothynge but shepe. This is the thyrd losse.

The X. is, which we do cal for remedy, and we desyre of God and the Kynges Maiestye, yf it shal please his Highnes to be so good & gracious unto his poore subjectes, that there might be in euery shyre & hundred, as many plowes vsed, occupyped, and maynteyned, *as many householdes kept, as was by king Henry the Seuenth tyme, fyrst commynge. And then vnfayned, as we do thinke, we sholde hawe cattell ynoth, and shepe ynoth; then wil shepe and well be in more mens handes; we shall haue also white mete ynoth, and all thynges necessary. And thus Iesu preserue oure dreade souerainge Lorde and Kynge!

As we do thinke, we haue two losses more that we haue not spoken: The firste losse is for lacke of household kepynge & mayntenaunce of tyllage. It is great decay to artillary: for that do we reken that shepheardes be but yll archeers. And as we do further thinke, it leseth the kings Maiesty in prision for his noble householdes, that is to saye, in wheat, malt, benes, mottons, veles, hay and otes, and pultry, & all maner suche prisions that belongeth to hys Maiestyes household, as we do thinke, v. thousande markes by the yeare with the left. In a trial as we do thinke, yf it shuld please the Kynges Maiesties officers to call in hys graces pursuyners, & examyne them where they
LOST OF 50,000 PLOWS.

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hane had within their tyme for his graces provisions of his warres, & for his Maiestyes housholde, where as there is nowe nothyng to be gotten : for they that kepe the sayde landes, hath put the foresayde landes to pastures, *themself byeth all maner of grayne & corne to kepe theyr housholde with all.

Furthermore, yf it shall please the Kingses Highnes, and hys noble counsell, for to haue a further tryall of thys matter, and to assure it to be true, take al craftes men dwelling in cyties & townes, daye laborers that laboreth by water or by lande, cottygers & other housholders, refusyng none, but only them that hath al this aboundaunce, that is to saye, shepe or wollmasters, and inclosers, the lamentacions of the Kingses Maiestyes subiectes will make any true herted body to seke & call for remedy, whiche we beseche the Lorde to *amende. Amen.

Furthermore, as we do thinke, this Realme doeth decaye by thys meanes: It is to understande and knowen, *that there is in England, townes and villages to the nomber of fifty thousand & vpward, & for euery towne and vyllage,—take them one with an other throughout all,—there is one plowe decayed sens the fyrste yeare of the raigne of kyng Henry the Seveneth. And in som townes and vyllages all the hole towne decayed sens that time ; and yf there be for euery towne and village one plough decayed, sens the first yeare of the raygne of kyng Henry the Seveneth, then is there decayed 1. thousande ploews and vpwarde.

The *whiche 1. thousande ploews, enere plough were able to mainteine .vi. persons: That is to saye, the man, the wyfe, and fower other in his house, lesse and more. 1. thousande ploews, six persons to euery plough, draweth to the nomber of thre hundred thousand persons were wont to haue meate, drynde, and rayment, vprysing and down lyinge, paying skot and who paid scot and

Those who keep the lands, and have put them to pasture, [* sign. B. iij.] buy grain to keep their household.

Take all craftes-men, and all labourers, and their lamentation will make a true man call for remedy.

In each of 50,000 towns, one plow is decayed since the 1 Hen. VII, [* sign. B. iij.] which 50,000 ploews represent a loss of 300,000 persons.
lot to God, & to the Kyng. And now they have nothyng, but goeth about in England from dore to dore, and axe theyr almose for Goddes sake. And because they will not begge, some of them doeth steale, and then they be hanged, and thus the Realme doeth decay, and by none other wayes els, as we do thynke. Besechyng your Hyghnes (of your moste noble grace) and honourable lordshyppes, the premisses tenderly considered before you in examinacion vpon the premisses, that we may haue a remedy in this behalfe. And we shall dayely praye for the conservacion of your Highnes, and for your ful noble lordshyppes.

Finis.

† Imprinted at London in Pouls churche yearde at the sygne of Saynet Austen by Hengh Singleton¹.

¹ Dibdin’s Ames gives dates for Singleton from 1553 (or 1550 according to Herbert’s notes), and says that Singleton died in 1592-3. The date of the present tract cannot therefore be earlier than 1550, or later than 1553, when Edward VI, to whose Council it is evidently addrest, died.—F.
SIX ARTICLES.

1. That in the most blessed Sacrament of the Altar, by the strength and efficacy of Christ's mighty word (it being spoken by the priest) is present really under the form of bread and wine, the natural body and blood of our Saviour Jesus Christ, conceived of the Virgin Mary; and that after the consecration there remains no substance of bread or wine, nor any other substance, but the Substance of Christ God and Man.

2. That the communion in both kinds is not necessary ad salutem by the law of God to all persons; and that it is to be believed and not doubted of, but that in the flesh under the form of bread is the very blood, and with the blood under the form of wine is the very flesh as well apart as though they were both together.

3. That priests, after the order of priesthood received as afore, may not marry by the law of God.

4. That vows of chastity or widowhead by man or woman made to God advisedly, ought to be observed by the law of God; and that it exempteth them from other liberties of Christian people, which without that they might enjoy.

5. That it is meet and necessary that private Masses be continued and admitted in the King's English Church and congregation, as whereby good Christian people ordering themselves accordingly, do receive both godly and goodly consolation and benefit; and it is agreeable also to God's law.

6. That auricular confession is expedient and necessary to be retained and continued, used and frequented in the Church of God.—Statutes at Large, ii. 149, ed. 1811. Commissions were issued to the Archbishops, Bishops, &c., to execute the Act, and to them powers were given to take and burn books containing matters contrary to it. The Act was to be read quarterly in all churches.

p. 62. Outbreak in 1536-7.—On the 2nd of October, 1536, when the Ecclesiastical Commissioners were to hold their visitation at Louth,
they found a great body of peasantry in arms, clamouring for their holidays; and proclaiming that they were gathered together for the maintenance of the faith, which was about to be destroyed. So far from Henry having finished his "golly purpose without bloodshed" of his "poore commones" (p. 63) he "wrote to Norfolk on the 22nd February, to cause such dreadful execution to be done upon a good number of the inhabitants of every town, village, and hamlet, that have offended in this rebellion, as they may be a fearful spectacle to all others hereafter that would practise any like matter." A priest and a butcher at Windsor were hanged for expressing sympathy with the Northern rebels."—Knight's Crown Hist. of Eng., p. 198, 200.

pp. 64—68. The Bible.—It was in 1536 that the Vicar-general's injunctions directed every parish priest to place a copy of the whole Bible in his church. These copies were all based upon Tyndal's translation. The bishops, although they had undertaken to supply a version which should suit Catholic orthodoxy, left their work untouched. In 1539 Taverner's Bible appeared. This contained a summary of things in Holy Scripture. "The priesthood was denied; masses and purgatory were ignored; the sacraments were described as nothing but outward signs." This led to the sale of unauthorized editions being forbidden, and after some discussion "a temporary limitation was imposed, perhaps wisely, upon its indiscriminate use." "It was wrangled over in ale-houses and tap-rooms. It was disfigured in rhymes, printed ballads, plays, songs, and other fantasies." Scandalous brawls and controversies disgraced the churches where it was placed for the people to read."—Froude, iv. 288—291. In the 34 and 35 Hen. VIII, cap. 1, the Bible was forbidden to be read in English in any church. Women, artificers, prentices, journeymen, servingmen, husbandmen, and labourers, might read the New Testament in English. Nothing was to be taught or maintained contrary to the King's Instructions.—Stat. at Large, ii. 201.

p. 67. Thomas Cromwell, Earl of Essex.—It was "with the private connivance of Cromwell" that "other editions" of the Bible than those authorized were put in circulation (Froude, iv. 289), and this was not forgotten when he stood attainted of treason. Not only was he accused of having "been the most corrupt traitor and deceiver of the king and the crown that had ever been known in his whole reign," but it was alleged that "he being also a heretic, had dispersed many erroneous books among the king's subjects, [the Bible probably being one] particularly some that were contrary to the belief of the sacrament." On the day of his beheading, 28th July, 1540, Henry married Catherine Howard.¹ Six years later one of the very party, to serve which he had risked (and lost) so much, was found to brand him as "a traytoure!"

p. 69. Boulogne.—On the 18th of September, 1544, Henry made his solemn entry into Boulogne.—Knight, p. 211. See also Froude, iv. 352.

¹ Knight's Crown Hist. of Eng., p. 206.
NOTES.

p. 75. The Holy Maid of Kent. — "About the time of Easter, in the seventeenth yeere of the Reigne of King Henrie the Eight, it hapned a certaine maiden . . . . servant to one Thomas Kob . . . to bee touched with a great infirmitie in her bodie, which did ascendde at divers times up into her throte, and swelled greatly" (Lambarde's Perambulation, p. 170, rep.). Her history is well known. "In the ende her dissimulation was deciphered, her Popish comforters were bewraied, the deceived people were well satisfied, these daungerous deceivers were worthely executed, and the Devill their Master was quite and cleane confounded." — Ib. p. 175.

p. 75. The Rood of Kent was at Boxley. It is thus described by Lambarde (p. 205): — "It chaunced (as the tale is) that upon a time, a cunning Carpenter of our countrie was taken prisoner in the warres betwene us and Fraunce, who (wanting otherwise to satisfie for his ransome, and having good leysure to devise for his deliveraunce) thought it best to attempt some curious enterprise, within the compasse of his owne Art and skill, to make himselfe some money withall: And therefore, getting togither fit matter for his purpose, he compacted of wood, wyer, paste and paper, a Roode of such exquisite arte and excellencie, that it not onely matched in comelynesse and due proportion of the partes the best of the common sorte; but in strange motion, variety of gesture, and nimblenes of joints, passed al other that before had been seene: the same being able to bow down and lift up it selfe, to shake and stirre the handes and feete, to nod the head, to rolle the eies, to wag the chars, to hende the browes, and finally to represent to the eie, both the proper motion of each member of the body, and also a lively, expresse, and significant shew of a well contented or displeased minde: byting the lippe, and gathering a frowning, froward, and disdainful face, when it would pretend offence: and shewing a most milde, anyable, and smyling cheere and countenance, when it would seeme to be well pleased."

p. 91. Queen Catherine Howard. — In 1541, Henry solemnly offered thanksgiving for the happiness he found in the society of this his Fifth Queen. On the 12th of February, 1542, she and lady Rochford were executed.
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My best thanks are due to the Rev. Dr Rock and the Rev. W. W. Skeat for their valuable assistance in the explanation of certain words in this Glossary.

ADDYCTE, 47, to give over to.
Aduaylable, 8, available.
Adulterine, 92, adulterate, counterfeit, corrupt.
Alckmist, 77, alchemist.
Amners, 34, almoners.
Artchers, 100, archers.
Artillary, 100, artillery, the art of shooting with bows and arrows.
Assityng, 2, to ascite, to call, to summon.
Attender, 96, to attend to.
A wiles, 68. ? In the mean time.
Axe, 101, ask.


Bloudsupper, 5, a murderer, a bloodsucker. "Poor creatures that should be killed by these unsatiate blood-savers for his truth's sake." Bp Bale, p. 324.
Bopipe, 68, bo-peep. "Some of the byshoppes at your injunctions slepe, Some laugh and go bye, and some can play boo pipe." Bale's Kyng Johan, p. 97.
Brenninge, 41, burning.
Bruit, 64, brute.
Bryres, 56, briers.
Buggery, 63, "the coupling of one man with another, or of man or woman with a brute beast." P.
Bumme court, 48, a court which took cognizance of certain vices.
By, set by, 97, thought much of.

Cannebes, 75, canopies. "Can nabie, canabie, a corruption of canopy." Jamieson: who adds that it is used in Inventories. "Canopeum, reticulum subtile factum de canabo. The Canope alluded to in the Promptorium was very probably the Umbrae canum under which the Sacred Host was carried in the

Carp, 88, talk, or speak.

Catuyite, 23, captivity.

Chaplaynes, 42. "Rydyng Chaplaynes"?

Church ales, 41; a church ale was a feast in commemoration of the dedication of a church.

Cocke of haye, 65, "a conical heap of hay." II.

Coelginers, 66. Bailey has "coelignous," but whether the "Coelginers" were a "heaven-born" sect or what they were I don't know. C.p. "Then was there an infinite table of . . . . senten- tioners and summists, of colliginers and canonists." Bp Bale, p. 350. Canon Rock suggests that the writer meant Culdees. "The Culdees were a sect of religious monks, remarkable for their religious exer- cises of preaching and praying." B.

Cohlyted, 25, hindered.

Commessacyon, 53, commissation, revelling.

Coopes, 75, Copes. "Cope, a sacred vestment which is directed by the Canons of the Reformed Church to be worn at the celebration of the communion in cathedral and collegiate church." P. P., note 2, p. 91.

Corporace, 75, "Corporasse, or corporalle. Corporate." P.P. "The term corporas, corporalis palla, de- notes a consecrated linen cloth folded and placed upon the altar in the service of the mass, beneath the sacred elements." Ib. note 3, p. 93. The corporal "is the name given to the linen cloth which is spread over the body (corpus), or conse- crated bread, in the communion." Hook's Church Dict., 9th ed. So that the corporas or corporal is placed beneath the elements by the Roman Catholic, over them by the Protestant.

Conentes, 80, convents.

Counfortable, 28, comfortable.

Counforte, 28, comfort.

Covent, 27, convent.

Cream, 41, Chrism. Oil conse- crated in the Romish and Greek churches by the bishop, and used in baptism, confirmation, orders, and extreme unction. "At the last crept in the worshipping of relics and shrines, with holy oil and cream." Bp Bale, p. 329.

Cruets, 75, cruets. "Crewet or crevet, a little vial, or narrow-mouth'd glass." P. "Copes, crosses, cruets." Bp Bale, p. 259.

Cukkoldrie, 6, the act of adul- tery.

Cure, 29, care.

Dashed, 8, condemned, con- founded. "The gentlemen were dashed by his earnestness." Gine's Baby, p. 175.

Debities, 85, deputies. "These spiritual tyrants shall examine you . . . and so deliver you up unto kings and debities." Bp Bale, p. 6.

Demaner, 61, demeanour.

Demurante, 32, grave in behavi- our.

Deplorate, 46, deplorable.

Dimitted, vii, dismissed, sent away.

Distayne, 81, to stain.

Dwe, 77, due.

Dome, 53, dumb.

Drafsocke, 15, a sack full of draf, a place of extreme wickedness. "Proving their traditions to be most vile draff, and most stinking dregs of sin." Bp Bale, p. 285.

Elbowhangers, 77, hangers-on, parasites.


Ennyng, ix. See above.

Enpiysonmente, 36, imprisonment.

Enterdite, 5, interdict.

Entermedlyng, xi, intermixing.

Eretik, 9, heretic.

Estatute, 30, statute.

Exquysytely, 22, exquisitely, accurately, with great exactness; minutely. "Exquisite, curious, choice; also exact, or carry'd on to the utmost height." P.

Externe, 91, external.

Felles, 85, fells, skins, or hides.

Fiftenes, 3, fifteenths.

Frayd, 84, afraid.

Fumishly, ix, angrily.

Galpe, 81, gape, gape after, to look forward to.

Gnatonical, 77, 89, gnat-like.

Goulafres, 10. See note, p. 10.

Gyldes, 75. "Gild, guild, or geld, A company of men united together, with laws and orders made among themselves." P. In the text it means the house in which a religious fraternity or gild lived.

Habilitate, 65, ability, power, or authority.

Habitacle, 24, a dwelling or habitation. "And he shall finally sup with me and with him in the eternal habitacle of God . . ." Bp Bale, p. 296.

Holde, 50, whole.

Hyed, 50, hide.

Hylded, 85, skinned. Hild, to skin. H.

Illected, 6, enticed. "Illectus, Pleasantly prouoked, intised, tolled, allured." Cooperi Thesaurus.

Impe, 92, a shoot of a tree, a cutting, a bud. "He shall be called . . . a lamb of Christ's fold, a sheep of his pasture, a branch of his vine, a member of his church, an imp of his kingdom." Bp Bale, p. 292. The same writer uses it in a bad sense: "O very imps of hell, and limbs of the devil!" p. 441.

Importune, 84, importunate.

Iorney, 71, journey.

Iote, 83, jot. "One iote, or one title of the law shall not escape." S. Mat. v. 18, Genevan New Test. 1557.

Iour, 92, your.

Ioywell, 39, jewel.

Kyre Eleyson, 69. Kyrie Eleison, the Greek of "Lord, have mercy" upon us.

Latward, 71. "Lateward, that is of the latter season." P.

Lazer, 77, leprous, afflicted with leprosy.

Leas, 80, lease.

Lirippowpe, 84. The following is Mr Halliwell's note on this word: "Liripopoys. An appendage to the ancient hood, consisting of long tails or tippets, passing round the neck, and hanging down before,
reaching to the feet, and often jagged. The term is often jo-
cularly used by writers of the 16th
and 17th centuries. ‘A lirripoop vel lirripoop, a silly empty crea-
ture, an old dotard.’ Milles, MS. Devon Gloss. A priest was for-
merly jocularly termed a lerry-cam-
poop. It seems to mean a trick or
stratagem, in the London Prodigal,
p. 111. ‘And whereas thou takest
the matter so farre in snuffe, I will
teach thee thy lyprippys after an-
other fashion than to be thus male-
pertile coocking and billing with
me, that am thy gouvernor.’ Stan-
hurst, p. 35.

There’s a girl that knows her
lerripoop.
Lillie’s Mother Bombie, 1594.”
“I believe the scarf grew out of
the fur tippet or almuce, or amass,
not the liripipe of the hood.”
Church Times, 16 Dec., 1870, p.
536, col. 4.

Lobies, 14, looby, a silly awk-
ward fellow. II.
Loutes, 15, clownish unmannernunly
fellows.

Lubbers, 15. “Abbey loutes or
lubbers.” Drudges, lazy drones.
“I dul abbe-lubbers, wych are
apte to no thyng but . . . only to
eat and drynke.” England in Henry
VIII’s Time, p. 131, ed. J. M.
Cowper.

Lubricite, 7, lubricity, incontin-
cency. See Lubricus, Cooperi The-
saurus.

Lyuleyke, 66, lively, living.

Maihem, 8. “Maihem or Ma-
him, (F.) main, wound, hurt.” P.

Morowe mas, 42. Morrow Mass.
I am indebted to Canon Rock for
the following:—“Time out of mind
and while the Anglo-Saxons ruled,
there used to be in every monastery,
cathedral, and large church, in this
land, two altars in every chancel:
one, the high or large altar; the

other, a smaller altar, not always
but usually at the back of this
larger altar. Every morning at
dawn, and at the end of matins, a
mass was sung or said at the smaller
altar, and the monk or priest who
celebrated it was termed the mor-
row-mass priest; and the altar it-
self was named the morrow Mass
Altar.” “The morrow masse aw-
ter” of Faversham had, in the 4th
Henry VIII. “Imprimis. A chise-
byll of grene damaske with lyones
of golde with apparel for the preest.
It. A masse boke preyned.
It. 2 cruets of pewter.
It. 2 kandylstykks and a small of
laton standing upon brods herse.”

Jacob’s Faversham, p. 164.

And Thomas Sterkey of Faversham
gave, in 1525, “to the morrow
masse altar every weeke a penny
after my decease the space of one
whole yere.” Lewis’s Fan. Man. in
the Church of Faversham, p. 37.

Mortvaries, 85, mortuaries.
“Mortuary, in the English ecclesi-
astical law, is a gift left by a man
at his death to his parish church,
in recompence of personal tithes
omitted to be paid in his lifetime.
By 21 Hen. VIII c. 6, mortuaries
were commuted into money pay-
ments.” Hook’s Ch. Diet.

Mought, 5, might.

Munke peneysons, 42, Monk
pensioners.

Murmuracyon, 26, murmurn, or
murmuring.

Myss, 78, a wrong, that which
is amiss.

Nastureum, ix, the herb nose-
smart.

Noble, 80, a coin of the value of
6s. 6d. “And in thys yere (1527)
begane the golde to ryse, as the
angell nobill at vije. and in No-
ember after it was made vijs. vjd.”
Grey Friars’ Chron., p. 33. The
angel also was of the value of 6s. 6d.
But when "a physician called Doctor Nicholas," received "xx Angells, vij li. x. s? the angel was worth 7s. 6d. *Furnivall's Andrew Boorde,* p. 49, note 1.

**Obeisant, 81, obedient.**

**Obeysanee, 90, obedience.**

**Other, 46, either.**


**Palme trees, 78.** The Sallow, *salix caprea,* is commonly known in the Midland counties as the Palm.

"For look here, what I found on a palme-tree." *As You Like It,* iii. 2.

"Ye leaning palms, that seem to look
Pleased o'er your image in the brook."

*Clare's Rural Life,* p. 62.

**Pax, 75.** A small tablet of silver, or some fit material, often very elaborately ornamented, by means of which the kiss of peace was, in the mediaval Church, circulated through the congregation.

"Crucifixes ... borne aloft in their gaddings abroad, with the religious occupying's their paxes, cructs, and jewels which be of silver." *Bp Bale,* p. 526.

**Pewling, viii, ix, x.** "To pule, to piep or cry as chickens and young birds do. To whine, to cry, to whimper." B.

"To speak *puling,* like a beggar at Hallowmas."

*Two Gent. Ver.* ii. 1.

"A wretched *puling* fool,
A whining mammet."

*Rom. & Jul.* iii. 5.

**Perseuation, 73, persecution.**

**Personagyes, 34, personages.** "So is there in *personages,* some sente from Christ as shepherds to fede, and some from the deuyll as theues to devoure." *Lever's Sermons,* p. 66, Arber's reprint.

**Petttyt, 87, petty, little, small, paltry.**

**Pixes, 75.** *Pyx,* the vessel or box in which the Host is kept. Irreverently called "god-boxes" by *Bp Bale,* p. 527.

**Pours, 63, powers, authorities.**

**Prescripte, 41, prescribed, appointed.** "The dwellers of the earth ... practised worshippings besides the *prescripte* rules of God's word." *Bp Bale,* p. 495.

**Prist, 90, priest.**

**Prodocessours, 77, predecessors.**

**Prophanate, xi, to profane.**

**Prosession, 69, procession.**

**Pyristishe, 45, priestish.**

**Puc, 67, pew.**

**Pyed, 79, black and white, parti-coloured.** "These *freres of the Pye* would appear to be not very different from the Carmelites; they were called *Pied Friars* from their dress being a mixture of black and white, like a magpie." *Pierce the Ploughmans Crede,* ed. Skeat, p. 35.

"The Pied Friars had but one house, viz. at Norwich. We find the expression 'Fratrum, quos *Freres Pye* veteres appellabant' in Thom. Walsingham, Hist. Angli- cana, vol. i. p. 152; ed. H. T. Riley. See also Notes and Queries, 4 S. ii. 496." *Additional Note to the same.*

**Pynfolde, viii, a place of confinement.**

**Quest, 9, inquest, a jury of citizens.**

**Realyfe, 70, relief.**

**Renomed, 82, renowned.**
Reuialc, 69, reveal.
Royalme, 78, realm.

Salue, 28, to apply salve to, to heal.
Scala celi, 41, Scala Coeli, the name given to "a vision of St Bernard's, who, while celebrating a funereal mass, saw the souls for whom he was praying going up to heaven by a ladder." Sometimes the term "is used merely as one of mystical figurative names of the Madonna." *Political and Rel. Poems*, xxvii.

Seased, 80 (Law term), seized of, possessed of.
Sence, 41, cense, to perfume with incense.
Sensourus, 75, censers.
Serpentical, 74, serpent-like, devilish.
Shepe, 75, ship. "Schyppe, vesselle to put ye rychel (incense)" P. P. "Acre, a schyp for cesse," Nominale MS. xv. Cent. quoted by Halliwell. "He gave a censer, and a shyp of clene sylver, argento puro." Newman, P. P. p. 80, note 6. Sir T. More uses the word, but the reference I have not at hand. Canon Rock tells me he thinks sheep is meant. He says, "It was usual in those times for people having nothing better to bestow in charity, to give certain animals to the church that therewith some money might arise, to be expended for charitable purposes: cows, for instance, that their milk, butter, and cheese might produce sums for charity; and sheep for the wool they produced, to be sold for the like purpose. The ship for incense is not a thimble, but an oblong shallow kind of box for holding incense. This appliance is now called 'an incense boat,' and in Latin is known as the *uricula*, because shaped in the form of one, but without any mast."
Skanter, 96, scarcer.
Skanite, 95, scarcelessness.
Skot and lot, 98, "a customary contribution laid upon all subjects according to their ability." B. "Every freeholder is bound to be a partaker in lot, which is liability to hold office, and in scot, which means contribution to taxes and other charges." *Riley's Mem. of London*, p. 601, quoted in Smith's *English Gilds*, p. 474.
Slaughterfully, 3, cruelly, murderously.
Sparceled, vi, enlightened, illuminated.
Steare, 24, 63, stir.
Sterculynges, 64, starvelings; lean, hungry-looking persons.
Strawne, x, strewn, scattered.
Sumner, 17, summoner. See note, p. 17.
Swynescotes, 78, pig-sties.
Swynged, 69, repeated frequently and loudly.
Tapurs, 75, tapers.
Thouchyng, 96, touching.
Trentalles, 41, Trental, a service of thirty masses for the dead, usually celebrated on as many different days. "On þe morwe to see

Vembermente, 96, number. Vmber, number. II.

Vnaxed, 8, unasked.

Vndoutely, 65, undoubtedly.

Voult safe, 85, vouchsafe. Another form of the word is withsave. “For unto them only are his heavenly verities known, to whom he withsaveth to open them.” Bp Bale, p. 473.

Vre, 51, ure, use.

Vtylite, 3, utility.

Wayne, 23, vain.

Warmoll, 9. See note, p. 9. Mr Skeat says: “Warmoll. I know nothing of it; and can only guess. It may be warn, to admonish, and mall. But what is mall? It can hardly be Fr. mal. It can hardly be Mall or Moll, a common name for frail ones. Nor am I satisfied with a friend’s guess that the word is warn-em-all! It’s too clever. And as if to make that which is dark darker, I find A.S. wurn-mælum (spelt wearn-mælum in Bosworth) means by companies. Cf. O.E. flockmel, by flocks, and piece-meal, by pieces.”

Weyte, 97, white.

Wringyng, 77. “To wrest... to wring... to force the sense of a passage or author.” P.

Wyllouse, 78, willows.

Wyte, ix, blame, reproach.

Yie, 1, eye.

Yower, 75, ewer.

Ypochrise, 11, hypocrisy.

Ypochrite, 11, hypocrites.
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The Astrolabe;

addressed to his son Rowys

by Geoffrey Chaucer.

A.D. 1391.

EDITED FROM THE EARLIEST MSS.

BY

THE REV. WALTER W. SKEAT, M.A.,
LATE FELLOW OF CHRIST'S COLLEGE, CAMBRIDGE.

"His Astrelabie, long ynge for his art."—Canterbury Tales, A. 3299.

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PREFAE.

DESCRIPTIONS OF THE MSS.

§ 1. The existing MSS. of the "Astrolabe" are still humerous. I have been successful in finding no less than eighteen, sixteen of which I here describe. It is remarkable that, although many printed editions of the treatise have appeared, no first-class MS. has ever hitherto come under the notice of any one of the various editors. This point will appear more clearly hereafter.

§ 2. A.—MS. Dd. 3. 53 (part 2) in the Cambridge University Library. The "Treatise on the Astrolabe" begins at fol. 212 of the MS. considered as a whole, but the folios are now properly renumbered throughout the treatise, as in the present volume. The MS. is of vellum, and the writing clear and good, with a great number of neatly drawn diagrams, which appear wherever the words "lo here thi figure" occur in the text. This MS. I have made the basis of the text, and it is followed with minute exactness except when notice to the contrary is given in the Critical Notes. Wherever any change of even slight importance is made, notice is drawn to the alteration by the use of square brackets.

This MS. is of considerable importance. The hand-writing

1 Two were kindly pointed out to me by Mr Bradshaw after this Preface was in type. Both are imperfect. They are (1) MS. Bodley 68, ending with Part ii. sect. 36, chiefly remarkable for containing the title "Bred and Mylk for children"; and (2) MS. E Museo 116, in the Bodleian Library, which contains a fragment of the latter part of the treatise on vellum, in the handwriting of the scribe of MS. Camb. Gg. 4. 27.
exactly resembles that in MS. B, and a comparison of the MSS. leads to the following results. It appears that MSS. A. and B. were written out by the same scribe, nearly at the same time. The peculiarities of spelling, particularly those which are faulty, are the same in both in a great many instances. It is also clear that the said scribe had but a very dim notion of what he was writing, and committed just such blunders as are described in Chaucer's Lines to Adam Scrivener, and are there attributed to "negligence and rape."\(^1\)

It is still more interesting to observe that Chaucer tells us that he had to amend his MSS. by "rubbing and scraping" with his own hand; for MS. A. and B. differ precisely in this point, viz. that while the latter is left uncorrected, the former has been diligently "rubbed and scraped" by the hand of a corrector who well knew what he was doing, and the right letters have been inserted in the right places over the erasures. These inserted letters are in the hand of a second scribe who was a better writer than the first, and who was entrusted with the task of drawing the diagrams. The two hands are contemporaneous, as appears from the additions to the diagrams made by the writer of the text. Unfortunately, there are still a good many errors left. This is because the blunders were so numerous as to beguile the corrector into passing over some of them.

When, for example, the scribe, having to write "lo here thi figure" at the end of nearly every section, took the trouble to write the last word "vigure" or "vigour" in nearly every instance, we are not surprised to find that, in a few places, the word has escaped correction. It further appears that some of the later sections, particularly sections 39 and 40, have not been properly revised; the corrector may very well have become a little tired of his task by the time he arrived at them.

It must also be remembered, that such blunders as are made by a scribe who is not clear as to the meaning of his subject-matter are by no means the blunders which are most puzzling or most misleading; they are obvious at once as evident blotches, and the general impression left upon the mind by the perusal of this MS. is—that a careless scribe copied it from some almost perfect original, and that his errors were

\(^1\) I. e. haste, rapidity. Cf. "Rydyngel ful rapely;" Piers the Plowman, B. xvii. 49.
DESCRIPTIONS OF THE MSS. ix

partially corrected by an intelligent corrector, who grew tired of his task just towards the end.

The order of the conclusions in Part ii. differs from that in all the editions hitherto printed, and the MS. terminates abruptly in the middle of a sentence, at the words “howre after howre” in Conclusion 40. A portion of the page of the MS. below these words is left blank, though the colophon “Explicit tractatus,” &c., was added at the bottom of the page at a later period.

Certain allusions in the former part of the MS. render it probable that it was written in London, about the year 1400.

§ 3. B.—MS. E Museo 54, in the Bodleian Library, Oxford. This is an uncorrected duplicate of the preceding, as has been explained, and ends in the same way, at the words “howre after howre,” followed by a blank space. The chief addition is the rubricated title—“Bred and mylk For children,” boldly written at the beginning; in the margin are the following notes in a late hand—“Sir Jiffray Chaucer”—“Dominus Gaufredus Chaucerus”—“Galfredi Chauceri Tractatus de Ratione et vsu Astrolabij ad Ludouicium filium.” At the end is the note—“Liber Francisci Beyley, 1637. Franc. Bayley, Noui Collegij Socius, Anno Dom., 1637. Ned. Tourner.”

Before I undertook the present edition, a transcript of part of this MS. had been made for the Early English Text Society, which afterwards came into my hands. A portion of the text was “set up” from it, but the proof sheets were corrected by MS. A. I mention this to show how closely the two MSS. resemble each other in spelling. It is very seldom that such a course is practicable; but in this instance it occasioned no difficulty.


This is a beautifully written MS., on vellum, with 38 pages of text, and 4 blank pages. It has the conclusions in the same order as the preceding, six well-executed diagrams, and corrections on nearly every page. It is of early date, perhaps about A.D. 1420, and of considerable importance. It agrees closely with the text, and, like it, ends with “howre after howre.” Some variations of spelling are
to be found in the Critical Notes. In this MS. the "Conclusions" are numbered in the margin, and the numbers agree with those adopted in this edition.

§ 5. D.—MS. Ashmole 391, in the Bodleian Library. This contains several tracts of very different dates—including tracts on astrology, calendars, tables, a printed tract, a tract on houses and horoscopes, a Latin tract with a very carefully painted picture resembling that given as fig. 19 in this volume, and finally, Chaucer's "Astrelabie." This is an old and well-written copy on vellum, with illuminated border on the first page, fair diagrams, blue and flourished capital letters, &c., and is much faded. It begins—"Lite lowys my sone, I apecyue wel by certeyn euydences"—and contains the following, viz. all of Part i; Part ii, sections 1, 2, and part of 3, down to "18 degrees of heighte taken bi myn" in l. 30, after which several leaves are lost; then comes sect. 25, beginning at l. 17—"but for ensample; For wel I woot pe latitude of Oxenford," &c., followed by sections 26, 27, 28, 29, 30, and part of 31, down to l. 9—"The maner of diuysion of pe." The rest is torn away. I have made but little use of this MS., on account of its being so imperfect.

§ 6. E.—MS. Bodley 619. This MS., like B., has the title—"Brede and Milke for children." Like other good MSS., it ends sect. 40 with "houre after houre." But after this, there occurs an additional section, which is probably not genuine, but which I have printed here (for the sake of completeness) as section 46; which see.

There are some Latin notes in this MS. which are worth notice. The first is a note on Chaucer's words in Part i, sect. 10, l. 14, that "the sonne dwelleth ther-for neuer the more ne lesse in on signe than in another," which declares this to be a mistake, for the sun dwells longer in Cancer than in Capricorn; an observation which is perfectly correct.

Again, at the end of sect. 3 in Part ii, we have a Latin paragraph, beginning—"Nota, quod si quot miliaria sunt inter duas regiones"—and ending—"dando 100. miliaria. Idem facies de longitudinibus, si fuerint diuerse, & latitudines eodem." This is a quotation from Messahala (see p. 97), and is very interesting, be-
cause it directly connects Chaucer's translation with the Latin text of Messahala.

At fol. 53, back, we find another Latin note, having reference to Part ii, sect. 39, as follows:—

"Nota; si vis scire per quot gradus currit Almicantatium, computa almicantarath, incipiendo ab orisonte vsque ad Cenith, et per numerum illorum dinide 90, et numerus quociens ostendet tibi per quot currat.

"Longitudines antem quarundam regionum, idem elongaciones circulorum earum meridianorum a meridiano utlimo regionis habitabilis in occidente. Et earum latitudines, idem distancias ab equinoxiali circulo, notabimus in quadam tabula."

This is of some interest, as shewing that the ancients took for their first meridian of longitude the meridian of the last habitable spot which could be reached in proceeding westward. The principle is clear, but the locality vague. Observe that the latter part of this note is also from Messahala; see p. 97.

At fol. 15, there is a note on Part i, sect. 21, l. 12, where Chaucer instances the stars Aldebaran and Algomeysa. To these are here added the stars "Menkar," "Algevze," and "cor leonis," that is to say, α Ceti, α Orionis, and α Leonis; with the remark—

"nota: pat pese 5 sterres ben meridional fro pe ecliptic, and septentrional fro pe equinoctial, secundum astrolabium colleg. de Merton." Merton College, it thus appears, possessed an Astrolabe on which the five above-named stars were represented.

At fol. 21 is an additional section, not found elsewhere, which is printed in the Additional Notes; see p. 81. This conclusion has some claims to our notice, because, whether genuine or not, it is translated from Messahala.

§ 7. F.—MS. 424, in the library of Corpus Christi College, Cambridge. Very imperfect, especially at the beginning, where a large portion has been lost. Written in a close hand, late in the fifteenth century, though the thorn-letter (þ) appears in it. Begins—

"vnderstood well pat pe zodiake is departyd in 2 halfe cercles as fro pe hede of capricorne"—which is sect. 16 of Part ii without the rubric. Then follow, with rubrics, the entire sections 17—36, the
last of which ends thus, with an additional remark—"& the begyn-nyng of pe 12 howse is nadyr to pe 6. ¶ To fynde pe howse by pe astrolaby pat is wretin¹ suffysye. Explicit tructatus astrolabii secon- dum chansers, factus filio suo lodowyco."

Although the MS. is thus imperfect, we see that the conclusions follow the right order, as in the best MSS.

§ 8. G.—MS. R. 15. 18, in the library of Trinity College, Cambridge. This is a curious and interesting volume, as it contains several tracts in English on astrology and astronomy, with tables of stars, &c. It also contains the picture which I have but imperfectly represented in Fig. 19.²

The copy of the "Astrolabe" in this MS. is not a very good one. It is not divided into paragraphs or sections, and occasionally portions of sentences are omitted. It ends with the words—"as well as by the fyxe sterre" in Part ii, sect. 34, l. 14. The conclusions are in the right order, and there are a few diagrams.

§ 9. H.—MS. Sloane 314, British Museum. A late MS. on paper, absurdly said in a note to be in Chaucer's handwriting, whereas it is clearly to be referred to the end of the fifteenth century. Size of page, about 8 inches by 5½. The treatise begins on fol. 65, back, and ends on fol. 106, in the middle of a page, at the end of conclusion 36, like MS. F. It is written in a clear hand, but with pale ink. It has rubrics in red, and some not very well-drawn diagrams. The conclusions are (unless I have misread my notes) in the wrong order, i.e. in the order adopted in the old printed editions.

§ 10. L.—MS. Sloane 261. This is an "edited" MS., having been apparently prepared with a view to publication. Mr Brae has made considerable use of it, and gives, in his preface, a careful and interesting account of it. He concludes that this MS. was written by Walter Stevins in 1555, and dedicated by him to Edward Earl of Devonshire; and that MS. H. was one of those which Stevins especially consulted, because it contains marginal notes in Stevins'

¹ Very indistinct. MS. Addit. 23002 has "ywrytten" here.
² I regret to say that my hasty copy of this picture gives merely the general idea of it. The truth is, I was not aware of the marvellous accuracy with which such a wood-engraver as Mr Rimbault can reproduce what is given him, or I would have taken care to copy it more exactly.
handwriting. The date 1555 was assigned to it by Mr Brae after most careful investigation; in any case, it is the latest MS. which I know of. A memorandum shews that this MS. was in Urry's hands in 1712; a fact which is (as Mr Brae points out) not much to Urry's credit, seeing that some of the glaring errors in Urry's edition might have been corrected by consulting Stevins. The contents of this MS. can be so well ascertained from Mr Brae's edition that it is unnecessary to say more about it here. The Conclusions are arranged in the same order as in other MSS. not of the first class. This will be further discussed presently.

§ 11. K.—MS. Rawlinson Misc. 3, in the Bodleian Library, Oxford. On vellum, 49 folios, with rich gold capitals, beautifully ornamented; in a large clear handwriting, with red rubrics. Title—"Astralabium." Begins—"Lityl lowys my sone," &c.—and ends—"For þe mone meuyth the contrarie from other planetys. as yn here epicircle. but in none other maner;" see end of Part ii, sect. 35. Order of Conclusions in Part ii as follows; 1—12, 19—21, 13—18, 22—35; as in other late MSS. There are no diagrams, and the MS., though well written, may perhaps be referred to the latter half of the fifteenth century.

§ 12. L.—MS. Additional 23002, British Museum. A fair MS., on vellum, without diagrams; size of page, about 7½ by 5 inches. Begins on fol. 3; ends on fol. 28b. Contents as follows:—Part i, wanting sections 15—23 inclusive; Part ii, sections 1—12, 19—21, 13—18, 22—35, as in K.; together with additional sections, viz. 41—43; also 44, 45; also 41a—42b; then 36 and 37, concluding with the words "of 3 howses that folowyn." The second part is thus seen to be nearly complete, although sections 38—40 are missing. See also the Additional Note on Part ii, sect. 3.

§ 13. M.—MS. E. 2 in the library of St John's College, Cambridge. Small MS. on vellum, without diagrams. Size of page, 6 in. by 4 in. Former owner, Wilhemus Graye. Contents: (a) Fol. 1. De septem climatibus expositio (Short treatise in Latin); (b) Fol. 2. De astrolabio. The leaves have been misplaced, and bound up in a wrong order, but nothing is lost. If they were properly rearranged, the order of contents of Part ii would be seen to be as follows, viz.
sections 1—12, 19—21, 13—18, 22—35, as in the last MS.; with
the additional sections 41—43; also 44, but not 45; also 41a—42b;
after which come sections 36—38, the last ending with the words
"styke an even pyn or a wrec vprixt, þe smallere þe bettre. sette þy
pyn be plum-rewle euen"; see l. 6. I have printed from this MS.
the last five words of sect. 40; also 41—43, and 41a—42b; besides
collating it for the improvement of the text in sect. 44. I have also
been indebted to it for the Latin rubrics to the conclusions, which I
have not found elsewhere. Several various readings from this MS.
appear in the Critical Notes.

§ 14. N.—MS. Digby 72, in the Bodleian Library. This is a
collection of various tracts, including tables of latitudes of planets, and
for finding the moon's place; table of roots of "mene motes" for the
"anni collecti," &c. (see Part ii, sect. 44); tables of the motions of
the sun and moon; astrological tables; description of planets; on
horoscopes; on aspects; after which, on fol. 78, a curious table of 15
fixed stars, in which each star is denoted by some odd-shaped strag-
gling character, and is connected with certain gems and herbs. On fol.
79 comes the "Astrolabye," beginning—"lytull lewis my zone, I
perseyyve well," &c. The conclusions in Part ii are: 1—12, 19—21,
13—18, 22—35; 41—43; 44, 45; 41a—42b; 36 and 37, ending
with the words—"3 howsis that folowen;" cf. MS. L. From this
MS. I have printed the text of sections 44 and 45, but have made little
further use of it. The writing is not very good, and the ink pale.

§ 15. O.—MS. Ashmole 360, in the Bodleian Library. Late MS.,
on paper; former owner's name, Johan Pekeryng; without diagrams.
There are evidently some omissions in it. But it includes sections 44
and 45, and I have given various readings from it in those sections. It
ends at the end of sect. 43a, with the words—"one to twelfe. ò sic finis."

§ 16. P.—MS. Dd. 12. 51 in the Cambridge University Library.
Small MS. on vellum, size of pages scarcely 6 inches by 4; containing
86 leaves, and written in the fifteenth century. The text is by no
means a bad one, though the spelling is somewhat peculiar. Unfortu-
nately, some of the pages are very much rubbed and defaced; other-
wise I should have made more use of it. As it is, I have taken from
it some various readings, recorded in the Critical Notes. The scribe
seems generally to have understood what he was writing, which is not
often the case in MSS. of the "Astrolabe;" so that this MS. is use-
ful in passages where other texts have absurd readings.

One point deserves particular attention. It not only contains
the conclusions of Part ii in the right order, but continues it without
a break to the end of conclusion 43; at the end of which is the
colophon—Explicit tractatus astrolabii.¹

§ 17. Q.—MS. Ashmole 393, in the Bodleian Library; on paper.
This is of little importance. The piece entitled "Chaucers: The
Tretyse off the Astrolabye" merely fills one closely-written leaf, and
contains a sort of epitome of Part i, with the beginning of Part ii.

§ 18. Of the above MSS., Mr Brae describes H., I., and L. only,
and does not seem to have made use of any others. Mr Todd, in his
Animadversions on Gower and Chaucer, p. 125, enumerates only four
MSS., which are plainly A., P., F., and G. The rest seem to have
escaped attention.

In addition to the MS. authorities, we have one more source of
text, viz. the Editio Princeps, which may be thus described.
R.—The edition of Chaucer's Works by Wm. Thynne, printed
at London by Thomas Godfray in 1532. This is the first edition in
which the Treatise on the Astrolabe appeared; it begins at fol.
ceviii., back. The Conclusions in Part ii are in the order follow-
ing, viz. 1—12, 19—21, 13—18, 22—40; after which come 41—43,
and 41a—42b. This order does not agree precisely with that in any
MS. now extant, with the exception of I., which imitates it. It is
further remarkable for certain additions and errors, which are dis-
cussed in § 26 below. All later editions, down to Urry's in 1721,
contribute no new information. The few slight alterations which
appear in them are such as could have been made without reference
to MSS. at all.

REMARKS ON THE CLASSES OF THE MSS.

§ 19. On comparing the MSS., it at once appears that they do not
agree as to the order of the Conclusions in Part ii. The MSS. A., B.,

¹ This MS. is, in fact, of the first class, and should have been mentioned
much earlier; but the mistake was overlooked till it was too late to correct it.
C. (which are unquestionably the oldest) as well as E., F., G., and P., adopt the order which appears in this edition, but which has never appeared in any previous edition. In all other editions we find the three sections 19—21 made to precede sections 13—18. Now we might here appeal to authority only, and say that the order in the oldest MSS. ought to be preferred. But it so happens that we can appeal to internal evidence as well, and there are at least three considerations which shew that the oldest MSS. are certainly correct. These are as follows. In the first place, sect. 18 amounts to finding the degree of the zodiac which souths with any star, and begins with the words "Set the centre of the sterre vpon the lyne Meridional"; whilst sect. 19 amounts to finding the degree of the zodiac that rises with any star, and begins with the words "Set the centre of the sterre vpon the est orisonte." Clearly, these "conclusions" are closely linked together, and one ought to follow the other. But, in all the editions, this continuity is broken. In the second place, the rubric of sect. 21 is—"To knowe for what latitude in any regioun," &c.; whilst that of sect. 22 is—"To knowe in special the latitude of owre countray," &c. Clearly, these conclusions are closely linked, and in their right order. But, in all the editions, this continuity is again broken; and we have this absurd result, viz. that a proposition headed—"To knowe the degrees of the longitudes of fixe sterres" is followed by one headed—"To knowe in special the latitude of owre countray." What in the world can the latitude of a place have to do with the longitude of a star? And how is it possible to assign, in this arrangement, the faintest idea of sense to the words "in special"? This argument is alone convincing. But thrilley, we may note the heading of sect. 16—"This chapitre is a Maner declaracioun pat folwen." By the right arrangement, this section comes earlier than it does otherwise, and precedes sections 19, 20, and 21, which is a more natural arrangement than that in former editions. This is a minor point, and I lay no stress on it. But the two former reasons are cogent, and we see that common sense confirms that arrangement of sections which the authority of the oldest MSS. prescribes. The two things together are sufficient, and we can now trust to the oldest MSS. with the greater confidence. Hence we are enabled to draw a
line, and to divide the MSS. into two classes; those in which the order of sections is correct, and those in which it has suffered misplacement, the number in each class being much the same. This gives us the following result.

First Class. A. B. C. (probably D.) E. F. G. P.

Second Class. H. I. K. L. M. N. O.; to which add R.

But this division immediately leads to another very curious result, and that is, a certain lack of authority for sections after the fortieth.

A. ends with an incomplete sentence, in sect. 40, with the words—"howre after howre."

B. C. end exactly at the same place.

E. ends sect. 40 with the same words; and, after this, has only one additional section (46), which is, in my opinion, spurious; especially as it does not appear in Messahala, of which more anon.

D. fails earlier, viz. in sect. 31, which is incomplete.

F. has all down to the end of sect. 36, and then—"explicit."

G. breaks off in sect. 34, which is incomplete.

In none of the first-class MSS. (excepting P., which terminates with section 43) is there a word about umbra recta or umbra versa.

Even in the second class of MSS., we find H. breaking off at sect. 36, and K. at sect. 35; so that the sections on the umbrae rest only on MSS. I. (obviously an edition, not a transcript), L., M., N., O., and P. Putting aside the first of these, as being "edited," we have but five left; and in the first four of these we find that the additional Conclusions appear in a certain order, viz. they insert 44 and 45 (on the "mene mote") between three sections 41—43 on the "umbrae" and five other sections 41a—42b on the same.

§ 20. This at once suggests two results. The first is, that, as this gives two sets of sections on the "umbrae," we can hardly expect both to be genuine; and accordingly, we at once find that the last fire of these are mere clumsy repetitions of the first three; for which reason, I unhesitatingly reject the said last fire as spurious. This view is strikingly confirmed by MS. P.; for this, the only first-class MS. that is carried on beyond section 40, contains the first three sections on the "umbrae" only. The second result is, that if the first three sections on the "umbrae" are to be received, there is good reason
why we should consider the possible genuineness of sections 44 and 45 on the "mene mote," which rest very nearly on the same authority.

Now the sections on the "mene mote" have in their favour one strong piece of internal evidence; for the date 1397 is mentioned in them more than once as being the "root" or epoch from which to reckon. In most cases, the mention of a date 1397 would lead us to attribute the writing in which it occurs to that year or to a later year, but a date fixed on for a "root" may very well be a prospective one, so that these sections may have been written before 1397; an idea which is supported by the line "behold whethy thy date be more or lasse þan þere 1397;" sect. 44, l. 5. But I suspect the date to be an error for 1387, since that [see Somer in Tyrwhitt's Glossary] was really the "rote" used by Nicholas Lenne. In either case, I think we may connect these sections with the previous sections written in 1391. 1 Besides which, Chaucer so expressly intimates his acquaintance with the subjects of these sections in the Canterbury Tales, 2 that we may the more readily admit them to be really his. There is still less difficulty about admitting the first three sections (41—43) on the "umbra," because we find similar matter in the treatise of Messahala, from which, as will appear, he derived so much. And hence we may readily conclude that, in the second part, the first forty sections, found in the oldest MSS., are certainly genuine, whilst sections 41—43, as well as 44 and 45, have every claim to be considered genuine also. This need not, however, force us to accept the remaining sections, since they may easily have been added by another hand; a circumstance which is rendered the more probable by the

1 See Part ii, sect. 1, l. 4; sect. 3, l. 11. "Obviously, nobody putting a hypothetical case in that way to a child would go out of his way to name with a past verb [see the second case] a date still in the future."—Morley's Eng. Writers, ii. 282. Similarly, the expression "I wolde knowe," in the former case, precludes a date in the past; and hence we are driven to conclude that the date refers to time present. Curiously enough, there is an exactly parallel case. Blundevill's Description of Blagrave's Astralabe, printed at London by William Stansby, is undated. Turning to his Proposition VI, p. 615, we find—"As for example, I would know the Meridian Altitude of the Sun y* first of July, 1592." The same date, 1592, is again mentioned at pp. 619, 620, 621, 636, and 639, which renders it probable that the book was printed in that year.

2 "Nother his collect, ne his expans yeres, Nother his rotes, ne his other geres;" 1. 11587,8.
fact that sections 41a—42b merely repeat 41—43 in a more clumsy form, and by the consideration that, if genuine, they should have occupied their proper place immediately after sect. 43, instead of being separated from the former set. As to sect. 46, I pronounce no decided opinion; there is but little to be said either for or against it, and it is of little consequence.

§ 21. But admitting the genuineness of sections 40—45, it at once becomes evident that there are two distinct gaps or breaks in the continuity of the treatise; the first between 40 and 41; and the second between 43 and 44. A little consideration will account for these. Looking at the Canterbury Tales, we observe the very same peculiarity; at certain points there are distinct breaks, and no mending can link the various groups together in a satisfactory manner. This can be accounted for in part by our knowledge of the fact that the poet died before he had completed the proper linking-together of the tales which he had more or less finished; but I think it also shews him to have been a fragmentary worker. It seems very probable that he did sometimes actually tire of a thing which he had nearly completed, and allowed himself to begin something else for which he had meanwhile conceived a newer enthusiasm. Such characters are not uncommon amongst men of great ability. To suppose that, upon reaching "conclusion" 40, he suddenly turned to the sections upon the "umbrae," which are at once more easy to explain, more suitable for a child, and illustrative of a different and more practical use of the Astrolabe, seems to me natural enough; and more probable than to suppose that anything is here lost. For, in fact, it is to the very MSS. that contain sections 41—43 that we are indebted for the last five words of sect. 40, so curiously omitted in the oldest and best MSS.; and this is a direct argument against the supposition of any matter having been here lost.

§ 22. The break between sections 43 and 44 may be explained in a totally different manner. I suppose that the break indicates a real, not an accidental, gap. I suppose section 43 to have been really the last section of Part ii, and I refer sections 44 and 45 to the Fourth Part of the Treatise, and not to the Second at all.¹ For if

¹ Not wishing to enforce this view upon every reader, and in order to save
we run through the contents of Parts Three and Four, we observe that they chiefly involve tables, with reference to one of which we find the words "upon wych table ther folwith a canon," &c. Now sections 44 and 45 exactly answer the description; they are alternative canons, shewing how certain tables may be used. It happens that "Conclusion" 40 is particularly dependent upon tables. To supply these was partly the object of Part iv—"the whiche 4 Partie in special shal shewen a table of the verray Moneynge of the Mone from houre to houre, every day and in euery signe, after thin Almenak / upon wych table ther folwith a canon, suffisant to teche as wel the maner of the wyrkyng of pat same conclusion / as to knowe in owre orizonte with wych degree of the zodiac that the Mone arisith in any latitude, & the arising of any planete aftur his latitude fro the Ecliptik lynye." The opening words of the same Conclusion are—"Knowe be thin almenak the degree of the Ecliptik of any signe in which pat the planete is rekned for to be," &c. This is easily said; but I suppose that it was not so easy in olden times to know off-hand the exact position of a planet. It must have been shewn by tables, and these tables chiefly considered the "mene mote," or average motion of the planets, and that only for periods of years. If you wanted the position of a planet at a given hour on a given day, you had to work it out by figures; the rule for which working was called a "canon." This very "canon" is precisely given at length in sect. 44; and sect. 45 is only another way of doing the same thing, or, in other words, is an alternative canon. When all this is fairly and sufficiently considered, we shall find good grounds for supposing that these sections on the "mene mote" are perfectly genuine, and that they belong to Part iv of the Treatise.

I will only add, that the fact of sections 41a—42b being thus placed after a portion of Part iv is one more indication that they are spurious.

§ 23. But it may be objected, as Mr Brae has very fairly objected, that Conclusion 40 itself ought to belong to Part iv. So it trouble in reference, I have numbered these sections 44 and 45. But if they belong, as I suppose, to Part iv, they should have been named "Part iv, Canon 1," and "Part iv, Canon 2" respectively.
ought perhaps, if Chancer had followed out his own plan. But we have clear indications that his was one of those minds which are not easily bound down to the exact completion even of designs which he had himself formed. The Prologue to the Canterbury Tales must have been written later than several of the tales themselves, and yet we find him deliberately proposing to furnish two tales for every speaker at a time when he had not even provided for them all once round. The well known difficulty about the number of the pilgrims is probably only one more instance of a similar uncertainty; for the simplest solution of the said difficulty is to suppose that the poet did not exactly know himself, but intended to make it come all right at some vague future period. So in the "Astrolabie," he seems to have laid down a plan, without any very distinct understanding that he was bound to abide by it. It is clear from its contents that the Prologue to the "Astrolabie" was written before commencement of the treatise itself, and not, as prefaces generally are, afterwards. He was pleased with his son's progress. Little Lewis had asked him if he might learn something about an astrolabe. The father at once sent him a small astrolabe by way of reward, constructed for the latitude of Oxford, and having 45 circles of latitude on the flat disc (see Fig. 5) instead of having 90 such circles, as the best instruments had. This, however, was a "sufficient" astrolabe for the purpose. But he believes the Latin treatises to be too hard for his son's use, and the conclusions in them to be too numerous. He therefore proposes to select some of the more important conclusions, and to turn them into English with such modifications as would render them easier for a child to understand. He then lays down a table of contents of his proposed five parts, throughout which he employs the future tense, as "the first partie shal rehearse,"—"the second partie shal teche," &c. This use of the future would not alone prove much, but taken in connection with the context, it becomes very suggestive. However, the most significant phrase is in the last line of the Prologue, which speaks of "other noteful

1 "A smal instrument portatif aboute;" Prov. l. 50.
2 "The almykanteras in thin Astrolabie ben compowet by two and two." Part ii, sect. 5, l. 1.
thingez, yif god wol vouche sauf & his modur the mayde, mo than I behete," i. e. other useful things, *more than I now promise, if God and the Virgin vouchsafe it*. In accordance with his habits of seldom finishing and of deviating from his own plans at pleasure, we have but an imperfect result, not altogether answerable to the table of contents. I therefore agree with Mr Brae that the 40th conclusion would have done better for Part iv; though I do not agree with him in rejecting it as spurious. This he was led to do by the badness of the text of the MSS. which he consulted, but we can hardly reject this Conclusion without rejecting the whole Treatise, as it is found in all the oldest copies. By way of illustration, I would point out that this is not the only difficulty, for the Conclusions about astrology ought certainly to have been reserved for Part v. These are Conclusions 36 and 37, which concern the "equacion of howses;" and this is probably why, in two of the MSS. (viz. L. and N.), these two conclusions are made to come *at the end of the Treatise*. There is nothing for it but to accept what we have, and be thankful.

§ 24. If, then, the questions be asked, how much of the Treatise has come down to us, and what was to have been the contents of the missing portion, the account stands thus.

Of Part i, we have the whole.

Of Part ii, we have nearly all, and probably all that ever was written, including Conclusions 1—40 on astronomical matters, and Conclusions 41—43 on the taking of altitudes of terrestrial objects. Possibly Conclusion 46 is to be added to these; but Conclusions 41a—42b are certainly spurious.

Part iii probably consisted entirely of tables, and some at least of these may very well have been transmitted to little Lewis. Indeed, they may have been prepared by or copied from Nicholas of Lynn and John Somer before Chaucer took the rest in hand. The tables were to have been (and perhaps were) as follows.

1. Tables of latitude and longitudes of the stars which were represented on the "Rete" of the Astrolabe. Specimens of such tables are printed in § 30 of this Preface.

2. Tables of declinations of the sun, according to the day of the year.
3. Tables of longitudes of cities and towns.

4. Tables for setting clocks and finding the meridian altitudes (of the sun, probably).

Such tables as these are by no means lost. There are MSS. which contain little else, as e.g. MS. Iff. 6. 8 in the Cambridge University Library. The longitudes of towns are given in MS. Camb. II. 3. 3, at fol. 214b. Again, in MS. F. 25, in St John's College Library, Cambridge, we find tables of fixed stars, tables of latitudes and longitudes of towns, tables of altitudes of the sun at different hours, and many others.

Part iv was to explain the motions of the heavenly bodies, with their causes. This was probably never written. It was also to contain a table to shew the position of the moon, according to an almanac; and such a table is given in the St John's MS. above mentioned, and in MS. Camb. II. 3. 3, at fol. 143. This was to have been followed by a canon, and an explanation of the working of the Conclusion—"to knowe with wych degree of the zodiac that the Mone arisith," and "the arising of any planete," &c. The canon is partly accounted for, as regards the planets at least, by sections 44 and 45, and the "conclusion" by section 40.

Part v was to contain the general rules of astrology, with tables of equations of houses, dignities of planets, and other useful things which God and the Virgin might vouchsafe that the author should accomplish. Sections 36 and 37 tell us something about the equations of houses, but, in all probability, none (or, at least, no more) of this fifth Part was ever written. Tables of equations of houses, for the latitude of Toledo, are given in MS. Camb. II. 3. 3, at fol. 177, and elsewhere. Of the general rules of astrology we find in old MSS. somewhat too much, but they are generally in Latin; however, the Trinity MS. R. 15. 18 has some of them in English.

On the whole, we have quite as much of Chaucer's Treatise as we need care for; and he may easily have changed his mind about the necessity of writing Part v; for we actually find him declaring (and it is pleasant to hear him) that "natheles, theise ben obseruauncez of iudicial matiere & rytes of païens, in which my spirit ne hath no feith;" ii. 4. 34.
§ 25. I next have to point out the sources whence Chaucer's treatise was derived. Mr Halliwell, in a note at the end of his edition of Mandeville's Travels, speaks of the original treatise on the Astrolabe, written in Sanskrit, on which he supposes Chaucer's treatise to have been founded. Whether the Latin version used by Chaucer was ultimately derived from a Sanskrit copy or not, need not be considered here. The use of the Astrolabe was no doubt well known at an early period in India and among the Persians and Arabs; see the "Description of a Planisphere Astrolabe constructed for Shâh Sultân Husain Safawi, king of Persia," by W. H. Morley, in which elaborate and beautifully-illustrated volume the reader may find sufficient information. Marco Polo says (bk. ii. c. 33) that there were 5000 astrologers and soothsayers in the city of Cambaluc, adding—"they have a kind of Astrolabe, on which are inscribed the planetary signs, the hours, and critical points of the whole year;" Marco Polo, ed. Yule, i. 399. Compare also the mention of the instrument in the 161st night of the Arabian Nights' Entertainments, where a translation which I have now before me has the words—"instead of putting water into the basin, he [the barber] took a very handsome astrolabe out of his case, and went very gravely out of my room to the middle of the yard, to take the height of the sun;" on which passage Mr Lane has a note (chap. v, note 57) which Mr Brae quotes at length in his edition. There is also at least one version of a treatise in Greek, entitled περὶ τῆς τοῦ ἀστρολάβου χρήσεως, by Johannes Philoponus, of which the Cambridge University Library possesses two copies, viz. MSS. Dd. 15. 27 and Gg. 2. 33. But it is clear, from his own words, that Chaucer followed the Latin, and I can point out one of the Latin treatises to which he was very considerably indebted. This is the "Compositio et Operatio Astrolabie," by Messahala,¹ of which copies are, I have no doubt, sufficiently numerous. The Cambridge library has four, viz. Hh. 6. 8, Ii. 1. 13, Ii. 3. 3,² and Kk. 1. 1, and there

¹ Macha-allah or Messahala, an Arabian astronomer, by religion a Jew, flourished towards the end of the eighth century. Latin translations of four of his works (not including the Treatise on the Astrolabe) have been printed, and were published at Nuremberg in 1549. A list of his works is given in Casiri (Bibl. Arab. hisp. tom. 1er. pag. 134), and in the Biographie Universelle.

² This splendid MS., of the thirteenth century, is dated 1276, and illustrated
is another copy in St John’s College Library, Cambridge, marked F. 25. The title should be particularly observed; for the treatise is distinctly divisible into two separate parts, viz. the “Compositio Astrolabii” and the “Operatio Astrolabii.” The former begins with the words—“Scito quod astrolabium sit nomen Graecum,” and explains how to make an astrolabe, and how to inscribe on it the various necessary lines and circles with sufficient exactness. It is much the longer portion of the treatise, and (in MS. ii. 3. 3) is illustrated by numerous diagrams,1 whilst the second part has no such illustrations. But it does not appear that Chaucer made any use of this former part, as his astrolabe had been procured ready-made. The second part of the treatise, or “Operatio Astrolabii,” begins with the words “Nomina instrumentorum sunt hec.” This is evidently one of the sources from which Chaucer drew largely, and I have therefore printed it at length in this volume, from MS. ii. 3, 3, with a few corrections from the other copies. Chaucer’s Part i is almost wholly taken from this, but he has expanded it in several places, with the evident intention of making it more easy to understand. In Part ii, he has taken from it, with more or less exactness, sections 1—3, 5—8, 10, 11, 13—18, 20, 21, 24, 25, 27—31, 33—37, 41, and 42; whilst sections 4, 9, 12, 19, 22, 23, 26, 32, 38—40, and 43 do not appear in it. In other words, Messahala’s treatise accounts for thirty-one conclusions out of forty-three, or about two-thirds of the whole. In some places, Chaucer has translated almost word for word, so as to leave no doubt as to his authority. Besides which, I have already remarked that Chaucer’s version is directly connected with Messahala by the quotations from the latter which appear in MS. E.; see description of this MS. above. If it be inquired, whence did Chaucer derive the remaining third of his Second Part, I think it very likely that some of it may be found amongst the varied and voluminous contents of such a MS. as ii. 3. 3, which is a sort of general compendium of astronomical and astrological knowledge. The complete solution of this question I leave to some one with more leisure than myself, being satisfied that with beautifully-executed coloured diagrams. It is a storehouse of information about the Astrolabe, and I frequently quote from it.

1 See the Description of the Plates in this volume.
to have discovered the original of Part i and two-thirds of Part ii is
to have made a good start.\(^1\) It must not be omitted that the MSS.
of Messahala are \emph{not all alike}, that some copies have propositions
which are not in others; and that the order of the conclusions is not
invariable. The chief noteworthy difference between Chaucer's
version and the Latin original is in the order of the conclusions; it
is clear that Chaucer not only took what he liked, but rearranged his
materials after his own fashion.

§ 26. About the early printed editions of the Astrolabe, I have
not much to say. The Editio Princeps of 1532 was clearly derived
from some MS. of the second-class, and, what between the errors of
the scribes and printers, absurdities abound. After a careful ex-
amination of the old editions, I came to the conclusion that the less
I consulted them the better, and have therefore rather avoided them
than sought their assistance.

The following is a brief but accurate list of the editions of
Chaucer's Works:

1. Ed. by Wm. Thynne, London, 1532. Folio. (The "Astro-
labe" begins on leaf cxcviii, back.)

(Leaf cxxi.)

3. Reprinted, with the matter re-arranged, London, no date,
about 1551. Folio.

4. Reprinted, with large additions by John Stowe. London,
1561. Folio.

5. Reprinted, with additions and alterations by Thomas Speght,
London, 1598. Folio. (Leaf 261.)

6. Reprinted, with further additions and alterations by Thomas
Speght, London, 1602. Folio. (Leaf 249.)

(Page 445.)

8. Reprinted, with additions and great alterations in spelling,

Urry's edition is at least as bad as any before it; but there are a

\(^1\) The first suggestion as to Chaucer's use of Messahala came to me, as
many other excellent suggestions have come to me, from Mr Bradshaw.
few useful explanations in the Glossary, which was added by Mr Timothy Thomas. All these editions not only give the conclusions in a wrong order, but (like the MSS. of the second class) absurdly repeat Conclusion I of Part ii, and reckon the repetition of it as Conclusion III. MSS. of the first class are free from this defect, and may thus be easily known. The only edition worth consulting is that by Mr A. E. Brae, published quite recently, in 1870. Mr Brae made much use of MS. I., besides which he consulted the Printed Editions, and MSS. II. and L. See the descriptions of these MSS. above. From this edition I have taken many hints, and I wish to express, very thankfully, my obligations to it. Mr Brae has brought to bear upon his work much skill and knowledge, and has investigated many points with much patience, minuteness, and critical ability. But I cannot but perceive that he has often expended his labour upon very inferior materials, and has been sometimes misled by the badness of those MSS. to which alone he had access; whereas I have made a point of consulting MSS. at least half a century older, and far more correct. It is solely for this reason that I believe this edition will be found more generally useful than his, as containing a sounder text; for I have been so fortunate as to have met with fewer corrupt readings, and in many cases the older MSS. explain passages at once, at the meaning of which he could but guess. It is from no wish to depreciate his labour (which has been considerable), but only for the reader’s information, that I point out a few passages where the older MSS. at once correct the text of the Editio Princeps (R) and the printed texts generally.

Conclusion III in R. (which must either be rejected or altered from the form in which it there appears) does not appear at all in the best copies.

Mr Brae observes that the description of the "Moder" (i. 3) is repeated in "all the copies." In the best MSS. it is not so repeated.

The Pin, in R., is said to hold the "tables of the clymathes in the

For all the information derived from Mr Brae’s works, he has my sincere acknowledgments and thanks; and for any expressions of mine which insufficiently represent his claims as an interpreter of Chaucer, my regret. To all fellow-workers I cordially wish success, and would rather forgo all credit than claim too much.
recthe in the wombe of the moder" (i. 14). But, for the first "in," the best MSS. have "and." The sense is very different.

I here observe, by the way, that, in his Preface, p. 2, Mr Brae suggests that the Wedge (i. 14) may have been ornamented with the figure of a horse's head. This guess is turned into a certainty by the diagram in MS. ii. 3. 3, which I have copied. See Fig. 7.

In the same section (i. 14) we read in R. that this "hors" straineth all these parts "togyther." The sense is right enough, but togyther is a mere late gloss. The best MSS. have the curious Chaucerian phrase to hepe. So also in the translation of Boethius, ed. Morris, p. 140—"god ʒeuep and departip to ʒer folk prosperites and aduersites ymedeled to hepe;" and in Troil. and Cress. iii. 1770 (ed. Tyrwhitt), we have the complete phrase—"And lost were all, that Love halt now to hepe." Mr Morris's edition (Aldine Series, iv. 297) has "halt now to kepe," which is probably a misprint.

In the last part of i. 17, Mr Brae inserts the words because that the head of Capricorne, which, he says, are not in the copies. But they really do exist in the older MSS.; see i. 17. 34.

In i. 18. 4, where the old MSS. have "is cleped the senyth," Mr Brae (following R.) prints "is cleped the Signet,"—with the remark that "Stevins invariably, but very improperly, altered signet to Zenith." This involves a chronological error of at least three centuries. Mr Brae occasionally attributes to Stevins or Stüffler expressions which may be found in the Latin version of Messahala, three hundred years earlier. It is not a question of opinion, but of fact. In this and many similar instances, we must consult the Latin original, which the reader may now do for himself.

In i. 21, for "the riet of thin astrelacie with thy zodiak," R. has "which is thy Zodiake." The older reading is the better; for the Rete is not identical with the zodiac, but only contains it.

In i. 21. 9, for "by northe the est line," i. e. to the North of the East line (which is clearly right), R. has "by the north-eest lyne;" an obvious corruption of the text.

In i. 21. 42, R. has "transmute" instead of "causen." But signs cannot "transmute in us operations."

1 The double form of the "skale" appears in a MS. dated 1276.
(The curious passage in i. 21. 48—56, found in the old copies, was accidentally omitted in Mr Brae's edition.)

In ii. 3. 29, Mr Brae explains "Alhabor" to be the star Rigel or Rigil (ζ Orionis). This was because the numbers in the later MSS. are incorrect. But the numbers in the older MSS. are quite consistent with the usual explanation, which identifies Alhabor with Sirius or the Dog-star. That Alhabor and Rigel are totally different appears from the list of stars printed below, from MS. Camb. ii. 3. 3. As if to preclude all mistake, the diagram in MS. A. represents the Dog-star by a roughly-drawn dog's head, with the name "Alhabor" written on it; see Fig. 2.

In ii. 4. 26, for "infortunyng" R. has "fortune"; this exactly reverses the sense.

In ii. 4. 31, R. omits the necessary words "and that he be."

In ii. 4. 33, for "joigned," i.e. joined, R. has "reigned;" which gives no sense.

In ii. 11. 5, R. omits "of any of these howris that ben passed, or elles how many howres or partie of."

In ii. 11. 12, for "lasse chapitre of the 4 partie," R. has "fourthe partye of the laste chapitre;" the cart before the horse.

In ii. 13. 5, Mr Brae prints "the highest degre," with the note, "in all the copies this word is lyne. It ought manifestly to be degré." The oldest MSS. have neither line nor degré, but a third word, viz. cours.

So in the rubric to ii. 17, for "longitude" R. has "latitude;" but Mr Brae observes that the object of the problem is longitude. The oldest MSS. have "longitude" rightly enough.

In ii. 17. 24, R. has "after the syght." Mr Brae well says that "it is difficult to interpret after the sight." So it is; but the right reading "after the site" is clear enough.

In ii. 23, Mr Brae has an argument to shew that the two stars used were β Ursae Majoris and the Pole-star; and that the former was the star from which the latitude was derived, whilst the latter (the pole-star) was merely used to help to find the other's place. This

1 See also Fig. 2 and Fig. 9, where they are marked on the lower rim at some distance apart.
curious inversion was caused by the false numbers in the late copies. The true numbers in the early copies shew (as might have been expected) that it was exactly the other way; the latitude, or rather the elevation of the pole was, naturally enough, derived as usual from observing the pole-star, and the other star (to determine which we have quite insufficient data) was merely used for convenience, to help to fix the pole-star's position.

In ii. 25. 36—40, the old editions are so imperfect that the text has to be guessed at. The old MSS. are clear enough.

In ii. 26. 22, R. has "ouercometh the equinoctial." The right word is "ouerkernyth," i.e. cuts across, crosses.

In ii. 29. 7, Mr Brae prints "bordure" correctly; but he had to guess at it, for his authorities had "sonne," which he saw to be absurd.

In ii. 30, he attributes to Stevins the notion that the "wey of the sonne" means the sun's apparent diurnal path, and says that it is wrong. However absurd it may seem, I suspect it is what Messahala means; at any rate, the oldest MSS. distinctly say "the wey wher as the sonne wente thilke day" (ii. 30. 10); but the later copies differ from this.

In ii. 31. 2, the phrase "by north the est" is again corrupted (in R.) into "by North-east."

In a note on p. 52, Mr Brae says that Stevins has everywhere wrongly altered minute to Azimuth. But the latter reading can be defended; it was so written a century before Stevins was born. The rubric to ii. 34 is corrupt in the later copies; Mr Brae has restored it by conjecture, and the old copies shew that he has done rightly.

In ii. 34. 6, he has "wayte than of which dege the zodiake is to which the pryck of the altitude of the Mone [applies]." Curiously enough, MS. A. also erroneously has to which, but collation at once shews that it is a mere error for touchith, and the right reading is as I have given it. R. also wrongly has to whiche.

In ii. 35. 18, for "Episicle" R. has "eclyptyke lyne."

In ii. 39. 3, R. has "signet" instead of "lyne Meridional," which cannot well be explained. The last part of ii. 35, viz. ii. 19—27, is very badly represented in R.
The whole of ii. 40 is also so badly represented in R. and the late MSS. that Mr Brae was led to reject it. But it occurs in MSS. A., B., C., and others, and is therefore of the same age as all the Conclusions which precede it.

Besides his print of Chaucer's Astrolabe, Mr Brae has reprinted some curious and interesting critical notes of his own, and has added some essays on Chaucer's "prime," on "the Carrenare," and "shippes opposteres." To some of these I shall refer presently. To all that he has done I am much indebted, and I should, indeed, have abandoned the editing of the present volume but for the fact that I had ascertained the existence of better materials than he happened to meet with.

It is, perhaps, not out of place to observe here that those who are best acquainted with Early English will readily perceive that the spelling, and many turns of expression, are of an older character in the present edition than in any that has preceded it.

§ 27. The works upon, and descriptions of, the astrolabe, are numerous. I have had neither time nor inclination to make researches into the subject; for which reason I here note the names of a few books which may be examined by the curious reader.

In his Universal Lexicon, Zedler explains that astrolabes are of two kinds, "universal" and "particular." He speaks of the astrolabes (1) of Gemma Frisius; see Petri Apiani Cosmographia, per Gemmam Phrygium restituta; (2) of Johan de Rojas, a Spaniard, a. d. 1550; (3) of De la Hire the elder, professor of mathematics at Paris, a. d. 1702; (4) of Johannes Stoefflerinus (or Stöffler), a. d. 1510. The last of these differed from the others in adopting a different and more convenient system of projection, viz. that upon the plane of the equator, or one parallel to it, the eye being in the antarctic pole, and the arctic pole being made the centre of the instrument. This projection is the same as that which was used by Ptolemy, and it is adopted in the diagrams which accompany Chaucer's treatise in some of the MSS. It should be observed here that the term "astrolabe" alone is vague; it was originally a general name for any circular instrument used for observation of the stars; but in the sixteenth and seventeenth centuries it was restricted to the
paticular kind called the "Astrolabe Planisphere," or astrolabe on a flat surface, in which sense alone the word is used throughout this volume. See the English Cyclopædia, Arts and Sciences, s. v. Astrolabe.

The simplest work is that by Stöffler or Stöfferinus, as he calls himself; see also Gemma Frisius, Metius, Clavius Bambergensis, the Cursus Mathematicus of Dechales, vol. iv. p. 161, Delambre's History of Astronomy, and other works. The plates in Metius are most exquisitely engraved, and on a large scale, and give a better representation of the instrument than any others that I have seen.

One of the MSS. speaks, as I have said, of an astrolabe belonging to Merton College, Oxford. There is a very nice one, made of brass, and by a Dutch engraver, in the library of King's College, Cambridge. It has several discs or plates, or, as Chaucer calls them, "tables." Of this instrument the same library contains a written description, with some account of the problems it will solve, and an investigation of its probable date, by H. Godfray, Esq., of St John's College. There is also a small silver instrument in Trinity College, Cambridge, which has a circular rim like that of an astrolabe.

There is a book entitled "A verie briefe and most plaine description of Mr Blagrave his Astrolabe," &c., by Mr Blundevill; London, printed by William Stansby. It is undated, but mentions the date 1592 several times. This treatise is very much on Chaucer's plan, as it gives a description of the instrument, followed by the Conclusions which it will solve. But it turns out to be of little practical assistance, because Blagrave's astrolabe was on a different principle. Blundevill, in his Preface, says he has seen but three sorts of astrolabes, first, that of Stöfflerus, which was much used for a whole century; secondly, the Catholicon, or universal astrolabe of Gemma Frisius; and thirdly, an improved Catholicon by Mr Blagrave, "a Gentleman of Reading besides London." He goes on to say that broad astrolabes are bad for use at sea, as being affected by the wind; "which thing to auoyde, the Spaniards doe commonly

1 This word has several senses in Chaucer. It means (1) the discs of an astrolabe; (2) a set of tablets; (3) astronomical tables; and (4) the game of "tables."
make their Astrolabes or Rings narrow and weighty, which for the most part are not much above five inches broad, and yet doe weigh at the least foure pound." English astrolabes, he says, are very heavy, and six or seven inches broad. He recommends that more of the southern stars should be represented on the "Rete," such as the Southern Cross, the Southern Triangle, Noah's Dove or Pigeon, and another called Polophilax, lately found out by mariners. Blagrave's Astrolabe had 71 stars on the Rete, which Blundevill enumerates. He alludes to the division of the mariner's compass into 32 parts, as in Chaucer's time, each part being termed "a Rombe." He always calls the "rewle" the "Diopter." There is little else in his volume that illustrates Chaucer.


There is not, however, much need of reference to books to understand what the astrolabe used by Chaucer was like. The instrument may be readily understood from a brief description, and from the Plates in this volume.

The most important part of the "astrolabe planisphere" consisted of a somewhat heavy circular plate of metal from four to seven inches in diameter, which could be suspended from the thumb by a ring (i. 1), working with such freedom as would allow the instrument to assume a perfectly perpendicular position (i. 2). One side of the plate was perfectly flat, and was called the back. This is represented in Fig. 1. On it was described a number of concentric rings, marked with various divisions, which may be readily understood from the figure. Beginning at the outermost ring, the first two represent the ninety degrees into which each quadrant of a circle can be divided (i. 7). The next two represent the signs of the zodiac, each subdivided into thirty degrees (i. 8). The next two represent the days of the year, and are rather difficult to mark, as the circle has, for this purpose, to be divided into 365½ equal parts (i. 9). The next three circles shew the names of the months, the number of days in each, and the small divisions which represent each day, which coincide exactly with those representing the days of the year (i. 10). The two innermost rings shew the saints' days, with their Sunday-letters. Thus, above the 21st of
December, is written "Thome," i. e. St Thomas's day, its Sunday-letter being E; the rest can easily be traced by the tables in Prayer-book (i. 11). These may be thus briefly recapitulated.

1 and 2. Circles of degrees of the quadrant and circle.
3 and 4. Circles of the zodiacal signs, with their degrees.
5 and 6. Circles of the days of the year, with their numbers.
7, 8, and 9. Circles of the months, with their days and numbers of the days.
10 and 11. Circles of saints' days, with their Sunday-letters.

Within all these, are the Scales of Umbra Recta and Umbra Versa, in each of which the scale is divided into twelve equal parts, for the convenience of taking and computing altitudes (i. 12). This primitive and loose method of computation has long been superseded by the methods of trigonometry. Besides these circles, there is a perpendicular line, marking the South and North points, and a horizontal line from East to West.

The other side of the plate, called the front, and shewn in Fig. 2, had a thick rim with a wide depression in the middle (i. 3). The rim was marked with three rings or circles, of which the outermost was the Circle of Letters (A to Z) representing the twenty-four hours of the day, and the two innermost the degrees of the quadrants (i. 16). The depressed central portion of the plate was marked only with three circles, the "Tropicus Canceri," the "Equinoctialis," and the "Tropicus Capricorni" (i. 17); and with the cross-lines from North to South, and from East to West (i. 15). But several thin plates or discs of metal were provided, which were of such a size as exactly to drop into the depression spoken of. The principal one of these, called the "Rete," is shewn in Fig. 2. It consisted of a circular ring marked with the zodiacal signs, subdivided into degrees, with narrow branching limbs both within and without this ring, having smaller branches or tongues terminating in points, each of which denoted the exact position of some well-known star. The names of these stars, as "Alhabor," "Rigel," &c., are (some of them) written on the branches (i. 21). The "Rete" being thus, as it were, a skeleton plate, allows the "Tropicus Canceri," &c., marked upon the body of the instrument, to be partially seen below it. Another form of the "Rete" is shewn in Fig. 9,
USES OF THE ASTROLABE.

and other positions of the Rete in Fig. 11 and Fig. 12. But it was more usual to interpose between the "Rete" and the body of the instrument (called the "Mother") another thin plate or disc, such as that in Fig. 5, so that portions of this latter plate could be seen beneath the skeleton-form of the "Rete" (i. 17). These plates are called by Chaucer "tables," and sometimes an instrument was provided with several of them, differently marked, for use in places having different latitudes. The one in Fig. 5 is suitable for the latitude of Oxford (nearly). The upper part, above the Horizon Obliquus, is marked with circles of altitude (i. 18), crossed by incomplete arcs of azimuth tending to a common centre, the zenith (i. 19). The lower part of the same plate is marked with arcs denoting the twelve planetary hours (i. 20).

At the back of the astrolabe revolved the "rule," made of metal, and fitted with sights, represented in Fig. 3 (i. 13). At the front of it revolved the "label," represented in Fig. 6 (i. 22).

All the parts were held together by the central pin (Fig. 4) which passed through the holes in the "moder," plates, "Rete," rule, and label, and was secured by a little wedge (i. 14), which was sometimes fancifully carved to resemble a horse (Fig. 7).

Another "table" or disc is shown in Fig. 14, and was used for ascertaining the twelve astrological houses.

§ 29. USES OF THE ASTROLABE PLANISPHERE.

I here briefly enumerate such principal uses of the instrument as are mentioned by Chaucer.

The back (Fig. 1) shows at once the degree of the zodiac answering to every day in the year (ii. 1). The altitude of the sun can be taken by the "Rule," elevated at the proper angle (ii. 2). If the Rete be properly adjusted to this altitude, we can thus tell the hour of the day (ii. 3). The duration of twilight can be calculated by observing when the sun is 18° below the horizon (ii. 6). Observe the times of sunrise and sundown, and the interval is the "artificial day" (ii. 7).

1 "Perutei: m. A hole. Perutei de l'Araigne, the centre of an Astrolabe; the hole wherein all the tables thereof are, by a pin or nails, joined together."—Cotgrave's French Dictionary.
This day, with the duration of morning and evening twilights added to it, is called the "vulgar day" (ii. 9). The plate in Fig. 5 shews the planetary hours (ii. 12). The placing of the sun's degree on the South-line gives the sun's meridian altitude (ii. 13), and conversely (ii. 14). The back of the instrument can shew what days in the year are of equal length (ii. 15). The degree of the zodiac which souths with any star can be ascertained by observing two altitudes of the star; but the observations must be made when the star is very near the meridian (ii. 17). If the star be marked on the Rete, the said degree is easily found by use of the Rete (ii. 18). We can also find with what degree of the zodiac the same star rises (ii. 19). The use of the Rete also shews the declination of every degree in the zodiac (ii. 20). We can always tell for what latitude a disc such as that in Fig. 5 is constructed, by properly examining it (ii. 21). The latitude of any place can be found by two observations of the altitude of the Pole-star (ii. 23); or of any circum-polar star (ii. 24); or by observing the sun's meridional altitude (ii. 25). The Rete also tells us the "ascensions of signs," or how many degrees of the equinoctial circle pass the meridian with a given sign (ii. 27); as also the "oblique ascensions" of the same (ii. 28). The astrolabe can also be used to discover (but only in an imperfect and approximate manner) the four cardinal points of the compass (ii. 29). We can also compare the altitude of a planet with that of the sun (ii. 30). We can find in what part of the horizon the sun rises (ii. 31); and in what direction to look for a conjunction of the sun and moon (ii. 32); also near what point of the compass the sun is at any given hour (ii. 33). The moon's observed altitude will shew her longitude (ii. 34). We can tell, from two observations of a planet properly made, whether the planet's movement is direct or retrograde (ii. 35). The disc shewn in Fig. 14 helps to shew the "equations of houses" (ii. 36). The four cardinal points can be found without an astrolabe, by an experiment properly conducted (ii. 38). The astrolabe can be used to find the degree of the zodiac with which any planet ascends, even when the planet is not situated in the ecliptic (ii. 40).

By the use of the Umbra Recta on the back of the instrument, we can take the altitude of an accessible object by a single observa-
tion (ii. 41); or of an inaccessible object by two observations (ii. 43). Or, the height of an inaccessible object may likewise be taken by two observations, by the scale marked Umbra Versa (ii. 42).

The few conclusions not here referred to are chiefly explanatory, or of minor interest.

§ 30. STARS MARKED ON THE RETE.

Several of the Latin MSS. upon the Astrolabe give a list of the stars marked upon the Rete. The first double list printed below is from the Cambridge MS. which has also furnished us with the Latin version of Messahala. It is given in the form of two tables; the first mentions 49 stars, with the degrees of the zodiac which south along with them, and their declinations from the equinoctial line. The second table mentions some only of the same stars, with their longitudes and latitudes, as referred to the ecliptic.

**TABLE I. FORTY-NINE STARS MARKED UPON A RETE.**

[MS. Camb. Univ. Lib. ii. 3. 3; fol. 70, back.]

Tabula stellarum fixarum que ponuntur in astrolabio, cum gradibus quibus celum mediant, et cum distantia carum ab equinoctiali linea.

<table>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Grad.</td>
<td>Min.</td>
<td>Grad.</td>
</tr>
<tr>
<td>Aries</td>
<td>(1) Mirach</td>
<td>7*</td>
<td>32</td>
<td>30</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>(2) Batea kaytaz</td>
<td>18</td>
<td>30</td>
<td>13</td>
<td>S</td>
</tr>
<tr>
<td></td>
<td>(3) Pantea kai-</td>
<td>venter cethi</td>
<td>20</td>
<td>0</td>
<td>14</td>
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<td></td>
<td>toz 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(4) Enil</td>
<td>22</td>
<td>0</td>
<td>23</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>(5) Finis fluxus</td>
<td>29</td>
<td>0</td>
<td>4</td>
<td>30</td>
</tr>
</tbody>
</table>

* The MS. has "Gradus O. Minuta 7; " but I have collated its readings with those in MS. Univ. Lib. ii. 1. 13, fol. 81, back; and the latter has "Grad. 7. Min. O," which seems rather to be meant.

† The MS. has contractions for "Septentrionalis" and "Meridionalis"; I alter these to "N" and "S" throughout, as being more explicit and less troublesome.

1 Patencaiaytaz in ii. 1. 13.
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Gr.</td>
<td>Min.</td>
<td>Gr.</td>
</tr>
<tr>
<td>Taurus</td>
<td>(6) Menkar</td>
<td>Naris cethi</td>
<td>6</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>(7) Algenib</td>
<td>Frons algonis</td>
<td>10</td>
<td>0</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>(8) Algececaur</td>
<td>Oculus vel cor tau</td>
<td>22</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>(9) Aldebaran</td>
<td></td>
<td>29</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>(10) Alhaidoth</td>
<td>Hyrcus vel humerus sag.</td>
<td>6</td>
<td>0</td>
<td>45</td>
</tr>
<tr>
<td>Gemini</td>
<td>(11) Rigil</td>
<td>Pes orionis</td>
<td>11</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>(12) Algeuze</td>
<td>Humerus dexter orionis</td>
<td>15</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>(13) Alhabor</td>
<td>In ore canis merid.</td>
<td>3</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>(14) Razalgenze</td>
<td>Cap. d. geminorum</td>
<td>9</td>
<td>0</td>
<td>33</td>
</tr>
<tr>
<td>Cancer</td>
<td>(15) Algomeyza</td>
<td>In collo canis</td>
<td>13</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>(16) Markep</td>
<td></td>
<td>21</td>
<td>0</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>(17) Egregez</td>
<td></td>
<td>24</td>
<td>0</td>
<td>45</td>
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<tr>
<td></td>
<td>(18) Aldlurin ²</td>
<td>In fronte leonis</td>
<td>6</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Leo</td>
<td>(19) Alfart ³</td>
<td>Equus vel cingul-</td>
<td>13</td>
<td>0</td>
<td>18</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cor leonis</td>
<td>20</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vrsa</td>
<td>20</td>
<td>0</td>
<td>35</td>
</tr>
<tr>
<td>Virgo</td>
<td>(22) Coruns</td>
<td>Id est, Vrsa</td>
<td>1</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>(23) Dubhe</td>
<td></td>
<td>2</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>(24) Deneb</td>
<td>Cauda leonis</td>
<td>15</td>
<td>0</td>
<td>19</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(25) Algorab</td>
<td>In centauro</td>
<td>22</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Libra</td>
<td>(26) Alchimec</td>
<td>Inhermis</td>
<td>10</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>(27) Beennaz</td>
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3 Alfarth in MS. li. 1. 13.  ⁴ Calbelezet in the same.
5 Alhaue vel Razalegune in the same.  ⁶ Razralcyn in the same.
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Notes. Star (4); Latitude given as 22 in the other MS. (H. 1, 13). Star (16); Longitude may be 22. Star (17); Longitude is 34 in the MS. Star (38); Longitude 20 in the other MS. Both the numbers and the directions North and South seem to be occasionally incorrect.

Table II. Longitudes and Latitudes of Some of the Above Stars.

Tabula stellarum fixarum uerificatarum per armillos⁵ Parisius;⁶ et est longitudo earum gradus circuli signorum per circulum transpouncet polos zodiacki et stellas; latitudo vero earum est arcus eiusdem circuli cadens inter stellas et gradus longitudinalis earum.

¹ Aldirid in the same. ² Miswritten pesagi, pesago. ³ Or (in other MS.), Scarath. ⁴ Or, Seder. ⁵ armilla in other MS. ⁶ The form Parisius, apparently put for Parisios, occurs in Barbour's Bruce, iv. 251.
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¹ Razalogue in other MS
### TABLES OF STARS.

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In the above tables I have inserted the numbers (1), (2), &c. for convenience of reference. The 49 stars mentioned are the following. (Compare Ideler, Untersuchungen über die Bedeutung der Sternnamen, &c.) I do not pretend to identify them with perfect exactness.

(1) Mirach; or β Andromedae.
(2) Perhaps τ Ceti.
(3) ζ Ceti; or, the Whale's Belly; see Ideler.
(4) a Arietis; also called Alnath. Enif means nose.
(5) A star in Eridanus. But it looks more like o Ceti.
(6) Menkar; a Ceti; or, the Whale's Nose.
(7) Algenib; or a Persei.
(8) Perhaps γ Eridani.
(9) Aldebaran; a Tauri, or the Bull's Eye.
(10) Capella; a Aurige; sometimes called Alhaidar.
(11) Rigel; β Orionis.
(12) a Orionis; often called Betelgenux.
(13) Alhabor; Sirius, or the Dogstar.
(14) Razalgeuze; Castor; a Geminorum.¹
(15) Algomeisa; Procyon; a Canis Minoris; the Little Dog.
(16) ι Argous; see Ideler. (Different from Marakab, or a Pegasi.)
(17) Uncertain.
(18) Aldurin; a star in the Lion; uncertain which.
(19) Alphard; Cor Hydæ; a Hydrae.
(20) Calbalased; the Lion's Heart; Regulus; a Leonis.

¹ The name Razalgeuze is commonly applied to Pollux; but Castor seems to be meant here; see Ideler, p. 151.
(21) Perhaps a star in Ursa Major; possibly λ Ursæ Majoris, its latitude being wrongly given. Alrocaba was also a name for the Polestar (Ideler, p. 14). Rukhba means knee.

(22) Uncertain; possibly γ Crateræ. See No. 25.

(23) Dubhe; α Ursæ Majoris.

(24) Denebalased; the Lion’s Tail; β Leonis.

(25) Algorab; i.e. the Crow; γ Corvi. It is clear that Corvus and Centaurus were not the same as on a modern globe.

(26) Alchimech: Spica Virginis; a Virginis.

(27) Benetnasch; η Ursæ Majoris; the foremost horse in Charles’s Wain, which the Arabs likened to a bier with a girl laid on it. (Hence Lat. feretri fillie.)

(28) Alramech; Arcturus; a Boötis.

(29) Alphecca; a Coronae Borealis.

(30) Perhaps β Serpentis.

(31) δ Ophiuchi.

(32) Cor Scorpii; the Scorpion’s Heart; Antares; α Scorpii.

(33) α Serpentarii vel Ophiuchi; also called Ras Alhagus.

(34) γ Draconis; Etanim; the Dragon’s Head.¹

(35) Wega; Vega; a Lyrae; Lyra.

(36) Altair; α Aquilæ.

(37) Possibly a Delphini; the four stars α, β, γ, δ, are very close together.

(38) A star in Cygnus; very near the next following. In fact, El-ridf was only another name for Arided (Ideler, p. 74).

(39) Arided; Deneb adigege; α Cygni.

(40) Somewhere near ζ Capricorni.

(41) Probably β Equulei. The name “Delfin” seems to imply that Equuleus was also called Delphinus Minor.

(42) The word “Aldurin” or “Aldira” is meant for Alderamin or α Cephei.

(43) Enif, or Enir; ε Pegasi.

(44) The Goat’s Tail; δ Capricorni.

¹ It is perfectly clear that the scribe has changed the places of the words “Capud draconis” and “Capud serpentis,” or rather, “serpentariorium.”
(45) δ Aquarii; represented as on the leg of the Waterbearer; hence called "Crus Aquarii."

(46) Alpheraz, or the Horse; β Pegasi.

(47) Mentichel; α Andromedæ. This star and the former are both called "humerus equi."

(48) The Whale's Tail; β Ceti.

(49) Sheddīr; a Cassiopeæ.

Even when all allowances are made for the alteration of the position of the pole since this table was made, it must be held to be very faulty. To the numbers given in the "longitude" column we must add always from 7 to 12 degrees, to make them equal to the present longitudes. The second table helps to confirm the interpretation of the first in many cases.

**TABLE III. OTHER TABLES OF THE SAME STARS.**

After Tables I and II were in type, I found that the tables, as given in MS. Ilh. 6, 8, were very differently arranged, and had the peculiar merit of being *dated*, as well as being explicitly calculated for the latitude of 48½ degrees. Their date is A.D. 1223, and I here add them for their curiosity, premising that the extraordinary mis-spellings of the Arabic names are due to the scribe, and not to me. Thus *Algārī* is for *Algorab*; *pes canis* means *pes Orionis*; *Galbāciel* is for *Calbalased*; *Bacelmara* is an error for *Ras el-mārā*, "the woman's head," a Andromedæ; and *Bacelgohol* is for *Ras Algol* or *Algol*. I may here add, that the word *In-hermis* against star (26) in Table I, is puzzling till explained; nor is it made clearer by being spelt *mermius* (!), as in MS. Ii. 1. 13. It is put for *incermis*, i.e. unarmed, a name given to the hand of Virgo holding the Spica (a Virginis), in Arabic *El-sīmākh el-a'zal*, "the unarmed Simākh;" as distinguished from a Boötes, in Arabic *El-sīmākh el-rāmilh*, "the Simākh with the lance." See Ideler, p. 51.

[MS. Camb. Univ. Lib. Ilh. 6. 8, fol. 236.]

*Tabula stellarum fixarum que ponuntur in Astrolabio, certificata ad ciuitatem parisius cuius latitude est .48. gradus et .30. Minuta. In anno domini nostri iesu christi .1223.*
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Tabula stellarum fixarum; que est longitudo carum a capite arietis, & que latitudo carum ab equatore diei.

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<td>quidam uocant genu femine</td>
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In this list, in which the Arabic words are very badly spelt, as I have said, there are only three stars which do not appear in the other lists. They are marked with an asterisk. The position of the first, Malkanabar, is not clear; the syllable abar points to abâr and Alhabor, and suggests the star β Canis Majoris; but the position seems nearer to α Leporis. As to the position of the second there can be no doubt, as it is the star Fomalhaut (α Piscis Australis) of the first magnitude. The third is certainly Algol, or Medusa's head. The explanation of this may be found in Ideler, p. 88. The Arabs turned Medusa into a demon; hence the expression "caput demonis."

§ 31. NOTES ON SOME PASSAGES IN CHAUCER.

It is interesting to inquire whether the Treatise on the Astrolabe throws any light upon other passages in Chaucer. This question was taken up by Mr Brae as far back as the year 1851, when he published a series of useful and suggestive articles on the subject in Notes and Queries. Some time afterwards, when making some similar investigations for myself, I came to conclusions of which some were erroneous, and made some mistakes which, if I had sooner become acquainted with Mr Brae's articles, I should not have made. In what I have now to say, I hope the reader will ascribe to Mr Brae's teaching whatever is right, and put down to my own blundering whatever is wrong. I have no desire to claim any credit in the matter, and only make the following observations for the convenience of readers and future editors.

The passages which I quote are cited from the Aldine edition of Chaucer, edited by Dr Morris.

I.

—"the yonge sonne

Hath in the Ram his halfe cours ironne."—Prol. 7.

The difficulty here really resides in the expression "his halfe cours;" which means what it says, viz. "his half-course," and not, as Tyrwhitt unfortunately supposed, "half his course." The results of the two

1 I beg leave to assure Mr Brae that the discrepancy which he remarks upon in his edition of the Astrolabe, p. 81, was wholly accidental. I believe it arose from my having read Mr Brae's articles too hurriedly, and missing the point of some of them. I had too much of my own work to do to attend much to the proofs which Mr Furnivall sent me. It was not till some time afterwards that I felt convinced about Mr Brae's explanation of the "Ram."
explanations are quite different. Taking Chaucer's own expression as it stands, he tells us that, a little past the middle of April, "the young sun has run his half-course in the Ram." Turning to Fig. 1, we see that, against the month "Aprilis," there appears in the circle of zodiacal signs, the latter half (roughly speaking) of Aries, and the former half of Taurus. Thus the sun in April runs a half-course in the Ram, and a half-course in the Bull. The former of these was completed, says the poet; which is as much as to say, that it was past the eleventh of April.\(^1\)

The sun had, in fact, only just completed his course through the first of the twelve signs, as the said course was supposed to begin at the vernal equinox. This is why it may well be called "the yonge sonne;" an expression which Chaucer repeats under similar circumstances in the Squyeres Tale, part ii. 1. 39.

Chaucer makes the sun enter Aries on the 12th of March (Astrol. ii. 1). In 1865, it entered the sign on the 20th, and in 1871 on the 21st. We thus find a difference of 8 or 9 days between the reckoning in his time and ours. In 1871, the sun entered Taurus on the 20th of April; subtracting 9 days, it entered Taurus, in Chaucer's time, on the 11th of April.\(^2\) This difference is worth remarking.

If the reader wants further confirmation of this view, he may find it in Mr Brae's edition, pp. 65 to 68, and 81 to 84. Compare the expression—"because a sign rises in the middle of each month;" p. 47 of Essays on Chaucer, Part I (Chaucer Society).

II. "Some wikke aspect or disposicioun
Of Saturne, by som constellationm,"

Knightes Tale, 229.

"But I moste be in prisoun through Saturne;" l. 470.
"My cours, that hath so wyde for to tourne;" l. 1596.
"Myn lokyng is the fadir of pestilens;" l. 1611.

\(^1\) This is wholly due to Mr Brae. My own explanation, that Chaucer referred to the constellation, not the sign of the Ram, I now see to be wrong. Mr Brae shews that Chaucer (and perhaps we may add Lydgate and others) never refers to the constellations, but always to the signs. Let this, then, be remembered in future.

\(^2\) This is a sufficiently close approximation for our purpose. The difference between Chaucer's reckoning and ours may be said to vibrate, just at present, between 8 and 9 days. For more exact calculations, the hour of the day would have to be taken into account.
Cf. "wykkid planete, as saturre or Mars"; Astrol. ii. 4. 21; notes in Wright's edition, ii. 2453, 2457; and Piers the Plowman, B. vi. 327. Add to these the description of Saturn—"Significat... quar- tanis, lepra, scabie, in mania, earcre, ... submersione, &c. Est infor- tuma." Johannis Hispalensis Isagoge in Astrologiam, cap. xv.

III. "The thridde night"—Kn. Ta. 605.
"right as hir day
Is gerful, right so chaungeth hire aray;" 1. 680.
"And this day fyfty wykes, fer ne neer;" 1. 992.

"Nough beth forgeten the infortune of Mart;" 1. 1163.
"By manasyng of Martz, right by figure;" 1. 1177.

Cf. "wykkid planete, as saturre or Mars;" Astrol. ii. 4. 21; "the infortunyng of an assendent," &c.; ii. 4. 26; notes in Wright's edition to ll. 1749 and 2023; and Tyrwhitt's Glossary, s. v. "Puella." See also Man of Lawes Tale, 203.

V. "As is depeynted in the sterres above;" Kn. Ta. 1179.
"For in the sterres, clerere than is glas," &c. Man of Lawes Ta. 96.
"The heven stood that tyme fortunate."—March. Ta. 726.

VI. "And after was sche maad the loode-sterre;" Kn. Ta. 1201.
"Hire sone is eek a sterre, as men may see;" 1. 1203.

Cf. Ovid's Fasti, ii. 153—192; especially 189, 190—

"Signa propinqua micant. Prior est, quam dicimus Arcton, Arctophylax formam terga sequentis habet."

The nymph Callisto was changed into Arctos, or the Great Bear. This was sometimes confused with the other Arctos, or Lesser Bear, in which was situate the "lodestar" or Pole-star. Chaucer has followed
NOTES ON THE CANTERBURY TALES.

this error. Callisto's son, Arcas, was changed into Arctophylax or Boötes; here again, Chaucer says "a sterre" when he means a whole constellation; as, perhaps, he does in other passages. See Smith's Classical Dict. s. v. "Arctos" and "Callisto;" also Ideler's remarks on the Greater and Lesser Bears, in his "Untersuchungen über die Bedeutung der Sternnamen;" pp. xv, and 1—32.

VII. "And in hire hour he walketh forth a paas."—Kn. Ta. 1359.
See also l. 1413,1509.

See Tyrwhitt's note, C. T. 2219; Astrol. ii. 10 and ii. 12. My note on pp. 23 and 24 shews the whole method of working this. Thus, to find the 23rd hour of Sunday, begin with 1, to the left of the upright line, and the 23rd figure is 6, i.e. Venus. Hence, when two hours are still wanting to complete Sunday, we are just beginning the 23rd hour of Sunday, or the hour of Venus. Two hours later we come to sunrise and the figure 2, i.e. Diana; so that Emelye sets off in the first hour of Monday, or the hour of the Moon. Three hours later still, we come upon the figure 3, i.e. Mars, being the fourth hour unequal of Monday, as Tyrwhitt explains.

VIII. "al his fantayse
Was torned for to lerne astrology,
And cowde a certeyn of conclusions;" Mill. Ta. 5.

"His almagest, and bookez gret and smale,
His astrylab[i]e, longyng to his art,
His augrym-stoones, leyen faire apart;" id. l. 22.

Observe Chaucer's avowal of his disbelief in astrology, Astrol. ii. 4. 36, and Mill. Ta. 265; note the expression "a certein of conclusions;" Astrol. Prol. 10; his mention of "pholome," Astrol. i. 17. 6 (see note to the line), and cf. Wyf of Bath, Prol. 324, and Sompn. Ta. 589; note that the spelling astrylabe of the Harl. MS. is clearly wrong; and cf. the expression "nombres in Augrym;" Astrol. i. 9.

3. See also Wright's note to his l. 3210.

IX. "That now on Monday next, at quarter night,
Shall falle a reyn;" Mill. Ta. 330.

When all the day of Monday, and a quarter of the night has past, 15 planetary hours are completed, and the 16th is beginning. Now the 16th hour of Monday (see scheme on p. 24) is the hour of Saturn.

ASTROLABE.
Cf. "Thorwgh flodes and pourh foule wederes · frutes shall faille,
And so sayde saturne · and sent 3ow to warne;"

Piers the Plowman, B. vi. 326.

X. The adjective rom, spacious, ample, and its comparative rommer
(Reeves Tale, 206, 225), occurs again in Astrol. i. 2. 2.

XI. "Owre hoste sawh [wel] that the brighte sonne
The arke of his artificial day hath i-ronne,
The fourthe part, of [and ?] half an hour and more, . .
He wist it was the eightetene day
Of April, that is mesanguer to May . .
And therefo by the schadwe he took his wit
That Phebus, which that schoon so fair and brighte,
Degrees was five and fourty clombe on highte,
And for that day, as in that latitude,
Hit was ten of the clokke, he gan conclude . .
The fourthe party of this day is goon."

Man of Lawes Prol. 1—17.

For the "artificial day," i. e. the actual duration of the day from sun-
set to sunrise, see Astrol. ii. 7. The equality of a shadow with its
object of course gives an elevation of 45°; but the reason for alluding
to this is made even more clear by noticing that the scale of Umbra
Recta (Fig. 1) terminates with the equality of the shadow, and with
45°. For eightetene day, Tyrwhitt has eighte and twenty day, which he
could not explain; see his note. But we must certainly read eightetene,
as in the Harl. MS. On April 18, the sun was in the 6th of Taurus
(see Fig. 1), and the use of a globe 1 will easily shew that the sun's
altitude in that degree, at 10 o'clock, was somewhere about 45° or 46°
degrees,2 speaking roughly. But Mr Brae has calculated it exactly,
and his results are, that the time when the sun was 45° high on April
18, was 9h. 58m., or only wanting 2 minutes of 10 o'clock. This is
even a closer approximation than we might expect, and leaves no
doubt as to the correctness of the numbers "eightetene" and "ten."
See Mr Brae's edition of the Astrolabe, pp. 68 and 80.

April 18 in Chaucer's time corresponds to about April 26 now.
On April 26, 1871, the sun rose, at London, at 4h. 45m., and set at

1 Any scientific person will naturally object to such a rough way of calcula-
tion as resorting to the use of a globe, but I prefer it just because it is a rough
way of calculating, for we expect no very great exactitude here. Besides, it is
so easy, and so useful in checking a closer calculation.

2 In Mr Farnivall's Temp. Pref. to Chaucer, p. 91, I wrote "about 47 de-
grrees;" I see now that is too much.
7h. 13m., giving a day of 14h. 28m., the fourth part of which is at 8h. 22m., or, with quite sufficient exactness, at half-past eight. This would leave a whole hour and a half to signify Chaucer's "half an hour and more," which, be it observed, was the host's first rough guess, before taking a more exact observation. But the matter is made much clearer by looking at it more closely. How did the host see that the 4th part of the day was past? Of course he looked at the sun. But what did he know about the sun? He could only (as we shall see) have noted the point of the horizon at which it rose; for I cannot believe that any one can do better than accept Mr Brae's equally simple and ingenious explanation, that the host made his guess from observing the extent of the sun's azimuthal arc from sunrise to sunset. The method was incorrect; but we have clear proof (as Mr Brae again rightly suggests) that Chaucer actually confounded the azimuthal arc with the hour-angle, in Astrol. ii. 29; see the Additional Note. Set the 6th degree of Taurus on the E. horizon on a globe, and it is found to be 22° to the N. of the East point, or 112° from the S. point; doubling this, gives an azimuthal arc of 224° (exactly as Mr Brae calculates it in his edition, p. 70); whilst halving it, gives an azimuthal arc from sunrise of 56°. All, in fact, that the host did, was to observe that the sun had gone more than half the distance from the point of sunrise to the S. point, which he might easily do. In numbers, this gives, as was said, an azimuthal arc of 56° from sunrise, and, therefore, 56° also from the South. This would happen, as may be seen even by a globe, at about a quarter past nine; but Mr Brae has made the calculation, and makes it 20 minutes past nine. This makes Chaucer's "half an hour and more" to stand for half an hour and ten minutes; an extremely neat result, and confirming the preceding calculations and assumptions. We conclude then that what "our host saw" was, that the sun had

1 I suppose others did the same. He obviously took it from Messahala, whom he here follows closely.

2 It follows that the day mentioned in the opening lines of the Prologue was either the 17th or the 16th. It was the 17th, if all the tales were told in one day; it was the 16th, if the Man of Lawe began the second day's series of tales. I believe Mr Furnivall is right here, and that the Man of Lawe did begin the second day. For how was the host to observe the azimuthal arc of the sun, if the pilgrims had greatly changed their position since sunrise? And why, if they had been busy tale-telling, should the host have said, "let us nat mowlen thus
gone more than half-way from his point of rising to the southern point of the horizon, and he supposed (from his wrong assumption of the equality of the azimuthal arc with the hour-angle) that more than the fourth part of the day was gone, by more than half an hour.\footnote{1} He then further observed the sun's altitude to be about 45°, from which he pronounced it to be ten o'clock. The latter observation was a more correct and closer one.

**XII.** "O firste mevyng cruel firmament,
With thi diurnal swough that crowdest ay,
And hurlest al fro est to occident,
That naturally wold hold another way."

*Man of Lawes Ta.* 197.

See note in this volume, p. 76; and note to the line in "Specimens of English, A.D. 1298—1393," ed. Morris and Skeat.

**XIII.** "Infortunat ascendent tortuous,
Of which the lordes [*read* lord is] helples falle, alas!
Out of his angle into the derkest hous;
O Mariz Attezere [*read* O Mars, O Atazir], as in this caas;
O feeble moone, unhappy been thi paas;
Thou knettest the ther thou art nat receyved,
Ther thou wer wel, fro thennes artow weyved;"

*Man of Lawes Ta.* 204.

For the word "tortuous," see Astrol. ii. 28. 19; the tortuous signs are from Capricorn to Gemini inclusive; the most tortuous of these are Pisces and Aries. Of these two, Aries is the mansion of Mars. We may then suppose Aries to be the tortuous ascending sign, and the lord of the ascendent to be Mars; see Astrol. ii. 4. The "derkest hous" is perhaps the weakest of the cadent houses, or probably the 6th, which had just set. The "houses," arranged in order of "power," are as follows: the four "angles," or the 1st, 10th, 7th, and 4th; the "succedents," the 2nd, 11th, 8th, and 5th; and the "cadents," or 3rd, 12th, 9th, and 6th. In other words, Mars, instead of being in the ascendent, had "fallen helplessly" beneath the western horizon. *Atazir* or *Atacir* is the Spanish spelling of an Arabic word denoting *in ydlenesse?* Perhaps there may be some force too in 1.90—"But of my tale how schal I do this day?" The 16th suits the opening lines even better than the 17th does. See Note I, above.

\footnote{1 The fact was, that the fourth part was gone, by at least an hour and a half; as has been said. But this was a thing which our host could not well have seen, by a mere glance at the sky.}
influence; as explained in Dozy, Glossaire des Mots Espagnols dérivés de l'Arabique, p. 207. See note on the line in "Specimens of English, A.D. 1298—1393," ed. Morris and Skeat. With the word "knet-test," cf. "foighed;" Astrol. ii. 4. 33. With "recyved," cf. Astrol. ii. 4. 30. With "Ther thou wer wel," cf. "he is wel," Astrol. ii. 4. 34. The exaltation of the Moon was in Taurus; its depression, or worst position, in the opposite sign of Scorpio. It seems to have been far from its best position.

I subjoin the following extract from Bailey's Dictionary, vol. ii. ed. 1731—"ANGLE (in Astrology) certain houses of a scheme of the heavens; the first house or horoscope is called the angle of the East; the seventh, the angle of the West; the fourth house, the angle of the North; the tenth house, the angle of the South." Bailey is not much to be depended on, so I add another authority.

"De Inveniendis xiii. domibus.

"In omni hora firmamentum in duodecim partes distribuitur, quae domus dicuntur, et prima incipit a gradu ascendente, et comprehendit totidem gradu sequentis signi, et sic usque ad duodecim domus per gradus æquales.

"Sed est alia diuisio per inæquales gradus pro terræ latitudine, quæ sic inuenitur. Ponitur gradu ascendentis in oriente, qui est principium primæ domus; sed septima incipit ab opposto, per gradus totidem; et gradu tangens lineam meridianam, est initium domus decimae. Quartum sinæ imum coeli domicilium incipit ab opposto eius per gradus totidem, et hac quatuor domus dicuntur Anguli. Et gradu inuenitus in fine lineæ horæ decimae, est principium secundae domus. In fine octauæ inuenitur tertia. In fine quartae, quinta; in fine secundae, sexta; octauæ uero domus per secundum inuenitur, nona per tertiam, et per quintam undecima, per sextam duodecima, per oppositum. Et secunda, quinta, octauæ, undecima sunt post Angulos succedentes. Tertia, sexta, none, duodecima sunt lapsæ, vel cadentes ab Angulis."—Epitome Astrologiae, a Johanne Hispalensi; cap. xxi.

This useful quotation well illustrates the "Astrolabe," pt. ii. sect. 36, 37; it explains the phrase "as in angle," i. e. "as for instance,
in an Angle, or one of the four principal houses;" Astrol. ii. 4. 28; and also the phrase "in a succedent;" Astrol. ii. 4. 29. Moreover it suggests that "the meridional angle" is only another name for the "tenth house;" cf. note XX below.

XIV. "Of viage is ther noon eleccioun . . . Nought when a roote is of a birthe i-knowe?
Man of Lances Ta. 214.

We learn from the third tract in MS. G., p. 10, that there are four "mobill" signs, Aries, Cancer, Libra, and Capricorn; four "fix" signs, Taurus, Leo, Scorpio, and Aquarius; and the rest are called "signes comune." It is added that the right time for going a journey is when the moon is a "mobill" sign; if it were in a "fix" sign, you may not go a journey, but you may build a city; if in a "comune" sign, you may not travel far, nor yet build, but you may safely go to a city, and live in it; see also Tyrwhitt's note. The whole of Book iv. of the Epitome Astrologiæ of Johannes Hispalensis is "De Electionibus," and the title of cap. xv. is "Pro itinere." For the word "roote," see Astrol. ii. 44, and the Glossarial Index.

XV. "Min asce[nde]nt was Taur, and Mars therinne;"
Wyf of Bathes Prol. 613.

The sign in the ascendent at her birth was Taurus, the mansion of Venus. Moreover, Taurus was a "feminine" sign. Mars being in the mansion of Venus is sufficiently significant; see Chancer's Compleynt of Mars. Cf. "si fuerit [Mars] in Tauro, erit multorum puerorum," &c. Liber Messahalte super significationem Planetarum, cap. iii.

XVI. "And thus, god wot, Mercury is desolate
In Pisces, wher Venus is exaltate,
And Venus faylith wher Mercury is reysed."
Wyf of Bathes Prol. 703.

The exaltation of Venus is in Pisces, which is also the dejection or depression of Mercury. The exaltation of Mercury is in Virgo, which is also the dejection of Venus. This is because the signs Pisces and Virgo are exactly opposite; see Fig. 1 or Fig. 2. This was explained by Tyrwhitt in his note on the line.
NOTES ON THE CANTERBURY TALES.

XVII. "The moone that at noon was thilke day
That January hadde weddid freisseche May
In tuo of Taure, was into Cancre gliden."—March. Tu. 642.

Tyrwhitt altered "tuo to ten," and gave his reason; see his note. He was wrong in making his calculation from the moon's mean motion, as it differs considerably from her actual motion. The question is simply, can the moon move from the 2nd degree of Taurus to the 1st degree of Cancer (through very nearly two whole signs, or 59 degrees) in four days complete (l. 649)? And, in particular, can the moon do this in the middle of June? Mr Brae (note on p. 93) says decidedly, that examples of it can be found in every almanack. In one of the volumes of the Nautical Almanack, I find one very opposite instance, which I here cite. In June, 1866, the moon's longitude at noon was 30° 22' on the 9th, and 90° 17' on the 13th; i.e. the moon was in the first degree of Taurus on the former day, and in the first degree of Cancer on the latter day, at the same hour; which gives a degree more of change of longitude than we require. There is therefore no objection to the reading "tuo," which the majority of MSS. (I believe) support.

XVIII. —"Er that dayes eyght
Were passid of the moneth of Jul" (sic, wrongly);—March. Tu. 888.

"He [the sun] was that tyrne in Geminis, as I gesse,
But litel fro his declinacioun
Of Canker, Joves exaltacioun."—id. l. 978.

The sun had not quite entered Cancer, but was still in Gemini. A glance at Fig. 1 shews that the sun would enter Cancer about June 12. The former passage must therefore refer to June 8; and the reading "Juil" is out of the question. We must, of course, read "Juin," whatever the scribes of the MSS. may have written to the contrary. But probably some of the MSS. will be found to have the right reading.

His "declination of Cancer" means the sun's maximum northern declination, which he attains at the period of the summer solstice, exactly upon entering Cancer. Now the summer solstice must of course be in June, not July.

1 Read "Geminis," the ablative plural.
2 The sun entered Cancer in 1871 on June 21. A difference of 9 days, as explained above, gives June 12.
Cancer is the exaltation of Jupiter, and the depression of Mars.

The correction *Juin for Jul* is due to Mr Bræe, and was first published in 1851. See his edition of the Astrolabe, p. 67.

XIX. "The last Idus of March, after the yeer;
Thebus the somne ful joly was and cleer,
For he was neith his exaltacioun,
In Martes face, and in his mansioun
In Aries, the colerik, the hote signe;"—*Syngeres Ta.* i. 39.

"The last Idus" is the very day of the Ides, i.e. March 15. The sun had entered Aries only three days before, on the 12th; see Astrol. ii. 1. 4. The sun was therefore in the 4th degree of Aries. Aries was called the exaltation of the Sun, and the sun's exaltation was supposed to take place in the 19th degree of the sign in particular, so that he was "nigh his exaltation," and approaching it. The word "face" is technical; it meant the third of a sign; see Astrol. ii. 4. 38. In Aries, the first face is that of Mars (where the Sun was), the second that of the Sun, and the third that of Venus. The word *his* in "his mansioun" refers of course, as Tyrwhitt says, to Mars, not to Phebus; for Aries was the mansion of Mars. The sign Aries is said in MS. G. Tract 3, p. 11, to be choleric, fiery, and masculine; cf. Tyrwhitt's note.

XX. "Phebus hath laft [read left] the angle merydional,
And yit ascendyng was a best roial,
The gentil Lyoun, with his Aldryan."—*Sy. Tu.* i. 255.

Four of the astrological houses were called "angles;" of these, the Southern angle, or "angle meridional," was the tenth house, corresponding to the time from 10 a.m. (at the equinox) to noon. Thus, the sun "leaving the angle meridional" is merely another way of saying that it was past noon. Now, at noon on the 15th of March, in Chaucer's time, the first point of Leo would be on the horizon; see Mr Bræe's edition, p. 87. We need not lay any stress on the word *yit*, which is not always equivalent to the modern *still*, and need not imply any very long continuance. I take the passage to mean merely this, that

1 In Mr Furnivall's Trial-forewords to Chaucer's Minor Poems, there is an unfortunate misprint in footnote 3, p. 87. Read—"Aries is the mansion of Mars, and the exaltation of the Sun," instead of "Venus." The rest of the table is correct.

2 Only nine lines above, *and yit* is put for *nevertheless*; *yet* is used for a very short continuance of time in the Second Nomes Tale, 1. 442, and for a very long period in the Man of Lawes Tale, 1. 536.
the sun had passed the meridian, and now the sign Leo, with his Aldryan, was ascending. Considering the frequent shifting of \( r \) in English, as in *bird* for *bird*, &c., we can have little hesitation in identifying Aldryan with the star *Ablarin* or *Aldiran* mentioned in the "List of Stars marked on a Rete" above; Chancer makes a much greater change than this, when he turns Ariadne into Adriane.

For determining Aldiran's\(^1\) position, we have, in Table III, its greatest altitude expressed as 48 degrees, for a latitude of about 48 degrees, or a co-latitude of 42 degrees. This makes it 6 degrees north of the equator, showing that in Table I "6. 0. S" is an error for "6. 0. N." One table makes its longitude 12 degrees, the other 14 degrees less than that of Cor Leonis. The only star I can see near this position is \( \theta \) Hydrea, which may have been considered as on the fore-paws of the Lion; a result which may be illustrated from Lane's Arabic Lexicon, p. 962, which shows that "the Dhirâän" of the Arabs, or fore-legs of the Lion, were extended even as far as \( \alpha \) and \( \beta \) of Gemini, and \( \alpha \) and \( \beta \) of Canis Minor. The only remarkable point about this small star is that, near London, it rises but a very little before Cor Leonis, and even at Paris would not long precede it. It may therefore have been looked on as a herald of that celebrated star. But this is mere conjecture, and I leave the working out of this question to others better qualified to do it. The reader should, however, see Mr. Brae's remarks in his edition of Chancer's Astrolabe, pp. 77, 87. If Cor Leonis were on the horizon, the time would be just 2 p.m., which looks as if Chancer here makes the "angle meridional" to extend for a couple of hours *after* noon instead of *before* it.

It is not clear what authority Speght had for declaring Aldryan to be "a star on the neck of the Lion." In the List already referred to, it is said to be "in fronte Leonis."

\(^1\) *Aldiran* is a dual form, and means "the two fore-paws," viz. of the Lion. One of these was called the "extended" paw, and reached as far as \( \alpha \) Geminorum; the other, or "drawn up" paw, was bent so as to end with \( \alpha \) and \( \beta \) Canis Minoris. The star named Aldiran must there be sought near the spot whence both fore-legs branch off. Though not very explicit, this does, after a manner, limit its position. The name Aldiran is probably an abbreviation of some longer phrase, just as Algol is put for Ras Algol.
XXI. "Now dauncen lusty Venus children deere;  
For in the fisch her lady sat ful heyghe,  
And loketh on hem with a frendly eyghe;"—Squ. Tu. i. 264.

I take "Venus children" to mean here simply men and women; see a similar expression in the Knightes Tale, ll. 1628 and 1629. In the next line, *her* means *their*, corresponding to *hem* for *them* below. Their lady Venus was then in Pisces; and Pisces was the *exaltation* of Venus, which explains "full heyghe." See Tyrwhitt’s note to C. T. 6284.

XXII. "As rody and bright, as is the yonge sonne  
That in the Ram is ten degrees i-ronne."—Squ. Tu. ii. 39.

I suppose ten is due to some eccentricity on the part of the scribe of the Harleian MS. Tyrwhitt has "foure degrees;" which can no doubt be supported by MS. authority. On the day before, March 15, the sun was in the 3rd degree; so that on March 16 he was in the 4th degree. "Non heigher was he," in l. 41, means that the sun was only four degrees above the horizon; cf. ll. 47, 48.

XXIII. "And this was on the sixte morwe of May...  
That yest, after thy declinacioun,  
To ilk of hem his tyme and his sesoun,  
As that thin herborwe chaungeth low and heighe...  
That thou next at this apposicioun [*read opposicioun*]  
Which in the signe shal be of the Leoun," &c.  

Frank. Tu. 178—330.

We see from Fig. 1, that the 6th of May is opposite the 23rd degree of Taurus, which is sufficiently correct. "After thy declinacioun" means "according to thy declination." The sun’s declination changes from day to day, and with it the solar power and heat; so that the vegetable kingdom fails or grows according as the sun’s "harbour" or position in the ecliptic makes his daily meridian altitude to be low or high. The power of the moon over the tides is referred to in l. 318; and the dependence of lunar upon solar light in l. 322. Cf. Astrol. ii. 46. The highest tides occur when the sun and moon are either in conjunction or opposition; the latter is here fixed upon. But if the sun be in the 23rd degree of Taurus, the moon, in opposition, is in the 23rd degree of Leo, as Chaucer says. If the sun and moon could remain always in opposition, says Aurelius, we might hope to have always a high tide or
"spring-flode" (l. 342). To secure this, the moon must go no faster than the sun (l. 340); and, as the moon in opposition is full, there would be a full moon all the while (l. 341).

XXIV. "This book spak mochil of operaciouns,¹
Touchyng the xxviii. manciouns
That longen to the mone."—Frank. Ta. 401.

The 28 "moon-stations" of the Arabs are given in Ideler's Untersuchungen, p. 287. He gives the Arabic names, the stars that helped to fix their positions, &c. See Mr Brae's edition of the Astrolabe, p. 89. For the influence of the moon in these mansions, we must look elsewhere, viz. in lib. i. cap. xi, and lib. iv. cap. xviii, of the Epitome Astrologiae of Johannes Hispalensis. Suffice it to say that there are 12 "temperate" mansions, 6 "dry" ones, and 10 "moist" ones.

XXV. "Phebus wax² old, and hewed lyk latoun,
That in his boote declinacioun
Schon as the burned gold, with stremes brighte;
But now in Capricorn adown he lighte," &c.—Frank. Ta. 509.

The sun, in his "hot" or extreme N. declination, shines brightly enough at the summer solstice; but he was now at his lowest altitude, at the winter solstice. He entered Capricorn on the 13th of December, as Chaucer says himself; Astrol. ii. 1. 12. See Fig. 1.

XXVI. "His tables Tollitanes forth he broughte," &c.—Frank. Ta. 537.

See the whole passage.

Here Chaucer mentions the Toletan tables, or tables for the latitude of Toledo; see Tyrwhitt's note. For the "collect" and "expans" years, see Astrol. ii. 44, and the Glossarial Index. Any one who is curious to see such tables may find them in Ptolemy's Almagest, lib. vi. and lib. ix. Ptolemy's expans years go from 1 to 25, or from 1 to 18, and his collect years by multiples of 25 or 18; whereas Chaucer's go by multiples of 20. For "root," see the Glossarial Index. "Argument" is an astronomical term still in use; see Entere in the Glossary. For the "proportionels convenientis,"

¹ Printed "of this operaciouns," which will not scan. Observe that xxviii, in Old English is always to be read "eight and twenty," never "twenty-eight."
² Read "wex" or "wox."
see Astrol. ii. 44. 22. Next come the lines, which in the Harleian MS. are as follows:—

"And by his three speeres in his worching,
He knew ful wel how fer Allnath was schove
Fro the heed of thilk fix Aries above,
That in the fourthe speere considred is."

There cannot be a moment's doubt that, as Mr Brae well shows in his Preface, p. 13, we must read eighte for three, and ninthe for fourthe. As the passage stands, it is mere nonsense. Tyrwhitt has the right readings in both places.¹ The reader has only to glance at Fig. 10, and he will see at once that the seven inner spheres are spheres of planets. The eighth is the sphere of fixed stars, and Alnath, being a fixed star (α Arietis), was in it. But the head of the fixed Aries, or the true equinoctial point, was in the sphere above it, the ninth sphere.

The exact amount of the precession of the equinoxes (which is what Chaucer here alludes to) could be ascertained by measuring from time to time the distance between the true equinoctial point and the nearest convenient bright star. The star Alnath would do well, being of the first magnitude; indeed, in the time of Hipparchus, its distance from the true equinoctial point was but a few degrees. At the present time, it is "schove" some 35° off, in longitude. For the word "face" in l. 552, see Note XIX. Not only every sign, but every "face" had its planet; hence the phrase "in whos face." A "term" is the Lat. terminus. Besides the division of a sign into three equal parts called faces, we find unequal divisions called terms. Thus, of Aries, the first 6 degrees are a term of Jupiter, the next 6, a term of Venus; the next 8, of Mercury; the next 5, of Mars; and the last 5, of Saturn.

XXVII. "By nature knew he ech ascensioun
Of equinoxial in thilke toun;
For whan degrees fyftene were ascendid,
Thanne crew he, it mighte not ben amendid . . .
Whan that the moneth in which the world bigan,
That bighte March, whan God first makede ² man

¹ I may just observe that three spoils the scansion of the line, whilst eight-e (A.S. eahta) is a disyllable, and suits well enough.
² Printed 'makede first,' which scans badly.
I once proposed an explanation of this which I now entirely give up; it is printed in Mr. Morris's small edition of Chaucer for the Clarendon Press, but it is not worth while to repeat it. My difficulty was wholly caused, I now see, by neglecting the word *ech* in the first line. Chaucer says that the cock knew *each ascension* of the equinoctial, and crew at each. That is, he crew every hour, as 15° of the equinoctial make an hour. Chaucer adds that he knew the hour better than an abbey-clock; see l. 34. This tells us, clearly, that we are to reckon clock-hours, not the unequal hours of the artificial day. Hence the *prime* mentioned below was at a clock-hour, at 6, 7, 8, or 9, suppose. The next point is the date; and here I am again guided, almost wholly, by Mr. Brac's work. The day meant is certainly May 3, because the sun had passed the 21st degree of Taurus; see Fig. 1. The reading *tway monthes and dayes tuo* is certainly wrong; it ought to be *thirty dayes and tuo*, as in Tyrwhitt, and in Mr. Morris's edition for the Clarendon Press. The date, May 3, is playfully denoted by saying that 'March was complete, and also (since March began) thirty-two days more had passed.' The words "since March began" are parenthetical; and we are, in fact, told that the whole of March, the whole of April, and two days of May were done with. March was then considered the first month in the year, though the year began with the 25th, not with the 1st; and Chaucer alludes to the idea that the Creation itself took place in March.1 The day, then, was May 3, with the sun past 21

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1 This may be illustrated from the Old English Menologium; see Grein's Bibliothek der Angelsächsischen Poesie, vol. ii. p. 2.

"Swylye cáe rémeræftige
On þa ylcan tid · emniht healdad,
degrees of Taurus. The hour must be had from the sun’s altitude, here said to be ‘Twenty degrees and oon.’ But this is a mere error, due to the scribe repeating the phrase by mistake; most MSS. (see Tyrwhitt’s note) have ‘Forty degrees and oon.’ Oddly enough, as Mr Brae points out, the oldest editions had ‘Forty degrees and oon’ in both places, till Francis Thynne corrected the text, and gave the correct readings. See Thynne’s Animaduersions, &c.; ed. G. H. Kingsley (E. E. T. S.), p. 50. I again use a globe, and find that the sun would attain the altitude of 41° nearly at 9 o’clock. Mr Brae has calculated it, and makes it ‘nine o’clock to the minute.’ It follows that prime, in this passage, signifies the end of the first quarter of the day, reckoned from 6 A.M. to 6 P.M. What prime means in all cases, I do not pretend to say. It is a most difficult word, and I think was used loosely. It might mean the beginning or the end of a period; and the period might be an hour, or a quarter of a day. I think it was to obviate ambiguity that the end of the period was sometimes expressed by high prime, or ‘passid prime;’ or ‘prime large;’ we also find such expressions as half prime, halfway prime, or not fully prime, which indicate a somewhat long period. For further remarks, see Mr Brae’s Essay on Chaucer’s Prime, in his edition of the Astrolabe, p. 90. I add some references for the word prime, which may be useful. We find prime in Kn. Ta. 1331; Mill. Ta. 368; March. Ta. 613; Pard. Ta. 200 (“Long erst than prime rong of any belle,” which goes to show that prime was a fixed time of day); Schip. Ta. 206; Sir Thopas, 114 (“fully prime’); also passed prime in Re. Prol. 52,¹ Fre. Ta. 178, Schip. Ta. 88; prime large in Sq. Ta. ii. 14. See also prime in Troil. and Cress. ii. 992 (Morris); passed prime, id. ii. 1095; an hour after the prime, id. ii. 1557; prime, id. v. 15.

XXVIII. “The soume fro the south line is descendid
So lowe, that it nas nought to my sight

Forfan wealdend god ‘ worhte æt frymde
On by selfan dæge ’ sunnan and mónan,”

¹ As also arithmeticians
At that very time consider the equinox,
Because all-ruling God wrought at the beginning,
On that very day, the sun and the moon.”

¹ But Tyrwhitt has half-way prime, as in the Six-text edition.
Degrees nyne and twenty as in height.

_Foure on the clokke it was, so as I gesse_ . . .

Therewith the mones exaltacioun

_In mena Libra, alway gan ascende._" . . .

_Persones Prol. 2—11.

Besides saying that the sun was 29° high, Chaucer says that his shadow was to his height in the proportion of 11 to 6. Changing this proportion, we can make it that of 12 to $6\frac{6}{11}$; that is, the point of the Umbra Versa (which is reckoned by twelfth parts) is $6\frac{6}{11}$ or $6\frac{1}{2}$ nearly. This can be verified by Fig. 1; for a straight edge, laid across from the 29th degree above the word "Occidens," and passing through the centre, will cut the scale of Umbra Versa between the 6th and 7th points. The sun's altitude is thus established as 29° above the western horizon, beyond all doubt. Now the day of the month was April 18 (see Note XI) if all the tales were told in one day; or April 20, if Mr Furnivall's scheme of four days be admitted; this makes the sun to be either in the 6th or the 9th degree of Taurus. In either case, even the use of a globe will show that the altitude of 29° corresponds closely to four o'clock in the afternoon. Mr Brae gives all the results of his calculations, and makes the altitude of the sun, at 4 P.M. on April 18, 1388 (which is at least near enough, if not the right date altogether), to be 29° 15'. There can therefore be no doubt that the reading _Foure_ is right. Some MSS. have Ten, which is out of the question, for that would be _after sunset_! Probably (as Mr Brae suggests) the _tenth hour_ may have been meant as a gloss to 'Foure'; since 4 P.M. is the tenth hour, reckoning from 6 A.M.

We have now to consider the last part of the passage. I make out, merely from the globe, that the point of the zodiac then ascending on the Eastern horizon was about the 4th or 5th degree of Libra. Mr Brae makes the altitude of a certain star which he puts in R. A. 12h. 25m., and N. D. 6° 43', to be 4° 20'; and I believe my result is much the same as his. At any rate, I feel confident in saying that only some few degrees of Libra had ascended. But, granting all this, how are we to read the passage? Mr Brae proposes to alter it, and to read, "In Libra men al awai gan ascende," which he interprets to mean that the moon was ascending
together with the star Min al auwa, which is the 13th of the 28 Arabic 'moon-stations.' The reader should carefully consider all his arguments. I regret that here, and here only, I cannot follow him. The change seems too bold; yet I have nothing better to offer. I merely give my own impression of the matter, which may, after all, be not worth much. *Gan ascend,* in Early English, means no more than *did ascend,* and *alway gan ascend* would mean merely *ever did ascend,* or *kept on ascending.* I see nothing unusual in the phrase, though Mr Brac looks upon it as a great difficulty, and objects, in particular, to the word *alway.* Next, Chaucer does not say that the *moon* was ascending, but that the *moon's exaltation* was ascending, which is a very different thing. Again, Chaucer uses *exaltation* in its true astrological sense in other passages (see Notes XVI, XVIII, XIX); but, unfortunately, the Moon's exaltation was in Taurus, a long way off. I have no solution to offer but Tyrwhitt's, that Chaucer did, for once, make a slip (or his scribes have done it for him), and that it ought to be "*Saturnes exaltation.*" Next, *In mene libra* would signify *in the middle of Libra,* just as we find "*mene mote*" (Astrol. ii. 44) for the Latin *medius motus*; but then, the ascending degree was certainly not *in the middle* of Libra, but *near the beginning* of it. This disposes of this reading, and throws us back upon *I mene Libra,* i.e. I refer to Libra; which can be supported by the use of the same phrase—*I mene Venus*—in l. 1358 of the Knightes Tale. This would give—

"Therwith Saturnes exaltacioun,
I mene Libra, alway gan ascende;"

and it would mean no more than that Libra kept on ascending. It had not long before appeared on the horizon. If it be asked, how came Chaucer (or the scribes) to put *mones* for *Saturnes,* I would reply, that a mistake of this kind is easy enough; for the whole of astrology is so technical that no one could be expected to remember it very well; and the *moon* might have been suggested by the fact, that every sign is divided into three equal parts (called *faces*); that the first *face* was then on the horizon; and that the first face of Libra is the face of the *Moon.* Only suppose a momentary confusion between *exaltation* and *face,* and it is done. But this is, perhaps,
very unsatisfactory. The reader should also consult Mr Brac's arguments. Perhaps the MSS. may some day help us out here.

XXIX. I add, by way of finishing these notes, the following miscellaneous remarks.

In the Assembly of Foules, l. 59, Chaucer mentions the nine spheres; see Fig. 10.

In the Flower and the Leaf (not Chaucer's) we are told that the Sun had just entered the Bull; and that the author rose long before sunrise, at daybreak, about three a.m. This would be about the 11th of April; roughly speaking, daybreak would be about three o'clock, and sunrise about five o'clock.

In the 1st (8th in Morris) stanza of Book ii. of Troilus and Creseide, Phebus is in the Bull on the 3rd of May. The sun would have just completed the 21st degree of Taurus. Cf. Note XXVII.

In the first stanza of the proem to Book iii. of Troilus, there is an address to Venus in "the thridde hevene." Now Venus is in the third heaven, if one begins at the innermost of the nine spheres; for we then have the order, Moon, Mercury, Venus, &c., and, in confirmation of this, we have a mention of the seventh sphere, which certainly means that of Saturn; Troil. v. 1823. But it is remarkable that Chaucer also adopted the other mode of reckoning, viz. from the seventh sphere of Saturn inwards, giving the order, Saturn, Jupiter, Mars, Sun, Venus, Mercury, Moon. This would place Venus in the fifth sphere; and so we find it in stanza ii. of L'Envoy de Chaucer a Scogan. It would also place Mars in the third sphere, as in the Compleint of Mars, st. v.1 In the Boke of the Duchesse, l. 198, is the expression—"a quarter before day." I do not know whether this is a quarter of an hour before day, or a quarter of a day (say three hours) before day. I incline to the latter. Chaucer dreamt about the House of Fame (see l. 111) on the 10th night of December. The winter solstice was then very near at hand.

In the Chanones Yemannes Prologue (l. 272) we have the seven metals belonging to the planets, viz. Saturn, lead; Jupiter, tin; Mars,

\[1\] Not having perceived this change in Chaucer's reckoning, I proposed another solution of this expression, which Mr Brac corrected; see Trial Forewords to Chaucer's Minor Poems, by F. J. Furnivall, pp. 85, 121.

ASTROLABE.
iron; Sun, gold; Venus, copper; Mercury, quicksilver;¹ Moon, silver. Observe that, in the House of Fame, iii. 341, the "Saturnine" Josephus is on a pillar partly of lead; cf. ll. 358, 359. The poets who wrote about warriors are on an iron pillar (l. 367), which is the metal of Mars, l. 356. Ovid, the poet of Venus, is on a copper pillar, l. 397; and so on.

The Prologue to the Legend of Good Women mentions May 1; l. 108.

In st. 1 of the Compleint of the Black Knight (which is certainly Lydgate's, not Chaucer's) we have the sun in the middle of the Bull in May. It must mean May 1, when the sun was in the 19th degree of Taurus, nearly.

§ 32. ASTROLOGICAL NOTES.

For a general sketch of Astrology, see the English Cyclopaedia, s.v. Worthless as the science is, it is useful to have a few "facts" for handy reference. I therefore attempt a synopsis of the chief points of it, drawn from Johannis Hispalensis Isagoge in Astrologiam.

To save space, I give the information in a tabular form, wherein I denote the 12 Signs by A. T. G. C. L. V. Li. S. Sa. Cp. Aq. P.; and the Seven Planets Saturn, Jupiter, Mars, Sun, Venus, Mercury, Moon, by St. J. Ms. Sn. V. My. Mo. What the table exactly means shall be explained presently.

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¹ We still have the name mercury for quicksilver; Copper and Venus are both connected with Cyprus. Nitrate of silver is lunar caustic. The sun shines like gold. Mars suggested iron armour. Saturn's slow motion suggested dull lead.
The first line is to be read thus.

Aries is the mansion (or house) of Mars; the exaltation (or honour) of the Sun, in the 19th degree of the sign; the lord of the Triplicity of Aries with its attendant signs is Saturn by day, Jupiter by night, and Saturn in common, both by day and night; the first Face of Aries (degrees 1 to 10) is that of Mars; the second Face (degrees 11 to 20) is that of the Sun; the third Face (degrees 21 to 30) is that of Venus. And so on for the rest; noting that Gemini is the Exaltation of the Dragon's Head (D. H.), and Sagittarius that of the Dragon's Tail (D. T.).

The meanings of the words are as follows. A Mansion or House appears to be that sign in which the planet is peculiarly at home for some reason or other.

The Exaltation or Honour is that degree of a sign in which the planet named has its greatest power; but the degree was often neglected, and Aries was called the Exaltation of the Sun, simply.

The Fall (Lat. occasus vel detrimentum) of a planet is the sign opposite its mansion. Libra is opposite Aries; therefore Libra is the Fall of Mars.

The Dejection or Depression (Lat. dedecus) of a planet is the sign opposite to that of its exaltation. Libra is opposite Aries; therefore Libra is the Dejection of the Sun. And so on.

A Triplicity is a combination of three signs in the form of a triangle, each 120° apart. Thus Aries, Leo, and Sagittarius form the first triplicity; Taurus, Virgo, Capricorn, the second; Gemini, Libra, Aquarius, the third; Cancer, Scorpio, Pisces, the fourth. Equal divisions of a sign (third-parts, namely) are called Faces. There were also unequal divisions called Terms; see § 31, Notes XIX, XXVI.

The "mobill" or movable signs are Aries, Cancer, Libra, Capricorn.

The "fixe" or fixed signs are Taurus, Leo, Scorpio, Aquarius.

The "common" signs are the four others.

The signs Aries, Gemini, Leo, &c. (taking every other sign) are diurnal or masculine.

The rest, Taurus, Cancer, &c., are nocturnal or feminine.
The first six signs, Aries to Virgo, are *northern* or *sinister* signs.\(^1\)

The last six, Libra to Pisces, are *southern* or *dexter* signs.

The signs Cancer to Sagittarius are *western*, *sovereign*, *right*, or *direct* signs. Cf. Astrol. ii. 28, and see Fig. 2.

The rest, Capricorn to Gemini, are *eastern*, *obedient*, *tortuous*, or *oblique* signs.

This is all that a reader is likely to want. For other points, see the authorities.

§ 33. DESCRIPTION OF THE PLATES.

Plate I. Fig. 1. The flat back of the Astrolabe; see Pref. § 28.

Plate II. Fig. 2. The front of the Astrolabe, with raised border. In the wide depression in the middle, the plate called the "Rete" is dropped in, and is shown in its primary position. Other positions of it are sketched in Fig. 11 and Fig. 12.

Plate III. Fig. 3. The "Rewle," carrying two sights, which revolved at the back of the Astrolabe. Astrol. i. 13.

Fig. 4. The central "Pin," shown with the "Wedge" inserted through it. Astrol. i. 14; cf. Fig. 7.

Fig. 5. One of the Tables or discs, used by being dropped within the depression on the *front* of the Astrolabe; i. 17. They were marked differently, according to the latitude of the place. The one here drawn is suitable for the latitude of Oxford, nearly.

Fig. 6. The "Label," which revolved at the *front* of the Astrolabe; i. 22.

Plate IV. Fig. 7. Another form of the "Pin," showing the Wedge cut into the shape of a Horse (i. 14); from MS. Camb. ii. 3. 3.

Fig. 8. Diagram, showing how to draw the three "principal circles;" see footnote on p. 10.

Fig. 9. Another form of the "Rete," from MS. ii. 3. 3; cf. Fig. 2. This figure shows the "Almury" very clearly; Astrol. i. 23.

Plate V. Fig. 10. Diagram of the nine spheres; from MS. Camb. ii. 3. 3. Astrol. i. 17.

Fig. 11. Rough sketch of the position of the "Rete" in Astrol.

\(^1\) So called because astrologers looked towards the east or ascendent.
ii. 3 (first part). Denticle opposite C, and first point of Aries opposite X; 9 a.m.

Fig. 12. Rough sketch of the position of the "Rete" in Astrol. ii. 3 (second part). Denticle near O; first point of Aries near II; 8h. 8m. p.m.

Fig. 13. Diagram of the Elevation of the Pole; Astrol. ii. 23. The arc AN is 56°; A'N is 48°; A'P. is 4°; and PN is 52°. A, A' are two positions of the Pole-star.

Plate VI. Fig. 14. A "Table" or disc showing the twelve astrological "Houses;" Astrol. ii. 36 and 37.

Fig. 15. Diagram showing how to ascertain the meridional line from two shadows of an upright gnomon; Astrol. ii. 38.

Fig. 16. Diagram illustrating the use of the Umbra Recta; Astrol. ii. 41, 41a, and 41b.

Fig. 17. Diagram of the use of the Umbra Versa, at two observa-
tions; Astrol. ii. 42, 42a, and 42b.

Fig. 18. Use of the Umbra Recta, at two observations; Astrol. ii. 43, and 43a.

Plate VII. Fig. 19. Diagram showing the influence of the signs upon parts of the human body; Astrol. i. 21. From MS. Trin. R. 15. 18.
Fig. 4

Fig. 3

Fig. 5

Fig. 6

W.W. Skeat fecit
Fig. 19.
Little Lewis my son, I perceive that thou wouldst learn the Conclusions of the Astrolabe; wherefore I have given thee an instrument constructed for the latitude of Oxford, and purpose to teach thee some of these conclusions. I say some, for three reasons; (1) because some of them are unknown in this land; (2) because some are uncertain; or else the Astrolabe.
hestes; \* & some of hem ben to harde to thy tendre age of .x. yer to conseyue.  \\
\* this tretis, diuided in 5 partes, wole I shewe the vnder ful lihte rewles & naked wordes in englissh; for latyn ne  
20 kanstow yit but smal, my lite sone.  \* but natheles, suflise to the thise trewe conclusionus in english, as wel as suffisith to thise noble clerkes grekes thise same conclusionus in grek, \* & to arabiens in arabik, \* & to Iewes in Ebrew, & to the latyn folk in latyn / whiche  
24 latyn folk han hem first of othe diuerse langages, & written in hir owne tonge, pat is to sein, in latyn.  \* & god wot, pat in alle this[e] langages, & in many mo, han thise conclusionus ben suflisantly lerned & tawht / & yit by diuerse rewles, ryht as diuerse  
28 pathes leden diuerse folk the rihte way to Roome.  \* Now wol I  
prey mekly euery discreet persone pat redith or herith this litel tretis, to haue my rewde endytyng for excused, & my superfluite of wordes, for two causes.  \* the firste cause is, for that curio[u]s enditing &  
32 hard sentence Is ful heuy atones for swich a child to lerne.  \* & the seconde cause is this, pat sothly me semeth betre to written vn-to a child twies a good sentence, than he for-get it ones.  \* And lowis,  
3if so be pat I shewe the in my lihte English as trewe conclusionus  
36 touching this matere, & nawht only as trewe but as many & as subtil  
\*[*fol.1B] conclusionus as ben shewed in latyn *in ani commune tretis  
of the astrelabie / kon me the more thank ; \* and preye god sane the  
kyng, pat is lord of this langage, & alle that him feyth bereth & obeith,  
40 euerech in his degree, the more and the lasse.  \* but considerel wel, that  
I ne vsurpe nat to haue fownde this werk of my labour or of myn  
engin.  \* I nam but a lewd compilalour of the labour of olde Astro-  
log[i]ens, and han hit translated in myn englisssh only for thi doc-  
44 trine ; \* & with this sword shal I slen envie.

(3) are too hard. This treatise, divided into five parts, I write for thee in English, just as Greeks, Arabians, Jews, and Romans were accustomed to write such things in their own tongue. I pray all to excuse my shortcomings; and thou, Lewis, shouldst thank me if I teach thee as much in English as most common treatises can do in Latin. I have done no more than compile from old writers on the subject, and I have translated it into English solely for thine instruction; and with this sword shall I slay envy.
The first part of this treatise shall rehearse the figures & the members of thin Astrolabie, by-cause pat thow shalt han the gretere knowyng of thin owne instrument.

The second partie shall teche the werken the verrey practik of the forseide conclusiones, as ferforth & as narwe as may be shewyd in so smal an instrument portatif a-boute. For wel wot every astrologien pat smallest fraccions ne wol nat ben shewid in so smal an instrument, as in subtil tables calculed for a kawse.

The .3. partie shall contienen diverse tables of longitudes & latitudes of sterres fixe for the Astrolabie, & tables of declinacions of the [sonne], & tables of longitudes of Citeez & of townes; & as wel for the gournance of a clokke as for to fynde the altitude Meridian & many [a]-nother notable conclusioun, aftar the kalendres of the reuerent clerkes, frere I. Somer & frere N. Lenne.

The .4. partie shall ben a theorik to declare the Moeuynge of the celestial bodies with [pe] causes. The whiche 4 partie in special 60 shall shewen a table of the verrey Moeuynge of the Mone from howre to howre, every day * & in every signe, after thin Almenak / [* Fol. 2.] vp-on wych table ther folwith a canon, suffisant to teche as wel the maner of the wyryng of pat same conclusioun / as to knowe in 64 owre orizonte with wych degree of the zodiac that the Mone arisith in any latitude / & the arising of any planetes aftar his latitude fro the Ecliptik lyne.

The .5. partie shall ben an introdutory aftar the statutz of owre 68 doctours, in which thow maist lerne a gret part of the general rewles of theorik in Astrologie. In which .5. partie shallow fynde tables of equacions of howses aftar the latitude of Oxenford; & tables of dignetes of planetes / & other noteful thingez / yif god wol vouche sauf & his modur the mayde, mo than I be-hete, &c.

The first part gives a description of the instrument itself. The second teaches the practical working of it. The third shall contain tables of latitudes and longitudes of fixed stars, declinations of the sun, and the longitudes of certain towns. The fourth shall shew the motions of the heavenly bodies, and especially of the moon. The fifth shall teach a great part of the general rules of astronomical theory.
Her by-gunneth the description of the Astrolabie.

1. ¶ Thyn Astrelabie hath a ring to putten on the t[h]ownbe of thy ryht hand in takynge the heyyhte of thynges. ¶ & tak kep, for from hennes-forthward, I wol clepe the heyyhte of any thing pat is 4 taken by thy rewle, the altitude, with-owte mo wordes.

2. ¶ This ring rennyth in A Maner turet, fast to the Moder of thyn Astrelabie, in so Rown a space pat hit desturbith nat the instrument to hangen after his rihte centre.

[Vol. 2 &] 3. ¶ The moder of thin Astrelabie is [pe] thikkeste plate, perced with a large hole, pat resseyuyth in hir wombe the thynnve plates compowned for diuere clymatz, & thi Riet shapen in manere 4 of a net or of a webbe of a loppe; & for the more declaracioun, lo here the figure.

4. ¶ This Moder is deuyded on the bakhalf with a lyne, pat cometh dessendinge fro the ryng down to the nethereste bordure. ¶ the whiche lyne, fro pe for-seide Ryng vn-to the centre of the large 4 hole amydde, is cleped the sowth lyne, or elles the lyne Meridional. ¶ & the remenant of this lyne downe to the bordure is cleped the north lyne, or elles the lyne of Midnyht. ¶ & for the more declaracion, lo here the figure.

Here begins the first part; i. e. the description of the Astrolable itself.

1. The Ring. See figs. 1 and 2. The Latin name is Armilla suspensoria; the Arabic name is spelt alhahwacia in MS. Camb. Univ. II. 3. 3, but Stößler says it is Alavathica, Alphantia, or Abalhautica. For the meaning of "rewle," see § 13.

2. The Turet. This answers nearly to what we call an eye or a svicele. The metal plate, or loop, to which it is fastened, or in which it turns, is called in Latin Ansa or Armilla Reflexa, in Arabic Alhabor.

3. The Moder. In Latin, Mater or Rotula. This forms the body of the instrument, the back of which is shewn in fig. 1, the front in fig. 2. The "large hole" is the wide depression sunk in the front of it, into which the various discs are dropped. In the figure, the "Rete" is shewn fitted into it.

4. See fig. 1; Chaucer describes the "bak-half" of the instrument first. The centre of the "large hole amydde" is the centre of the instrument, where a smaller hole is pierced completely through. The South lyne (marked Meridies in figs. 1 and 2) is also called Linea Meridiei; the North lyne is also named Linea Medie Noctis.
5. The *Est lyne* is marked with the word *Oriens*; the *West lyne*, with *Occidentes*.

6. The rule is the same as in heraldry, the *right* or *dexter* side being towards the spectator's left.

7. As the 360 degrees answer to 24 hours of time, 15° answer to an hour, and 5° to twenty minutes, or a *Mile-way*, as it is the average time for walking a mile. So also 1° answers to 4 minutes of time. See the two outermost circles in fig. 1, and the divisions of the "border" in fig. 2.
8. Vnder the compas of thilke degrees ben written the names of the 12 signes, as Aries, taurus, gemini, Cancer, leo, virgo, libra, scorpio, sagittarius, capricornus, aquarius, pisces; & the 4 nombres of the degres of tho signes ben written in Augrim aboue, & with longe deuysonius, fro 5 to 5; dyuyded also pat the signe entreteth vn-to the laste ende. But vnderstand well, pat thise degrees of signes ben euerycich of hem considered of 60 Mynutes, & euery 8 Minute of 60 seconds, & so forth in-to smale fraccions infinit, as seith Alkabnecius. & therfor, know wel, pat a degree of the boudre contienith 4 Minutis, and a degree of a signe contienith 60 Mynutis, & haue this in Mynde. & for the more declaracioun, loo here thi 12 figure.

9. Next this folwyth the cercle of the dayes, pat ben figured in maner of degrees, pat contienen in nowmbre 365; dyuyded also with longe strikes fro 5 to 5, & the nombre[s] in Augrym written vnder pat cercle. And for more declaracioun, loo heere thy figure.

10. Next the cercle of the dayes folweth the Cercle of the names of the Monthes; pat is to seyen, Iannare, Februare, Marcius, Aprile, Mayus, Iuyyn, Iulius, Augustus, Septembre, October, Novembre, Decembre. The names of thise Monthes were cleped in Arabyens, somme for hir propretes, & some by statutz of lordes, some by other lordes of Rome. Ek of thise Monthes, as liked to Iulius cesar & to cesar Augustus, some were compowned of divers 8 nombres of dayes, as Iuyl and August. Thanne hath Iannare xxxi daies, Februare 28, March 31, Aprille 30, May 31, Iunius 30, Iulius 31, Augustus 31, September 30, Octobre 31, Novembre 30, December 31. Thanne, al-thow that Iulius cesar tok 2 daies outh of 12 Feuerer & put hem in his month of Iuylle, & Augustus cesar cleped

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8. See the third and fourth circles (reckoning inwards) in fig. 1.
9. See the fifth and sixth circles in fig. 1.
10. See the seventh, eighth, and ninth circles in fig. 1. The names of the months are all Roman. The month formerly called Quindecilis was first called Julius in B.C. 44; that called Sextilis was named Augustus in B.C. 27. It is a mistake to say that Julius and Augustus made the alterations spoken of in the text; what Julius Caesar really did, was to add 2 days to the months of January, August (Sextilis), and December,
the Monyth of August After his name & ordeyned it of 31 daies, yit truste we, pat the sonne dwelleth ther-for neuere the more ne lesse in on signe than in another.

11. ¶ Than folwen the names of the halidayes in the kalender & next hem the lettres of the A. b. c. on whych they fallen. ¶ & for the more declaracion, loo here thi figure.

[Fol.5] 12. ¶ Next the foreside cercle of the A. b. c., vnnder the cros-lyne, is Marked the skal, in Maner of 2 Squyres or elles in Manere of ladders, pat serrith by his 12 poynetes & his deuisiones of ful many a subtil conclusion. Of this foreside skal, fro the croos-lyne vn-to the verre angle, is clesped umbra [versa], & the nether partie is clesped the umbra [recta, or elles umbra extessa.] ¶ & for the more declaracion, loo here the figure.

13. ¶ Thanne hastow a brad Rewle, pat hath on either ende a Square plate perced with a certein holes, some more & some lesse, to resseyuen the stremes of the sonne by day, and ek by mediacion of

and 1 day to April, June, September, and November. February never had more than 28 days till he introduced bisextile years.

11. See the two inmost circles in fig. 1. The names given are adopt-
ioned from a comparison of the figures in the Cambridge University and Trinity MSS., neither of which are quite correct. The letters of the “A. b. c.” are what we now call the Sunday letters. The festivals marked are those of St Paul (Jan. 25), The Purification (Feb. 2), The Annun-
ciation (Mar. 25), The Invention of the Holy Cross (May 3), St John the Baptist (June 24), St James (July 25), St Lawrence (Aug. 10), The Na-
tivity of the Blessed Virgin (Sept. 8), St Luke (Oct. 18), St Martin of Tours (Nov. 11), and St Thomas (Dec. 21).

12. The “skale” is in Latin Quadrans, or Scala Alimetra. It is cer-
tain that Chaucer has here made a slip, which cannot be fairly laid to
the charge of the scribes, as the MSS. agree in transposing versa and recta. The side-parts of the scale are called Umbra versa, the lower part Umbra recta or extensa. This will appear more clearly at the end of Part II.

13. See fig. 3, Plate III. Each plate turns on a hinge, just like the “sights” of a gun. One is drawn flat down, the other partly elevated. Each plate (tabella vel pinnula) has two holes, the smaller one being the lower. This Reule is named in Arabic Alhâdâda or Alhâdathâ; in Latin Verticulum, from its turning easily on the centre; in Greek Dióptra, as carrying the sights. The straight edge, passing through the centre, is
called the Linea Feludie. It is pierced by a hole in the centre, of the same size as that in the Mother.
4thyn Eye, to knowe the altitude of sterres by nyhtc. ¶ & for the more declaracion, lo here thi figure.

14. ¶ Thanne is ther a large Pyn in maner of an Extre, pat goth thorow the hole / that halt the tables of the clymates & the Rict in the wombe of the Moder / thorw wich pyn ther goth a litel wegge 4 which pat is cleped the hors, pat streyneth[?] alle thise partyes to hepe; this forside grete Pyn in maner of an extre is ymagyn[?]d to be the Pol Artyk in thin Astralabie. ¶ & for the more declaracion, lo here the figure.

[Par. 5 v.] 15. ¶ The wombe-side of thyne Astralabie is also deuyded wit[?] a longe croys in 4 quarters from est to West, fro sowth to north, fro riht side to left side, as is the bak-side. & for the more 4 declaracion, lo here thi figure.

16. ¶ The bordour of which wombe-side is deuyded fro the poynyt of the est lyne vn-to the poynyt of the south lyne vnder the ring, in 90 degrees; & by pat same proporcioune is euery quarter deuyded as ys the bak-side, pat amonteth 360 degrees. ¶ & vnderstond wel, pat degres of this Bordour ben answering & consentriek to the degres of the Equynoxial, pat ys deuyded in the same nombre as euery othere cercle is in the heie heuene. ¶ This same bordour is 8 deuyded also with 23 lettres capitals & a smal croys + aboue the south lyne, pat shewith the 24 howres equals of the clokke / &, as I haue said, 5 of thise degres maken a Milewey, & 3 Milewey maken an howre. ¶ & euery degree of this bordour contineth 4 Mynutes.

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14. See fig. 4, Plate III. The Pin is also called Axis or Clarus, in Arabic Alchetot; it occupies the position of the Arctic or North Pole, passing through the centre of the plates that are required to turn round it. The Wedge is called cuneus, or equus restringens, in Arabic Alpheraz or the horse, because it was sometimes cut into the shape of a horse, as shewn in fig. 7, Plate IV, which is copied from MS. Univ. Camb. II. 3. 3.

15. See fig. 2, Plate II. In the figure, the cross-lines are partly hidden by the Rete, which is separate and removable, and revolves within the border.

16. The Border was also called Margilabrum, Margolabrum, or Limbus. It is marked (as explained) with hour-letters and degrees. Each degree contains 4 minutes of time, and each of these minutes contains 60 seconds of time.
ever} Miniut 60 secoundes; now hau{y} told the twye. ¶ & for the 12 more declaraciuon, lo here the figure.

[ Fol. 6] 17. ¶ The plate vnder thi Riet is descried with 3 [principal] cercles; of wiche the leste is cleped the cercle of cancer / by-cause pat the heued of cancer turnyth euermor consenstrik vp-on the same cercle. ¶ in this heued of cancer is the grettist declinaciuon 4 northward of the sone. ¶ & ther-for is he cleped the Solsticiouw of somer; ¶ wiche declinaciouw, aftar ptholome, is 23 degrees & 50 Minutis, as wel in cancer as in Capricorne. this signe of cancre is cleped the tropik of Somer, of tropos, pat is to seyn Agaynward, for 8 thanne by-gynneth the sone to passe fro vs-ward; ¶ & for the more declaraciuon, lo here the figure.

[ Fol. 6b] ¶ The Middel cercle in wydnnesse, of thiese 3, is cleped the cercle equinoxial / vp-on whiche turneth euerno the hedes of 12 aries & libra. ¶ & vnderstanded wel, pat euerno this cercle equinoxial turnyth Instly fro verrey est to verrey west; ¶ as I hau{e} shewed the in the sper solide. ¶ this same cercle is cleped also the weyere, equator, of the day / for whan the sone is in the heuedes of 16 aries & libra, than ben the daies & the nyht[es] ilike of lengthe in al the world. ¶ & ther-for ben thiese two signes called the equinoxiiis. ¶ & alle pat Moeuyth with-in the heuedes of thiese aries & libra, his Moeuyng is cleped north-ward / & alle that Moeuyth with-20 coute thiese heuedes, his Moeuyng is clepid sowth-ward as fro the equinoxial. ¶ tak kep of thiese latitudes north and sowth, & for-get it nat. ¶ by this cercle equinoxial ben considered the 24 howres of the clokke; for euerno the arisyng of 15 degrees of the equinoxial 24 maketh an howre equal of the clokke. ¶ this equinoxial is cleped

17. We may place under the Rete any plates we please. If only the Mother be under it, without any plate, we may suppose the Mother marked as in fig. 2. The plate or disc (tympanum) which was usually dropped in under the Rete is that shewn in fig. 5, Plate III, and which Chaucer now describes. Any number of these, marked differently for different latitudes, could be provided for the Astrolabe. The greatest declination of the sun measures the obliquity of the ecliptic, the true value of which is slightly variable, but was about 23° 31' in Chaucer's time, and about 23° 40' in the time of Ptolemy, who certainly assigns to it too large a value. The value of it must be known before the three
the gyrdelle of the firste Moeuyng, or elles of the angulus primi motus vel primi mobilis. ¶ And nota, pat firste Moeuyng is cleped "Moeuyng" of the firste Moeuable of the 8 spere, whiche Moeuyng is fro est to west, ¶ & eft agayn in-to est / also it is cleped "girdel" of the firste Moeuyng, for it departeth the furste Moeuable, pat is to seyn, the spere, in 2 ilike parties, euene distantz fro the poles of this 32 world.

¶ The wydeste of thise 3 principal cercles is cleped the cercle of capricorne, by-cause pat the heued of capricorne turnyth euerno consegentry vp-on the same cercle / in the heued of this for-seide capri-36 corne is the grettest declinacioun sowthward of the sonne, & ther-for is it cleped the solsticiou? of wyntur: this signe of capricorne is also cleped the tropik of wyntur, for thanne bygynnynth the sonne to come agayn to ws-ward. ¶ & for the more declaracioni, lo here thi 40 figure.

[Vol.7] 18. ¶ Vp-on this forseide plate ben compassed certain cercles pat hilten Almicanteras / of which som of hem semen perfit cercles, & somme semen imperfit. the centre pat standith a-Middles the 4 narwest cercle is cleped the senyth; ¶ & the netherest cercle, or the furste cercle, is cleped the orisonte, ¶ pat is to seyn, the cercle

circles can be drawn. The method of finding their relative magnitudes is very simple. Let ABCD (fig. 8, Pl. IV) be the tropic of Capricorn, BO the South line, OC the West line. Make the angle EOB equal to the obliquity (say 23½°), and join EA, meeting BO in F. Then OF is the radius of the Equatorial circle, and if GH be drawn parallel to EF, OH is the radius of the Tropic of Cancer. In the phrase angulus primi motus, angulus must be taken to mean angular motion. The "first moving" (primus motus) has its name of "moving" (motus) from its denoting the motion of the primum mobile or "first moveable." This primum mobile (by some placed in the ninth sphere) is here identified with the eighth sphere, or sphera stellarum fixarum. See the fig. in MS. Camb. Univ. II. 3. 3 (copied in fig. 10, Plate V). Some authors make 12 heavens, viz. those of the 7 planets, the firmamentum (stellarum fixarum) the nonum caulum, decimum caulum, primum mobile, and caulum cupryarum.

18. See fig. 5, Pl. III. This is made upon the alt-azimuth system, and the plates are marked according to the latitude. The circles, called in Latin circuli progressionum, in Arabic Almicanlarath, are circles of al-titude, the largest imperfect one representing the horizon (horizon obli-gua), and the central dot being the zenith, or pole of the horizon. In
PART I. § 18.] DESCRIPTION OF THE ASTROLABE.

pat deuydeth the two Emyspecies / pat is, the parte of the heune a-bone the Erthe & the parte be-nethe. ¶ these almy-kanteras ben compounded by 2 & 2, al be it so pat on diners Astrelabies some 8 almy-kanteras ben deuydeth by on / & some by two, & somme by .3. after the quantite of the Astrelabie. ¶ this forside cenyth is ymagened to ben the verrey point owre the crowne of thyne heued / & also this cenyth is the verrey pool of the orisonte in euery region. 12 ¶ & for the more declaracioun, lo here thi figure.

19. ¶ From this cenyth, as it semeth, ther come a maner krokede strikes like to the clawes of a lopp, or elles like to the werk of a womanes calle, in keruyng ouer thwart the Almykanteras. ¶ & these same strikes or divisiouns ben cleped Azymuthz. ¶ & 4 they deuyden the Orisonte of thin astrelabie in 24 divisiouns. ¶ & these Azimutz seruen to knowe the costes of the firmament ¶ & to othre conclusionis, as for to knowe the cenyth of the sonne & of euery sterre. ¶ & for [the] more declaracioun, lo here thi figure. 8

[Fol. 7 b.] 20. ¶ Next thiis azymutz, under the cerel of Cancer, ben ther 12 deuysions embelif, moche like to the shap of the azimutes, pat shewen the spaces of the howres of planetes / & for mor declaracioun, lo here thi figure. 4

21. ¶ The rict of thin Astrelabie with thy zodiak, shapen in maner of a net or of a lop-webbe after the olde descripcioun, which thou maist tornen vp and down as thi-self likyth, contienith certein nombre of sterres fixes, with hir longitudes & latitudes determynat;

my figure, they are “compounded by ” 5 and 5, but Chaucer’s shewed every second degree, i. e. it possessed 45 such circles. For the method of drawing them, see Stöffler, leaf 5, back.

19. Some Astrolabes shew 36 of these azimuthal circles, as in my figure. See Stöffler, leaf 13, where will be found also the rules for drawing them.

20. If accurately drawn, these embelif or oblique lines should divide the portions of the three circles below the horizon obliquus into twelve equal parts. Thus each arc is determined by having to pass through three known points. They are called arcus horarum inegualium, as they shew the “howres inequales.”

21. In fig. 2, Pl. II, the Hede is shewn as it appears when dropped into the depression in the front of the instrument. The shape of it varied much, and another drawing of one (copied from Camb. Univ. MS.
If so be that the makere have nat erred, the names of the sterres ben written in the Margyn of the riet ther as they sitte; Of whiche sterres the smale poynt is cleped the Centre. And vnderstond also 8 pat alle sterres sittinge wyth-in the zodiak of thin astrolabie ben cleped sterres of the north. For thei Arisen by northe the est lyne. & alle the remenant fixed, owt of the zodiak, ben cleped sterres of the sowth; but y sey nat pat they arisen alle by southe the est 12 lyne; witnesse on aldeberan & Algomeysa. generally vnderstond this rewle, that thilke sterres pat ben cleped sterres of the north arisen rather than the degree of hire longitude, & alle [the] sterres of the sowth arisen aftur the degree of hire longitude; this is to seyn, 16 sterres fixed in thin Astralabie, the mesure of this longitude of sterres is taken in the lyne Ecliptik of heuene, vnder which lyne, whan that the sonne & the Mone ben lyne-riht or elles in the superfice of this lyne than is the Eclips of the sonne or of the 20 [† Fol. 8] Mone; as y shal declare, & ek the cause why, but *sothly the Ecliptik lyne of thy zodiak is the owtereste bordure of thy zodiak, ther the degrees ben marked.

Thy zodiak of thin Astralabie is shapen as a compas with that 24 contienith a large brede, as aftur the quantite of thin astralabie in ensample pat the zodiak in heuene is ymagened to ben a superfice contienyng a latitude of 12 degrees, wher[as] al the remenant of cercles in the heuene ben ymagined verrey lynes with-owte eny 28 latitude. Amidles this celestial zodiak ys ymagined a lyne, which pat is cleped the Ecliptik lyne vndur which lyne is enervo the wey of the sonne. Thus ben ther 6 degrees of the zodiak on pat on side of the lyne, and 6 degrees on that other. This zodiak is

Ii. 3, 3, fol. 66 b.) is given in fig. 9, Pl. IV. The positions of the stars are marked by the extreme points of the metal tongues. Fig. 2 is taken from the figures in the Cambridge MSS., but the positions of the stars have been corrected by the list of latitudes and longitudes given by Stöffler, whom I have followed, not because he is correct, but because he probably represents their positions as they were supposed to be in Chaucer's time very nearly indeed. There was not room to inscribe the names of all the stars on the Rete, and to have written them on the plate below would have conveyed a false impression. A list of the stars marked in fig. 2 is given at the end of the volume. The Ecliptic is the circle
21. divided in 12 principal divisions, pat departen the 12 signes. ¶ &, 32 for the streights of thin astrelabie, than is euery small deuisione in a signe departid by two degrees & two; I Mene degrees containing 60 Minutes. ¶ & this forseide heuenissh zodiak is cleped the cercle of the signes / or the cercle of the bestes / for zodia in langage of grek 36 sownyth ‘bestes’ in latyne tonge. ¶ & in the zodiak ben the 12 signes pat han names of bestes; or elles for whan the sonne entrith in any of the signes, he taketh the propretie of swich bestes; or elles for pat the sterres that ben there fixed ben disposed in signes of 40 bestes, ¶ or shape like bestes; ¶ or elles when the planetes ben vnnder thilke signes, pel causen vs by hir influence operacionvs & effectes lik to the operacionvs of bestes. ¶ & vnderstondye Also, pat whan an hot planetes comyth in-to an hot signe, than encresseth his hete; & 44 zif a planet be cold, thanne amenuseth his colndenes, by-cause of the hote signe. ¶ & by this conclusioune maistow take enample in alle the signes, be they moist or drie, or moeble or fix; rekenyng the qualite of the planetze as I furst seide. ¶ & euerich of thiste 12 Signes 48 hath respecte to a certein parcell of the body of a man and hath it in gouernance; as aries hath thin heued, & taurus thy necke & thy throte / gemyni thy armholes & thin armes, ¶ & so forth; as shal be shewed more pleyne in the 5 partie of this tretis. this zodiak, 52 which pat is part of the 8 spere, ouer-kerueth the equinoctial; and he ouer-kerueth hym again in euene partie / & pat on half declinith sowthward, & pat other northward, as pleynli declareth the tretis of the spere. ¶ & for mor declaracioun, lo here thi figure. 56

[Fol. 8 b.] 22. ¶ Thanne hastow a label, pat is schapen lik a rewle,

which crosses the Equinoctial at its East and West points. In Chaucer's description of the zodiac, carefully note the distinction between the Zodiac of the Astrolabe and the Zodiac of Heaven. The former is only six degrees broad, and shews only the northern half of the heavenly zodiac, the breadth of which is imagined to be 12 degrees. Chaucer's zodiac only shewed every other degree in the divisions round its border. This border is divided by help of a table of right ascensions of the various degrees of the ecliptic, which is by no means easily done. See Additional Note on this section; which explains Fig. 19, Plate VII. I may add that the Rete is also called Aranea or Volcellum; in Arabic, Alhawkabuth.

22. The Label. See fig. 6, Pl. III. The label is more usually used
same pat it is streit & hath no plates on either ende with holes; ¶ but with the smale point of the forseide label, shaltow kalcule 4 thyne equacioues in the bordure of thin Astrolabie as bi thin almury. ¶ & for the more declaraciouyn, lo here thy figure.

23. ¶ Thin almury is cleped the denticle of capricorne or elles the kalkuler. ¶ this same Almury sit fix in the hed of capricorne, & it seruyth of many a necessarie conclusion in equacioues 4 of thynges, as shal be shewed; ¶ & for the more declaraciouyn, lo here thi figure.

Her endith the description of the Astrelabie.

Her bygynneth the conclusions of the Astrelabie.

1. To fynde the degree in which the sonne is day by day, after hir cours a-bowte.

[Hic incipiunt conclusiones astrolabii; & prima est ad invenien- dum gradus solis in quibus singulis diebus secundum cursum sol est existens.]

¶ Rekene and knowe which is the day of thi monthe ¶ & ley thi reule vp that same day, & thanne wol the verray point of thy rewle sitten in the bordure, vp-on the degree of thy sonne. ¶ En-

sample as thus; the yer ofoure lord 1391, the 12 day of March at Midday, I wolde knowe the degree of the sonne. ¶ I sowhte in the bakhalf of myn astrelabie, and fond the sercle of the daies, ¶ the which I knowe by the names of the Monthes written vndur the same 8 Cercle. ¶ Tho leide I my rewle ouer this forseide day, & fond the

on the front of the instrument, where the Rete and other plates revolve. The rule is used on the back, for taking altitudes by help of the scale.

23. The Almury; called also denticulus, ostensor, or "calculer." In fig. 2, it may be seen that the edge of the Rete is cut away near the head of Capricorn, leaving only a small pointed projecting tongue, which is the almury or denticle, or (as we should now say) pointer. As the Rete revolves, it points to the different degrees of the border. See fig. 9.

Part II, § 1. [The Latin headings to the propositions are taken from the MS. in St John’s College, Cambridge.] See fig. 1. Any straight
point of my rewle in the bordure vp-on the firste degree of aries, A litol with-in the degree / & thus knowe I this conclusion. ¶ Another day, I wolde knowe the degree of my sonne, & this was at Midday in the 13. day of decembre; I foun the day of the monthe in maner 12 as I seide / tho leide I my rewle vp-on this forseide 13. day, & found the point of my rewle in the bordure vp-on the first degree of capricorne / a lito with-in the degree ¶ & than haddy of this conclusion the ful experience / & for the more declaracioun, lo her thi 16 figure.

[Fol. 9 b.] 2. To knowe the altitude of the sonne, or of othre celestial bodies.

[De altitudine solis & aliorum corporum supra celestium.]

¶ Put the ring of thin Astrelabie vp-on the riht thowmbe & turne the liff side a-gayn the light of the sonne/ And rem[c]ue the rewle vp and down til put the streymes of the sonne shyne through bothe holes of the rewle. ¶ loke thanne how Many degrees the rewle is a-reaised fro the litol crois vp-on thin est line, & tak ther the altitude of the sonne. ¶ & in this same wyse maistow knowe by nyhte the altitude of the Mone, or of brihte sterres / this chapitre is so general euere in on, put ther nedith no more declaracion; but 8 for-get it nat. ¶ ¶ & for the more declaracion, lo here the figure.

[Fol. 10] 3. To knowe euery tyme of the day by liht of the sonne, & euery tyme of the nyht by the sterres fixe, & eke to knowe by nyht or by day the degree of any signe pat assendith on the est Orisonte, which pat is cleped communly the assendent or elles oruscupum.

edge laid across from the centre will shew this at once. Chaucer, reckoning by the old style, differs from us by about 8 days. The first degree of Aries, which in his time answered to the 12th of March, now vibrates between the 20th and 21st of that month. This difference of eight days must be carefully borne in mind in calculating Chaucer's dates.

2. Here "thy left side" means the left side of thine own body, and therefore the right or Eastern edge of the Astrolabe. In taking the altitude of the sun, the rays are allowed to shine through the holes; but the stars are observed by looking through them. See figs. 1 and 3.
[Ad cognoscendum quidlibet tempus dici per solis indicacionem, & quodlibet tempus noctis per quasdam stellas in celo fixas; ac eciam ad inveniendum & cognoscendum signum super orizontem qui communiter vocatur ascendens.]

Tak the altitude of the sonne when the list, as I haue said; & set the degree of the sonne, in kas pat it be by-forn the Middel of the day, among thin al-my-kanteras on the est side of thin 4 astralabie; & zif it be after the Middel of the day, set the degree of thy sonne vp-on the west side / tak this manere of settyng for a general rewle, ones for evere. & when thou hast set the degree of thy sonne vp as many Almykanteras of heyhte as was the altitude of the sonne takyn by thi rewle, ley ouer thi label, vp-on the degree of the sonne; & thanne wol the point of thi label siti in the bordure, vp-on the verrey tid of the day. Ensamle as thus / the yer of owre lord 1391, the 12 day of March, I wold knowe the 12 tyd of the day. I tok the altitude of my sonne, & fond pat it was 25 degrees and 30 of Minutes of heyhte in the bordure on the bak-side. the turnede I Myn astralabie, & by cause that it was by-forn Midday, I turnede Mi riet and sette the degree of the sonne, that is to seyn the .1. degree of Aries / on the riht side of myn Astralabie, vp-on pat 25 degrees & 30 of Minutes of heyhte among myn almy-kanteras / tho leide I my label vp-on the degree of my [*fol. 108.] sonne, & fond the poynte * of my label in the bordure, vp-on a capital lettre pat is celyed an X ; the rekened I alle the capitalles lettres fro the lyne of Midnyght vn-to this forside lettre X, & fond pat it was 9 of the clokke of the day. tho loked I do[w]n vp-on the Est Orisonte, and fond there the 20 degree of gemynis assending;

3. Drop the disc (fig. 5) within the border of the mother, and the Rete over it. Take the altitude by § 2, and let it be 25½°. As the altitude was taken by the back of the Astrolabe, turn it over, and then let the Rete revolve westward till the 1st point of Aries is just within the altitude-circle marked 25, allowing for the ½ degree by guess. This will bring the denticle near the letter C, and the first point of Aries near X, which means 9 A.M. At the same time, the 20th degree of Gemini will be on the horizon obliquus. See fig. 11, Pl. V. This result can be approximately verified by a common globe thus; elevate the pole nearly 52°; turn the small brass hour-circle so that the figure XII lies on the equinoctial
which \textit{pat} I tok for Myn assendent. & in this wyse hadde I the 24 experience for euere-mo in which maner I sholde knowe the tyde of the day / & eek myn assendent. ¶ Tho wold I wyte the same nyght fol-

wyng the howr of the nyght / & wroteth in this wyse / among an hepe of sterris fixe, it liked me for to take the altitude of the feire 28 white sterre \textit{pat} is eleped Alhabor / and fond hir sitting on the west side of the line of Midday, 18 degrees of heymes taken by my rewle on the bak-side. ¶ tho sette I the centre of this Alhabor vp-on 18 degrees among myn Almy-kanteras, vp-on the west side; by cause 32 \textit{pat} she was fonden on the west side. tho leide I my label ouer the degree of the sonne \textit{pat} was descended vnder the weste Orisonte, ¶ & rikened alle the lettres capitals fro the lyne of Midday vn-to \textit{pe} point of my label in the bordure; ¶ & fond \textit{pat} it was passed 8 of 36 the clokke the space of 2 degrees / tho loket I donu vp-on myn est orisonte, ¶ & fond ther 23 degrees of libra assending, whom I tok for myn assendent; & thus lerned I to knowe ones for euere in which Manere I shuld come to the howre of the nyht / and to myn assendent; 40 as verreyli as may be taken by so smal [an] instrument / but natheles in general wold I warne the for euere / ne mak the neuere bold to hane take a Lust Ascendent by thin Astrilabie, or elles to haue sette Iustly a clokke, when any celestial body by which \textit{pat} thow wenest 14 gouter e thilke thynges ben ney the sowth lyne / for trust wel, when \textit{pat} \textit{pe} sonne is ney the Meridional lyne, the degree of the sonne remyth so longe consentrik vp-on the almy-kanteras, \textit{pat} sowthly thow shalt erre fro the Lust assendent / the same conclusion sey I by 48 \textit{pe} centre of any sterre fix by nyht; and more-ouer, by experience, 1 wot wel that in owre Orisonte, from .xi. of the clokke vn-to on of the

\begin{center}
\textbf{ASTROLABE.}
\end{center}
clokke, in takyng of a Just assendent in A portatif Astrelabie, hit is to hard to knowe. I mene, from .xi. of the clokke by-forn the howre of noon til on of the clok next folwyng. ¶ & for the more declaracion, lo her thi figure.

[Fol. 11]

4. Special declaracion of the assendent.

[Specialis declaracio de ascendentem.]

¶ The assendent sothly, as wel in alle natiiuitez as in questionus & elecciouns of tymes, is a thing which pat thise Astrologiens gretly obseruen / wher-fore me semeth convenienit, sin pat I spoke of the assendent, to make of it special declaracion / The assendent sothly, to take it at the [largeste], is thilke degree pat assendith at any of thise forseide tymes v[pe]n the est Orisonte; & there-for, yif pat any planet assende at pat same tyme in thilke for-seide [degre of] his longitude, Men seyn pat thilke planete is in horoscopo. ¶ but sothly, the hows of the assendent, pat is to seyn, the firste hous or the est Angle, is a thing more brod & large. ¶ For after the statutz of Astrologiens, what celestial body pat is 5 degrees a-bone thilke degre pat assendith, or with-in pat nowmbre, pat is to seyn, nere the degree pat assendith / yet rikne thei thilke planete in the Assendent. ¶ And what planete pat is vnder thilke degree pat assendith the space of [25] degrees, ¶ yet seyn thei that thilke planete is lyk to him pat is [in] the hows of the assendent / but sothly, yif he passe the bondes of thise forseide spaces, a-bone or by-nethe, they seyn pat the planete is failling fro the assendent; / yet seyn thise Astrologiens, that the assendent ¶ & eke the lord of the assendent, may be shapen for to be fortunat or infortunat / as thus / a fortunat assendent clepen they whan pat no wykki planete, as satyrne or Mars, or elles the [*Fol. II b.] tail of the dragoun, is in [pe] hows °of the assendent, ne pat no wikked planete hau non aspектe of enemye vpon the assendent; but they wol caste pat thei hau a fortunat planete in hir assendent & sit in his felicite, ¶ & than sey they pat it is wel. ¶ forther-

4. The assendent at any given moment is that degree of the zodiac which is then seen upon the Eastern horizon. Chancer says that astrologers reckon in also 5 degrees of the zodiac above, and 25 below;
over, they seyn put the infortunyng of an assendent is the contrario of thise forseide thinges. ¶ the lord of the assendent sey they put he is fortunat, whan he is in god place fro the assendent as in angle; 28 or in a succedent, where-as he is in his dignite & conforted with frendly aspectys of planetes & [wel] rescued, & ek that he may sen the assendent, and put he be nat retrograd ne combust, ne ioigned with no shrewe in the same signe / ne that he be nat in his des[c]en32 cioun, ne ioigned with no planetes in his discencioun, ne have vp-on him non aspecte infortunat; & [than] sey they put he is wel. ¶ nathelies, theise ben observauncez of judicial matiere & rytes of paiens, in which my spirit ne hath no feith, ne no knowyng of hir horoscopum; 36 for they seyn put every signe is departid in 3 euene parties by [10] degrees, & thilke precious they cyle a face. ¶ & al-thogh put a planetes haue a latitude fro the Ecliptik, yt sey [some folk] so put the planetes arise in put same signe wyth any degree of the forseide 40 face in which [h]is longitude is rekned, put yt is the planetes in horoscope/ be it in natuine or in eleccioun, &c. ¶ & for the more declaracioun, lo here the figure.

5. To knowe the verrey equacionem of the degree of the sonne, yif so be put it falle by-twixe thin Almykanteras.

[Ad cognoscendum veram equacionem de gradu solis, si contigiiferit fore in duas Almicanteras.]

[Vol. 12] ¶ For as moche as the almykanteras in thin astrelabie ben compownet by two & two, ¶ where-as some Almykanteras in sondri Astrelabies ben compownet by on and on, or elles by 2 & 2, it is necessarie to thy lernyng to teche the first to knowe & worke with thin owne Instrument. ¶ wher-for, whan put the degree of thy sonne falleth by-twixe two Almykanteras / or elles yif thin Almykanteras ben graven with over gret a point of a compas / for bothe thise thinges may causen error as wel in knowyng of the tid of the day as of the verrey Assendent / thow Most werken in this wise.

the object being to extend the planet’s influence over a whole “house,” which is a space of the same length as a sign, viz. 30°. See § 36.

5. This merely amounts to taking the mean between two results.
6. To knowe the spring of the dawyng & the ende of the euenyng, the which ben called the two crepusculus:

[Ad cognoscendum ortum solis & eius occasum, que uocatur vulgariter crepusculum.]

By Set the nadir of thy sonne vp-on 18 degrees of heyhte / Among thyn Almykanteras on the west side, & ley thy label on pe dege of thy sonne, & thanne shal the poynt of thi label schewe the sprynge of day. By Also set the nadir of thy sonne vp-on 18 degrees of heyhte among thin Almykanteras on the [est] side, & ley ouer thy label vp-on the degree of the sonne / & with the point of thy label fynd in the bordure the ende of the euenyng, pat is, verrey 8 nyght. the nadir of the sonne is thilke degree pat is opposit to the degree of the sonne, in the 7 signe, as thus / every degree of aries bi ordre is nadir to every degree of libra by ordre / & taurus to Scorpio / gemini to Sagittare / Cancer to Capricorne / leo to aquarie / 12 virgo to pisces / & 3lf any degree in thi zodiak be dirk, [h]is nadire shal declare him. By & for the more declaracion, lo heere thi figure.

6. This depends upon the refraction of light by the atmosphere, owing to which light from the sun reaches us whilst he is still 18° below the horizon. The nadir of the sun being 18° high on the W. side, the sun itself is 18° below the Eastern horizon, giving the time of dawn; and if the nadir be 18° high on the E. side, we get the time of the end of the evening twilight. Thus, at the vernal equinox, the sun is 18° high soon after 8 A.M. (roughly speaking), and hence the evening twilight ends soon after 8 P.M., 12 hours later, sunset being at 6 P.M.
7. To knowe the arch of the day, that some folk kallen the day artificial, from the sonne arisyng til hit go to rest[e].

[Ad cognoscendum archum diei, quem vulgus vocat diem artificialem in hoc ab ortu solis vsque ad occasum.]

¶ Set' the degree of thy sonne vp-on thin Est orisonte, & ley thy label on the degree of the sonne, & at the poynt of thy label in the bordure set a prikke. ¶ Turn thane thi riet aboute til the degree [Fol. 13] of the sonne sit vp-on the west Orisonte, & ley thi label vp-on the same degree of the sonne, & at the point of thi label set a-another prikke. ¶ rekne thane the quantite of tyme in the bordure by-twixe bothe prikkes, & tak ther thin ark of the day.

¶ the remenant of the bordure vnder the Orisonte is the ark of the 8 nyht. ¶ thus maistow rekne bothe arches / or every porcion, of wheither pat the liketh. ¶ & by this Manere of wyrkyng / Maistow se how longe pat any sterre fix dwellith a-bone the erthe, fro tyme pat he risith til he go to reste. ¶ but the day natural, pat is to 12 seyn 24 houris, is the revoluucioun of the equinoxial with as moche partie of the zodiak as the sonne of his propre Moeuninge passeth in the mene while. ¶ & for the more declaracioun, lo her thi figure.

8. To turn the howres in-equales in howres equales.

[Ad conuertendum horas inequales in horas equales.]

¶ Knowe the nombre of the degrees in the howris in-equales, & departe hem by 15, & tak ther thin howris equales. ¶ & for the more declaracioun, lo her thi figure.

7. Ex. The sun being in the 1st point of Cancer on the longest day, its rising will be shewn by the point in fig. 5 where the horizon obliquus and Tropicus Cancri intersect; this corresponds to a point between P and Q in fig. 2, or to about a quarter to 4 A.M. So too the sunset is at about a quarter past 8, and the length of the day 16½ hours; hence also, the length of the night is about 7½ hours, neglecting twilight.

8. On the same day, the number of degrees in the whole day is about 247½, that being the number through which the Rete is turned in the example to § 7. Divide by 15, and we have 16½ equal hours.
9. To knowe the quantite of the day vulgare, that is to seyen, from spring of the day vn-to verrey nyht.

[Ad cognoscendum quantitatem diei vulgaris, viz. ab ortu diei vsque ad noctem.]

† Know the quantite of thi crepusculis, as I haue tawht in the chapitre by-forn, & adde hem to the arch of thi day artificial / & tak ther the space of alle the hole day vulgar, vn-to verrey nyht. / The 4 same manere maistow worke to knowe the quantite of the vulgar nyht. / & for the more declaracioun, lo here the figure.

10. To knowe the quantite of howres in-equeales by day.

[Ad cognoscendum horas ineqauls in die.]

† Vnderstond wel, pat thise howris in-equalis ben cleped howres of planetes, & vnderstond wel pat som tymc ben thei lengere by day [than] by nyht, & som tymc the contrarie. †† but vnderstond wel 4 pat enero generaly pe howr in-equal of the [day with pe howr in-equal of the] nyght contenen [30] degrees of the bordure, whiche bordure is ener-mo answering to the degrees of the equinoxial; wherefor departhe the arch of the day artificial in 12, & tak ther the quantite of the howr in-equal by day. †‡ & 3if thow abate the quantite of the howr in-equal by daye owt of 30 / than shal the remenant pat leneth performe the howr in-equal by nyght. †‡ & for the more declaracion, lo here the figure.

[ Fol. 11] 11. To knowe the quantite of howres equales.

[Ad cognoscendum quantitatem horarum inequalium.]

† The quantite of howres equales, pat is to seyn, the howres of the clokke / ben departid by 15 degrees al-reedly in the bordure

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9. The "day vulgar" is the length of the "artificial day," with the length of the twilight, both at morn and at eve, added to it.

10. If, as in § 7, the day be 16½ hours long, the length of each "hour inequal" is 1 h. 22½ m.; and the length of each "hour inequal" of the night is the 12th part of 7½ hours, or 37½ m.; and 1 h. 22½ m., added to 37½ m., will of course make up 2 hours, or 30°.
of thin astralabie, as wel by nyht as by day, generally for euere. ¶ What nedith more declaracioun? ¶ Wher-for, whan the list to know how manye howres of the clokke ben passed, or any part of any of thise howris pat ben passed, ¶ or elles how many howres or partie of howres ben to come, fro swich a tyme to swych a tyme, by day or by nyhte, ¶ knowe the degree of thy sonne, & ley thy label on it / turne thi Riet abowte ioynytly with thy label, & with the point of it rekne in the bordure fro the sonne arise vn-to the same place ther thow desirest, by day as by nyhte / this conclusion wol I declare in the laste chapitre of the [4] partie of this tretis so openly, pat [per] 12 shall lakke no worde pat nedith to the declaraciou. ¶ ¶ & for the more declaracioun, lo here the figure.

12. Special declaraciou of the howres of planetes.

Specialis declaracio de horis planetarum.]

¶ Undrystond wel, pat euere-mo fro the arising of [the] sonne til it go to reste / the nader of the sonne shal shewe the howr of the planete / & fro that tyme forward / al the nyht til the sonne arise / than shal the verrey degree of the sonne shewe the howr of the 4 planete. Ensample as thus. ¶ the xiiij. day of March fil vp-on a saterday per auncynt / & at the arising of the sonne, I fond the secounde degree of aries sitting vp-on myn est Orisonte, al be it pat it was but lite ; *than fond I the [2] degree of libra, nadir of [*Fol. 116.] 8 my sonne, dessending on my west Orisonte, vp-on which west Orisonte euery day generally, at the sonne ariste, entrith the howr of any planete, after which planete the day berith his name; ¶ ¶ endith in

11. This merely repeats that 15° of the border answer to an hour of the clock.

12. This "hour of the planet" is a mere astrological supposition, involving no point of astronomy. Each hour is an "hour inequal," or the 12th part of the artificial day or night. The assumptions are so made that the first hour of every day may resemble the name of the day; the first hour of Sunday is the hour of the Sun, and so on. These hours may be easily found by the following method. Let 1 represent both Sunday and the Sun; 2, Monday and the Moon; 3, Tuesday and Mars; 4, Wednesday and Mercury; 5, Thursday and Jupiter; 6, Friday and Venus; 7,
12 the nexte strik of the plate vnnder the forseide west Orisonte / & euere as the sunne clymbith vnperne & vnperne, so goth his nadir downere & downere, techyng by swych strikes the howres of planetes by ordre as thei sitten in the heuene. the firste howr inequal of euery Sat-
16terday is to Saturne; ¶ & the seconde to Jupiter; ¶ the 3 to Mars; the 4 to the sonne; ¶ the 5 to venus; ¶ the 6 to Mercurius; ¶ the 7 to the mone; ¶ & thanne agayn the 8 is to satirne; ¶ the 9 to Jupiter; ¶ the 10 to Mars; ¶ the 11 to the sonne; ¶ the 12 20 to venus; ¶ And now is my sonne gon to reste as for that setter-
day. ¶ Thanne shewyth the verrey degree of the sonne the howr of Mercurie entrying vnnder my west orisonte at eue; ¶ & next him succedith the Mone; ¶ & so forth by ordre, planetes after planetes, 24 in howr after howr, al the nyght longe til the sonne arise. ¶ now risith the sonne pat Sonday be the morwe; ¶ & the nadir of the sonne vp-on the west Orizonte shewith me the entring of the howre of the forseide sonne. ¶ & in this maner succedith planetes vnnder planetes, 28 fro satirne vn-to the mone, & fro the mone vp a-gayn to satirne, howre after howre generally. ¶ & thus know[e] I this conclusion. ¶ & for the more declaracion, lo here the figure.

Saturday and Saturn. Next, write down the following succession of figures, which will shew the hours at once.

1642753|16427531642753164275316.

Ex. To find the planet of the 10th hour of Tuesday. Tuesday is the third day of the week; begin with 3, to the left of the upright line, and reckon 10 onwards; the 10th figure (counting 3 as the first) is 6, i.e. Venus. So also, the planet of the 24th hour of Friday is the Moon, and Saturday begins with Saturn. It may be observed that this table can be carried in the memory, by simply observing that the numbers are written, beginning with 1, in the reverse order of the spheres, i.e. Sun, Venus, Mercury, Moon; and then (beginning again at the outmost sphere) Saturn, Jupiter, Mars. This is why Chaucer takes a Saturday; that he may be-
gin with the remotest planet, Saturn, and follow the reverse order of the spheres. See fig. 10, Pl. V. Here, too, we have the obvious reason for the succession of the names of the days of the week, viz. that the planets being reckoned in this order, we find the Moon in the 25th place or hour from the Sun, and so on.
13. To knowe the altitude of the sonne in Middles of the day, that is cleped the altitude Meridian.

[Ad cognoscendum altitudinem solis in medio diei, que vocatur altitude meridiana.]

Set the degree of the sonne vp-on the lyne Meridional, & rikene how many degrees of Almykanteras ben by-twixe thyn est Orisonte & the degree of the sonne. & tak ther thyn altitude Meridian / this [is] to seyne, the heiest of the sonne as for that day. 

So maistow knowe in the same lyne, the heiest cours pat any sterre fix clymbith by nyht; this is to seyn, pat w[h]an any sterre fix is passed the lyne Meridional, than by-gynnyth it to descende, & so doth the sonne. & for the more declaracion, lo here thi figure.

14. To knowe the degree of the sonne by thy riet, for a maner curiosite, &c.

[Ad cognoscendum gradum solis curiose.]

Sek bysily with thi rewle the heiest of the sonne in Midde of the day; turne thanne thyn Astrelabie, & with a prikke of ynk marke the nombre of pat same Altitude in the lyne Meridional. turne thanne thy Ryet a-bowte til thow fynde a degree of thi zodiak according with the prikke; this is to seyn, sitynge on the prikke; & in soth, thow shalt fynde but 2 degrees in al the zodiak of that condicioun; & yit thilke 2 degrees ben in diverse signes; than maistow lyhtly by the sesouz of the yere knowe the signe in whiche pat is the sonne. [for the more declaracion, lo here thi figure.]

13. The reason of this is obvious from what has gone before. The sun's meridional altitude is at once seen by placing the sun's degree on the South line.

14. This is the exact converse of the preceding. It furnishes a method of testing the accuracy of the drawing of the almikanteras.
15. To know which day is lik to wych day as of lengthe, &c.

[Ad cognoscendum quales dies in longitudine sunt similis.]

\[\text{Loke whiche degrees ben illik fer fro the heuedes of Cancer \\ & Capricorn; \\ & lok, whan the sonne is in any of thilke degrees, \\ than ben the dayes ilike of lengthe. \]\\[\text{This is to seyn, pat as long \\ 4 is pat day in pat Monthe, as was swych a day in swich a month. \\ & ther variet[h] but lit. \}\\[\text{Also yif pow take 2 daies naturaly in the \\ yer ilike fer fro eyther pointe of [the] equinoxial in the opposit \\ parties, \]\\[\text{than as long is the day artificial of pat on day / as is the \\ 8 nyht of pat othere, \\ & the contrarie. \}\\[\text{\& for [the] more declaracioun, \\ lo here thi figure.}\\

16. This chapitre is a Maner declaracioun to conclusiouns \pat folwen.

[Illud capitulum est quedam declaracio ad certas conclusiones sequentes.]\\[\text{Vnderstoned wel \pat thy zodiak is departid in 2 halfe cercles, \\ as fro the heued of capricorne vn-to the heued of Cancer / \\ & agaynward fro the heued of cancer vn-to the heued of Capricorne. \\ 4 \text{\& the heued of Capricorne is the lowest point, wher as the sonne \\ goth in wynter; \}\\[\text{\& the heued of Cancer is the heiest point, in \\ whiche the sonne goth in somer. \}\\[\text{\& ther-for vnderstoned wel, pat \\ any two degrees pat ben ilike fer fro any of thilke two heuedes / truste \\ 8 wel pat thilke two degrees ben of il[i]ke declinacioun, be it sowth- \\ ward or northward; \\ & the daies of hem ben ilike of lengthe, \& the}\\

15. This is best done by help of the \textit{back} of the instrument, fig. 1. \text{Thus May 13 (old style), which lies 30° to the W. of the S. line, is nearly \\ of the same length as July 13, which lies 30° to the E. Secondly, the \\ day of April 2 (old style), 20° above the W. line, is nearly of the same \\ length as the night of Oct. 2, 20° below the E. line, in the opposite point \\ of the circle. This is but an approximation; as the divisions on the \\ instrument are rather minute. \\

16. This merely expresses the same thing, with the addition, that on \\ days of the same length, the sun has the same meridional altitude, and \\ the same declination from the equator.
nyhtes also; & the shadwes ilike, & the Altitudes ilike at Midday for enure. ¶ & for more declaracioun, lo here thi figure.

[Fol. 16] 17. To knowe the verrey degree of any maner sterre straunge or vnstraunge after his longitude, thow he be indeterminat in thin astralabie; sothly to the trowthe, thus he shal be knowe.

[Ad cognoscendum verum gradum alicuius stelle alicae secundum eius latitudinem (sic), quamvis sit indeterminata in astro-labio; veraciter isto modo.]

¶ Tak the altitude of this sterre whan he is on the Est side of the lyne Meridional, as ney as thow maist gesse; ¶ & tak an assendent a-non riht by som maner sterre fixe which pat pow knowest ¶ & for-get nat the altitude of the firste sterre, ne thyn assendent; ¶ & whan pat this is don / espie diligently when this same firste sterre passeth any-thing the sowth westward, and hath him a-non riht in the same nowmbr of altitude on the west side of this lyne Meridional ¶ as he was kawht on the est side; & tak a newe assendent a-non riht by som Maner sterre fixe which pat thow knowest; & for-get nat this secounde assendent. ¶ and whan pat this is don, rikne thane how manye degrees ben by-twixe the firste assendent & the seconde assendent / & rikne wel the Middel degree by-twylene bothe Assend-

17. Here passeth any-thing the south westward means, passes somewhat to the westward of the South line. The problem is, to find the degree of the zodiac which is on the meridian with the star. To do this, find the altitude of the star before it souths, and by help of problem 3, find out the ascending degree of the zodiac; secondly, find the ascending degree at an equal time after it souths, when the star has the same altitude as before, and the mean between these will be the degree that ascends when the star is on the meridian. Set this degree upon the Eastern part of the horizon obliquus, and then the degree which is upon the meridional line souths together with the star. Such is the solution given, but it is but a very rough approximation, and by no means always near to the truth. An example will shew why. Let Arcturus have the same altitude at 10 P.M. as at 2 A.M. In the first case the 4th of Sagittarius is ascending, in the second (with sufficient accuracy for our purpose) the 2nd of Aquarius; and the mean between these is the 3rd of Capricorn. Set this on the Eastern horizon upon a globe, and it will be
seen that it is 20 min. past midnight, that 10° of Scorpio is on the meridian, and that Arcturus has past the meridian by 5°. At true midnight, the ascendent is the 29° of Sagittarius. The reason of the error is that right ascension and longitude are here not sufficiently distinguished. By observing the degrees of the equinoctial, instead of the ecliptic, upon the Eastern horizon, we have at the first observation 272°, at the second 332°, and the mean of these is 302°; from this subtract 90°, and the result, 212°, gives the right ascension of Arcturus very nearly, corresponding to which is the beginning of the 5° of Scorpio, which souths along with it. This latter method is correct, because it assumes the motion to take place round the axis of the equator. The error of Chaucer’s method is that it identifies the motion of the equator with that of the ecliptic. The amount of the error varies considerably, and may be rather large. But it can easily be diminished, (and no doubt was so in practice), by taking the observations as near the south line as possible. Curiously enough, the rest of the section explains the difference between the two methods of reckoning. The modern method is to call the co-ordinates right ascension and declination, if reckoned from the equator, and longitude and latitude, if from the ecliptic. Motion in longitude is not the same thing as motion in right ascension.
18. To knowe the degrees of the longitudes of fixe sterres after pat they ben determinat in thin astralabie, yif so be pat they ben trewly set.

[Ad cognoscendum gradus longitudinis de stellis fixis que determinantur in astralabio, sicut in suis locis recte locentur.]

[F] Set the centre of the sterre vp-on the lyne Meridional, & tak kep of thi zodiak, [F] & loke what degree of any signe pat sit on the same lyne Meridional at pat same tyme, & tak the degree in which the sterre standith; [F] & with that same degree com[ec]th pat same 4 sterre vn-to that same lyne fro the Orisonte. [F] & for more declaracioun, lo here thi figure.

19. To knowe with which degree of the zodiak any sterre fixe in thin Astrelabie arisith vp-on the est Orisonte, Al-they [h] is dwellyng be in a-ther signe.

[Ad cognoscendum cum quibus gradibus zodiaci que stella fyxa in astrolabio ascendit super orizontem orientalem, quamuis eius orizon (sic) sit in alio signo.]

[F] Set the Sentre of the sterre vp-on the est Orisonte, [F] & loke what degre of any signe pat sit vp-on the same Orisonte at pat same tyme. [F] And understond wel, pat with pat same degre arisith pat same sterre; and thys *marueyllous arising with a strange de- [† Fol. 17r] 4. gree in another signe is by-cause pat the latitude of the sterre fix is either north or sowth fro the equinoxial. [F] but sothly, the latitudes

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18. The "centre" of the star is the technical name for the extremity of the metal tongue representing it. The "degree in which the star standeth" is considered to be that degree of the zodiack which souths along with it. Thus Sirius or Alhabor has its true longitude nearly equal to that of 12° of Cancer, but, as it souths with the 9th degree, it would be said to stand in that degree. This may serve for an example; but it must be remembered that its longitude was different in the time of Chaucer.

19. Also it rises with the 19th degree of Leo, as it is at some distance from the zodiack in latitude. The same "marveullous arising in a strange sign" is hardly because of the latitude being north or south from the equinoctial, but rather because it is north or south of the ecliptic. For example, Regulus (α Leonis) is on the ecliptic, and of courses rises
of planetes ben comu[n]ly rekned fro the Ecliptik, bi-cauce pat non 8 of hem declinet[h] but fewe degrees owt fro the brede of the zodiak.  

\[\text{\&} \text{ tak god kep of this chapitre of arising of the celestial bodies;} \] for truste wel, \[\text{pat} \text{ neyther mone ne sterre as in owre Embelif orisonete arisith with \text{pat} \text{ same degree of his longitude, same in O cas;}
\]

12\[\text{\&} \text{ that is, whan they have no latitude fro the Ecliptik lyne. but}
\]

natheles som tyme is eueriche of thes planetes vnder the same lyne.  

\[\text{\&} \text{ for more declaracioun, lo here thi figure.}
\]

20. To knowe the declinacioun of any degree in the zodiak fro the equinoxial cercle, \&c.

[Ad cognoscendum declinacionem alicuius gradus \([\text{in}]\) zodiaco \([\text{a}]\) circulo equinoctiali.]

\[\text{\&} \text{ Set the degree of any signe vp-on the lyne Meridional, \& rikne \([\text{h}]\)is altitude in Almykanteras fro the Est Orizonte vp to the same degree set in the forseide lyne, \& set ther a prikke. \[\text{\&} \text{ turne vp}\]

\[\text{4 thanne thy Riet, and set the heued of aries or libra in the same Meridional lyne, \& set ther a-nother prikke. \[\text{\&} \text{ when \text{pat} this is \([\text{\&} \text{ fol.}17 \text{~b}]\) don, considere the Altitudes of hem bothe; for sothly the}
\]

\[\text{difference of thilke altitudes is the declinacion of thilke degree fro}
\]

8 the equinoxial. \[\text{\&} \text{ yif so be \text{pat} thilke degree be northward fro the equinoxial, than is his declinacion north; \[\text{\&} \text{ yif it be southerward, than is it sowth. \[\text{\&} \text{ for the more declaracioun, lo here thi figure.}
\]

with that very degree in which it is. Hence the reading equinoctial leaves the case in doubt, and we find a more correct statement just below, where we have "whan they have no latitude fro the Ecliptik lyne." At all places, however, upon the earth's equator, the stars will rise with the degrees of the zodiac in which they stand.

20. Here the disc (fig. 5) is supposed to be placed beneath the Rete (fig. 2). The proposition merely tells us that the difference between the meridian altitudes of the given degree of the zodiac and of the 1st point of Aries is the declination of that degree, which follows from the very definition of the term. There is hardly any necessity for setting the second prick, as it is sufficiently marked by being the point where the equinoctial circle crosses the south line. If the given degree lie outside this circle, the declination is south; if inside, it is north.
21. To knowe for what latitude in any regioun the Almikanteras of any table ben compowned.

[Ad cognoscendum pro qua latitudine in aliqua regione almicantre tabule mee sunt composite.]

If Rikne how manie degrees of Almikanteras in the Meridional lyne be fro the cercle equinoxial vn-to the senyth; Or elles fro the pool artik vn-to the north Orisonte; & for so gret a latitude or for so smal a latitude is the table compnowned. & for more declaracion, lo here thi figure.

[Vol. 15] 22. To knowe in special the latitude of owre countray, I mene after the latitude of Oxenford, & the heyhte of owre pol.

[Ad cognoscendum specialiter latitudinem nostri centri (sic), scilicet latitudinem Oxone, et altitudinem poli nostri.]

Vnderstond wel, pat as fer is the heued of aries or libra in the equinoxial from owre orisonte as is the senyth fro the pole artik; & as heuy [is] the pol Artik fro the Orisonte as the Equinoxial is fer fro the senyth. I prove it thus by the latitude of Oxenford / vnderstond wel, pat the heyhte of owre pool Artik fro owre north Orisonte is 51 degrees & 50 Minutes; than is the senyth from owre pool Artik 38 degrees & 10 Minutes; than is the equinoxial from owre senyth 51 degrees & 50 Minutes; than is owre south Orisonte from owre equinoxial 38 degrees & 10 Minutes. Vnderstond wel

21. In fig. 5, the almicanteras, if accurately drawn, ought to shew as many degrees between the south point of the equinoctial circle and the zenith as are equal to the latitude of the place for which they are described. The number of degrees from the pole to the northern point of the horizon obliquus is of course the same. The latitude of the place for which the disc is constructed is thus determined by inspection.

22. In the first place where "orisonte" occurs, it means the South point of the horizon; in the second place, the North point. By referring to fig. 13, Plate V, it is clear that the arc $\gamma S$, representing the distance between the equinoctial and the S. point is equal to the arc $ZP$, which measures the distance from the pole to the zenith; since $PO \gamma$ and $ZOS$ are both right angles. Hence also Chaucer's second statement, that the arcs $PN$ and $\gamma Z$ are equal. In his numerical example, $PN$ is 51° 50' ;
this Reknyng. ¶ Also for-get nat pat the cenyth is 90 degrees of heyhte fro the Orisonte, & owre equinoxial is 90 degrees from owre 12 pool Artik. ¶ Also this shorte rewele is soth, pat the latitude of any place in a region is the distance fro the senyth vnto the Equinoxial. ¶ & for more declaracioun, lo here þei figure.

23. To proue euidently the latitude of any place in a Region, by the pruee of the heyhte of the pol Artik in þat same place.

[Ad probandum euidenter latitudinem alicuius loci in aliqua regione, per probationem altitudinis de polo artico in eodem loco.]

In some wynters nyht, when the firmament is clere & thikke-stere red / waite a tyme til þat any sterre fix sit lyne-riht perpendicular [*vol.15 s.] over *the pol Artik, & elepe þat sterre A. ¶ & wayte a-other 4 sterre þat sit lyne-riht vnder A, & vnder the pol / & elepe þat sterre F. And vnderstoned wel, þat F is nat consideret but only [to] declare þat A sit euene ouere the pool. ¶ tak thanne a-non riht the altitude of A from the Orisonte / & forget it nat. ¶ Lat A & F go far-8 wel til agayns the dawenyng a gret while / & come thanne agayn & Abid til þat A is euene vnder the pol & vnder F; ¶ for solthy, than woole F sit ouer the pool / & A wol sit vnder the pool. ¶ tak than eft-sones the altitude of A from the Orisonte ¶ & note as wel [h]is 12 seconde altitude as his furste Altitude / & when þat this is don, ¶ rikne how manye degrees þat the firste altitude of A excedith his seconde altitude, ¶ & tak half thilke porcioun þat is excedit, & adde it to his seconde altitude ; ¶ & tak ther the elevacioun of thi pool, 16 & eke the latitude of thy region; ¶ for these two ben of a nombre;

¶ this is to seyn, as many degrees as thy pool is eleuat / so michel

and therefore ZP is the complement, or 38° 10'. So also υ Z is 51° 50'; and ν S is 38° 10'. Briefly, υ Z measures the latitude.

23. Here the altitude of a star (A) is to be taken twice; firstly, when it is on the meridian in the most southern point of its course, and secondly, when on the meridian in the most northern point, which would be the case twelve hours later. The mean of these altitudes is the altitude of the pole, or the latitude of the place. In the example given, the star A is only 4° from the pole, which shews that it is the Pole-star, then farther
is the latitude of the Region. If Ensample as thus: par aventure the altitude of A in the euening is 56 degrees of heyte if than wol his seconde altitude or the dawnyng be 48 / pat is [8] lasse than 56, 20 pat was his furste altitude at euene. If take thanne the half of 8 / & adde it to 48, pat was [h]is seconde altitude, and [than] hastow 52. If now hastow the heyhte of thy pol and the latitude of the region. If but understand wel pat to prove this conclusiou & many a-nother 24 fair conclusiou, thow most haue a plomet hanging on a lyne heyer than thin heued on a perche & thilke lyne mot hange euene perpen-
diculer by-twixe the pool & thin eye / & thanne shal-tow sen yif A sitte euene over the pool & over F at euene / & also yif F sitte euene 28 over the pool & over A or day. If & for more declaracion, lo here thi figure.

[Fol. 19] 24. Another conclusioun to proue the heyhte of the pool Artik fro the orisonte.

[Alia conclusio ad probandum altitudinem de polo artico ab orizonte.]

Tak any sterre fixe pat neuere dissendith under the Orisonte in thilke region, & considere his heiest altitude & his lowest Altitude fro the Orisonte; If & make a nombre of bothe thise altitudes; tak thanne & abate half pat nombre, & tak per the elevaciou of the pol 4 Artik in pat same Region / & for more declaracion, lo here thi figure.

from the Pole than it is now. The star F is, according to Chaucer, any convenient star having a right ascension differing from that of the Pole-star by 180°; though one having the same right ascension would serve as well. If then, at the first observation, the altitude of A be 56, and at the second be 48, the altitude of the pole must be 52. See fig. 13, Plate V.

24. This comes to much the same thing. The lowest or northern altitude of Dubhe (a Ursa Majoris) may be supposed to be observed to be 25°, and his highest or southern altitude to be 75°. Add these; the sum is 104; "abate" or subtract half of that number, and the result is 52°; the latitude.
25. Another conclusion to prove the latitude of the Regioun, &c.

[Alia conclusio ad probandum latitudinem regionis.]

If Vnderstood wel that the latitude of any place in A Regioun is verrely the space by-twixe the senythe of hem that dwellen there & [the] equinoxial cerkle, north or sowthe, takynge the mesure in the 4 Meridional lyne, as shewith in the Almykanteras of thin Astrelacie. If & thylke space is as moche as the pool artik is hey in the same place fro the Orisonte. If And than is the depression of the pol antartik, that is to seyn, than is the pol antartik by-nethe the 8 Orisonte the same quantite of space, neither nor ne lasse. thanne, yif thow desire to knowe this latitude of the Regioun, tak the altitude of the sonne in the Middel of the day, when the sonne is in the heuedes of aries or of libra / for thanne Moeuyth the sonne in the 12 lyne equinoxial; If & abate the nombre of that same sonnes Altitude [* vol. 19. b.] owt of 90, & thanne is the remenaunt of the nombre that leuyth the latitude of the Regioun, as thus: I suppose that the sonne is thilke day at noon 38 degrees And 10 minutes of heyhte. Abate 16 thanne thees degrees And minutes owt of 90; so leueth there 51 degrees and 50 minutes, the latitude. If I sey nat this but for example; for wel I wot the latitude of Oxenforde is certein minutes lasse, as y myght proue. If Now yif so be that the semith to long a 20 tarienge, to abide til that sonne be in the heuedes of aries or of libra, thanne whaine when the sonne is in any other degree of the zodiak, & considere the degree of his declinacion fro the equinoxial lyne; If & yif it so be that the sonnes declinacion be northward fro the 24 equinoxial, abate thanne fro the sonnes altitude at noon the nombre

25. Here, as in § 22, Chaucer says that the latitude can be measured by the arc ZV or PN; he adds that the depression of the Antarctic pole, viz. the arc SP' (where P' is the S. pole), is another measure of the latitude. He explains that an obvious way of finding the latitude is by finding the altitude of the sun at noon at the time of an equinox. If this altitude be 38° 10', then the latitude is the complement, or 51° 50'. But this observation can only be made on two days in the year. If then this seems to be too long a tarrying, observe his midday altitude, and allow for his declination. Thus, if the sun’s altitude be 58° 10' at noon when he is in the first degree of Leo, subtract his declination, viz. 20°, and the result is 38° 10', the complement of the latitude. If, how-
of his declinacion, \& thanne hastow the heyhte of the heuedes of aries \& libra; as thus / My sonne is, par Auenture, in pe firste dege of leoun, 58 degrees and 10 Minutes of heyhte at noon / \& his declinacion is almost 20 degrees northward fro the equinoctial; 28 abate thanne thilke 20 degrees of declinacion owt of the altitude at noon, than leuceth the 38 degrees and odde Minutes; lo ther the heued of aries or libra, \& thin equinoxial in that Region. \ Also yif so be pat the sonnes declinacion be sowthward fro the Equinoctial, \ Adde thanne thilke declinacion to the altitude of the sonne at noon / and tak ther the heuedes of aries \& libra \& thin Equinoxial. \ Abate thanne the heyhte of the Equinoxial owt of 90 degrees, \& thanne leuyth there ,pe distans of the pole, 51 degrees \& 50 36 Minutes, of that region fro the Equinoxial. \ Or elles, yif the lest, take the heiest altitude fro the equinoxial of any sterre fix that sowth knowest, \& tak his nethere elongacion lengthing fro the same equinoxial lyne, \& wirke in the maner forseid. \ & for more decla-40-
cion, lo here thi figure.

[Declaracio de ascensione signorum.]

The excellence of the spere solide, amonges other noble con-
clusions, shewyth Manifeste the diverse assencion of signs in
diverse places, as wel in the rihte cercle as in the Embeliff cercle.
\thise Auctours writen pat thilke signe is cleped of riht Ascensioun, 4
with which more part of the cercle Equinoctial \& lasse part of the
zodiak ascendith / \& thilke signe ascendith Embeliff, with which
lasse part of the Equinoxial \& more part of the zodiak ascendith.

ever, the sun's declination be south, the amount of it must be added in-
stead of subtracted. Or else we may find \& F', the highest altitude of a
star F' above the equinocital, and also \& F, its nether elongation extend-
ing from the same, and take the mean of the two.

26. The "Sphere Solid" answers nearly to what we now call a globe.
By help of a globe it is easy to find the ascensions of signs for any latitude,
whereas by the astrolabe we can only tell them for those latitudes for
which the plates bearing the almicanteras are constructed. The signs
which Chancer calls "of right (i. e. direct) ascension" are those signs of
[Further over they seyn, that in thilke cuntrey where as the senith of hem that dwellen there is in the equinoctial lyne and her orisonte passyng by the poles of this world, thilke folke han this right cercle and the right orisonte; ¶ & enure mo the Arch of the day & the arch 12 of the nyht is ther ylike long, & the somme twYES every yer passinge thorow the cenyth of her heued; ¶ & 2 someres & 2 wynteres in a yer han this forseide pooseple. ¶ And the Almykaneras in her Astrolabies ben streythe as a lyne / so as shewayth in this figure. ¶ The vtilite to 16 knowe the Assenciou?is in the rihte cercle is this / truste wel pat by mediacionu of thilke assenciou?is thise Astrologiens by hir tables &

the zodiac which rise more directly, i.e. at a greater angle to the horizon than the rest. In latitude 52°, Libra rises so directly that the whole sign takes more than 2 1/5 hours before it is wholly above the horizon, during which time nearly 43° of the equinoctial circle have arisen; or, in Chaucer's words, "the more part" (i.e. a larger portion) of the equinoctial ascends with it. On the other hand, the sign of Aries ascends so obliquely that the whole of it appears above the horizon in less than an hour, so that a "less part" (a smaller portion) of the equinoctial ascends with it. The following is a rough table of Direct and Oblique Signs, shewing approximately how long each sign takes to ascend, and how many degrees of the equinoctial ascend with it, in lat. 52°.

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Capricornus</td>
<td>26°</td>
<td>1 h. 44 m.</td>
<td>Cancer</td>
<td>39°</td>
<td>2 h. 36 m.</td>
</tr>
<tr>
<td>Aquarius</td>
<td>16°</td>
<td>1 h. 4 m.</td>
<td>Leo</td>
<td>42°</td>
<td>2 h. 48 m.</td>
</tr>
<tr>
<td>Pisces</td>
<td>14°</td>
<td>0 h. 56 m.</td>
<td>Virgo</td>
<td>43°</td>
<td>2 h. 52 m.</td>
</tr>
<tr>
<td>Aries</td>
<td>14°</td>
<td>0 h. 56 m.</td>
<td>Libra</td>
<td>43°</td>
<td>2 h. 52 m.</td>
</tr>
<tr>
<td>Taurus</td>
<td>16°</td>
<td>1 h. 4 m.</td>
<td>Scorpio</td>
<td>42°</td>
<td>2 h. 48 m.</td>
</tr>
<tr>
<td>Gemini</td>
<td>26°</td>
<td>1 h. 44 m.</td>
<td>Sagittarius</td>
<td>39°</td>
<td>2 h. 36 m.</td>
</tr>
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These numbers are sufficiently accurate for the present purpose.

In l. 8, there is a gap in the sense in nearly all the MSS., but the Bodley MS. 619 fortunately supplies what is wanting, to the effect that, at places situated on the equator, the poles are in the horizon. At such places, the days and nights are always equal. Chaucer's next statement is true for all places within the tropics, the peculiarity of them being that they have the sun vertical twice in a year. The statement about the "two summers and winters" is best explained by the following. "In the tropical climates, ... seasons are caused more by the effect of the winds (which are very regular, and depend mainly on the sun's position) than by changes in the direct action of the sun's light and heat. The seasons are not a summer and winter, so much as recurrences of wet and dry periods, two in each year."

—English Cyclopaedia; Seasons, Change of. Lastly, Chaucer reverts to places on the equator, where the stars all seem to move in vertical
PART II. § 27. ASCENSION OF SIGNS.

hir instrumentz known verrryly the Assencioun of enery degree & Mynut in al the zodiak, as shal be showyd. ¶ And nota, pat this forseid rihte orisonte, pat is clepid orison rectum / diuideth the 20 equinoxial in-to riht Angles; & the embelif orisonte, wher as the pol is enhawsed vp-on the orisonte, ouerkeruyth the equinoxial in Embelif Angles, as shewith in the figure. ¶ & for the more declaracioun, lo her the figure.

27. This is the conclusion to knowe the Assenciouns of signes in the riht cercle, pat is, circulus directus, &c.

[Ad cognoscendum ascensiones signorum in recto circulo, qui vocatur circulus directus.]

[Par. 29 v.] Set the heued of what signe the liste to knowe his Assending in the riht cercle / vp-on [the] lyne Meridional, ¶ & waite wher thin Almury towhch[h] the bordure, & set ther a prikke / turne thanne thy riet westward til pat the ende of the forseide signe sitte vp-on the Meridional lyne / & eff-sones waite wher thin almury towhchth the bordure, & set ther Another prikke. Rikne thanne the nombre of degrees in the bordure by-twixe bothe prikkes, ¶ & tak the Assencioun of the signe in the riht cercle. And thus maistow 8 wyrke with enery porcioun of thy zodiak, &c. ¶ & for the more declaracioun, lo her thi figure.

23. To knowe the assencions of signes in the Embelif cercle in enery regioun, I Mene, in circulo oblique.

[Ad cognoscendum ascensiones signorum in recto (sic !) circulo in omni regione, hoc est, in circulo oblique.] ¶ Set the heued of the signe which as the list to knowe his As-

circles, and the almicaneras are therefore straight lines. The line marked Horizon Rectus is shewn in fig. 5, where the Horizon Obliquus is also shewn, cutting the equinoctial circle obliquely.

27. The real object in this section is to find how many degrees of the equinoctial circle pass the meridian together with a given zodiacal sign. Without even turning the rete, it is clear that the sign Aries, for instance, extends through 28° of the equinoctial; for a line drawn from the centre, in fig. 2, through the end of Aries will (if the figure be correct) pass through the end of the 28th degree below the word Oricus.

28. To do this accurately requires a very carefully marked Astro-
Ascension vp-on the est Orisonte, \(\Pi\) & waite wher thy Almury towe-che-th the bordure, & [set] ther a prikke. \(\Pi\) turne thanne thy riet 4 vpward til pat the ende of the same signe sitte vp-on the Est Ori-sonte / and waite eft-sones wher as thin almury towetheth the bordure, & set ther a-nother prikke. \(\Pi\) Rikne thame the nowmibre of degrees in the bordure by-twixe bothe prikkes, & tak ther the 8 Assencioun of the signe in the Emblem cirele. \(\Pi\) & understand wel, pat alle signes in thy zodiak fro the heued of aries vnto the ende of virgo ben cleped signes of the north fro the Equinoxia[il], \(\Pi\) & the[se] signes arisen by-twixe the verrey est & the verrey north in 12 owre Orisonte generaly for euere; & alle signes fro the heued of libra vn-to pe ende of pices ben cleped signes of the sowth fro [Fol. 21] the Equinoxia[il]; \(\Pi\) & thise signes arisen euere-mo by-twixe the verrey est & the verrey sowth in owre orisonte. \(\Pi\) Also euery signe 16 by-twixe the heued of capricorne vn-to the ende of geminis ariseth on owre Orisonte in lasse than 2 howres equales; \(\Pi\) & thise same signes, fro the heued of capricorne vn-to the ende of geminis, ben cleped tortuo signes or kroked signes / for they arisen embelif on 20 owre Orisonte; \(\Pi\) & thise crokede signes ben obedient to the signes pat ben of riht Assencioun. \(\Pi\) The signes of riht assencioun ben fro the heued of cancer to pe [ende] of sagittare; \(\Pi\) & thise signes arisen more vpricht, & they ben called eke souereyn signes; \(\Pi\) & 24 eueryich of hem ariseth in mor space than in to howres. \(\Pi\) Of which

labe, on as large a scale as is convenient. It is done by observing where the ends of the given sign, estimated along the outer rim of the zodiacal circle in fig. 2, cross the horizon obliquus as the rete is turned about. Thus, the beginning of Aries lies on the horizon obliquus, and as the rete revolves to the right, the end of it, on the outer rim, will at last lie exactly on the same curved line. When this is the case, the rete ought to have moved through an angle of about 14°, as explained in § 26. By far the best way is to tabulate the results once for all, as I have there done. It is readily seen, from fig. 2, that the signs from Aries to Virgo are northern, and from Libra to Pices are southern signs. The signs from Capricorn to Gemini are the oblique signs, or as Chaucer calls them, "tortuous," and ascend in less than 2 hours; whilst the direct signs, from Cancer to Sagittarius, take more than 2 hours to ascend; as shewn in the table in § 26. The eastern signs in fig. 2 are said to obey to the corresponding western ones.
29. To knowe Lustly the 4 quarters of the world, as est, west, north, & sowth.

[Ad cognoscendum eidenter quattuor partes mundi, scilicet, orientem, austrum, aquilonem, & occidentem.]

Take the altitude of thy sonne whan the list / & note wel the quarter of the world in which the sonne is for the tyme by the Azymutz. Turne thanne thin Astrolabie / & set the degree of the sonne in the Almykanteras of his altitude on thilke side pat the sonne stant / as is the manere in takyng of howres; & ley thy label on the degree of the sonne, And rikene how many degrees of the bordure ben by-twixe the lynes Meridional & the point of thy label; & note wel pat nowmbre. *Turne thanne a-gayn 8 thyn Astralabie, & set the point of thy gret Rewle ther thow takest thyne Altitudes / vp-on as many degrees in his bordure fro his Meridional as was the point of thy label fro the lynes Meridional on the wombe-side. Tak thanne thyn Astralabie with bothe handes sadly & slely, & lat the sonne shyne thorow bothe holes of thy rewle; & slely in thilke shynyng lat thyn Astrelabie kowch adown euene vp-on a smothe grond, & thanne wol the verrey lynes Merydional of thyn

29. Here both sides of the Astrolabe are used, the "rewle" being made to revolve at the back; and the "label" in front, as usual. First, by the back of the instrument and the "rewle," take the sun's altitude. Turn the Astrolabe round, and set the sun's degree at the right altitude among the almicanteras, and then observe, by help of the label, how far the sun is from the meridian. Again turn the instrument round, and set the "rewle" as far from the meridian as the label was. Then, holding the instrument as near the ground and as horizontal as possible, let the sun shine through the holes of the "rewle," and immediately after lay the Astrolabe down, without altering the azimuthal direction of the meridional line. It is clear that this line will then point southwards, and the other points of the compass will also be known.
16 Astrolabie lye euene sowth, & the est lyne wole lie est, & the west lyne west, & north lyne north, so pat thow werke softly & avisely in the cowchyng; & thus hastow the 4 quarters of the firmament. ¶ & for the more declaracioun, lo here the figure.

30. To knowe the Altitude of planetes fro the wey of the sonne, whether so they be north or sowth fro the forseide wey.

[Ad cognoscedum altitudinem planetarum a cursu solis, utrum sint in parte australi vel boreali a cursu supra dicto.]

¶ Lok whan pat a planete is in the lyne Meridional, yif pat hir altitude be of the same heyht pat is the degree of the sonne for pat day, & than is the planete in the verrey wey of the sonne, ¶ & hath 4 no latitude. ¶ & yif the altitude of the planete be heyere than the degree of the sonne, þan is the planete north fro the wey of the sonne swych a quantite of latitude as shewith by thyn Almykanteras. & yif the altitude of the planete be lasse than the degree 8 [* Fol. 22] of the sonne / thanne is the planete sowth fro the wey of the sonne swich a quantite of latitude as shewith by thin almykanteras; ¶ This is to seyn, fro the wey wher as the sonne wente thilke day / but nat from the wey of the sonne in euery place of the zodiak.

12 ¶ & for the more declaracioun, lo here the figure.

31. To knowe the senyth of the arysing of the sonne, this is to seyn, the partie of the Orisonte in which pat the sonne arisith.

[Ad cognoscedum signum de ortu solis, scilicet, illam partem orientis in qua oritur sol.]

¶ Thow most first considere pat the sonne ariseth nat al-wey verrey est, but some tyme by north the est, and som tyme by sowthe

30. This turns upon the definition of the phrase "the wey of the sonne." It does not mean the zodiacal circle, but the sun's apparent path on a given day of the year. The sun's altitude changes but little in one day, and is supposed here to remain the same throughout the time that he is, on that day, visible. Thus, if the sun's altitude be 61°, the way of the sun is a small circle, viz. the tropic of Cancer. If the planet be then on the zodiac, in the 1st degree of Capricorn, it is 47° S. from the way of the sun, and so on.
PART II. § 32.] AZIMUTHAL DIVISIONS.

the est / Sothly the sonne ariseth nevermo verrey est in owere Orisonte, but he be in the henced of ariec or libra. now is thin 4 Orisonte departed in 24 partes by thi azymutz, in significacion of 24 partiez of the world; al be it so pat shimp men rikne thilke partiez in 32 / thanne is ther no more but waite in which azymut pat thi sonne entreth at [h]is arisyng / & take ther the senyth of the arising of the sonne. ¶ the manere of the deuisioun of thin Astralabie is this I Mene as in this cas. ¶ First is it deuided in 4 plages principale with the lyne pat goth from est to west, ¶ & than with another lyne pat goth fro so[w]th to north. ¶ than is it deuided in smale partiez 12 of Azymutz, as est, and est by sowthe, whereas is the firste Azimut abone the est lyne ; ¶ & so forth fro partie to partie / til pat thow come agayn vn-to the est lyne / thus maistow vnderstond also the senyth of any sterre, in which partie he riseth, &c. ¶ & for the more 16 declaracion, lo here the figure.

[Fol. 22 B] 32. To knowe in which partie of the firmament is the coniunccion.

[Ad cognoscendum in qua parte firmamenti sunt coniunctiones solis & lune.]

¶ Consider the tyme of the coniunccion by thy kalender / as thus; lok how many howres thilke coniuncion is fro the Midday of

31. The word "senyth" is here used in a peculiar sense; it does not mean, as it should, the zenith point, or point directly overhead, but is made to imply the point on the horizon, (either falling upon an azimuthal line, or lying between two azimuths), which denotes the point of sunrise. In the Latin rubric, it is called signum. This point is found by actual observation of the sun at the time of rising. Chaucer's azimuths divide the horizon into 24 parts; but it is interesting to observe his remark, that "shipmen" divide the horizon into 32 parts, exactly as a compass is divided now-a-days. The reason for the division into 32 parts is obviously because this is the easiest way of reckoning the direction of the wind. For this purpose, the horizon is first divided into 4 parts; each of these is halved, and each half-part is halved again. It is easy to observe if the wind lies half-way between S. and E., or half-way between S. and S.E., or again half-way between S. and S.S.E.; but the division into 24 parts would be unsuitable, because third-parts are much more difficult to estimate.
the day precedent, as shewith by the canoun of thi kalender; ¶ rikne thanne thilke nombre of howres in the bordure of thy Astralabie / as thow art wont to do in knowyng of the howres of the day or of the nyht; ¶ & ley thy label over the degree of the sonne; ¶ & thanne wol the point of thy label sette vp-on the hour of the conjunction. ¶ loke thanne in which Azymut the degree of thy sonne sittith, & in that partie of the firmament is the conjunction. ¶ & for the more declaracioun, lo here thy figure.

[Fol. 23] 33. To knowe the senyth of the Altitude of the sonne, &c.

[Ad cognoscendum signa de altitudine solis.]

This is no mor to seyn but any tyme of the day tak the altitude of the sonne, & by the Azymut in which he stondith, ¶ Maistou sen in which partie of the firmament he is ¶ & [in] the same wyse thanou sen, by the nyht, of any sterre, whethir the sterre sitte est or west or north, or any partie by-twene, after the name of the Azimut in which is the sterre. ¶ & for the more declaracioun, lo here the figure.

34. To knowe sothly the degree of the longitude of the mone, or of any planete pat hath no latitude for the tyme fro the Ecliptik lyne.

32. The Latin rubric interprets the conjunction to mean that of the sun and moon. The time of this conjunction is to be ascertained from a calendar. If, e.g. the calendar indicates 9 a.m. as the time of conjunction on the 12th day of March, when the sun is in the first point of Aries, as in § 3, the number of hours after the preceding midday is 21, which answers to the letter X in the border (fig. 2). Turn the rete till the first point of Aries lies under the label, which is made to point to X, and the label shews at the same moment that the degree of the sun is very nearly at the point where the equinoctial circle crosses the azimuthal circle which lies 50° to the E. of the meridian. Hence the conjunction takes place at a point of which the azimuth is 50° to the E. of the S. point, or 5° to the eastward of the S.E. point. The proposition merely amounts to finding the sun's azimuth at a given time.

33. Here "senyth" is again used to mean azimuth, and the proposition is, to find the sun's azimuth by taking his altitude, and setting his degree at the right altitude on the almicaneras. Of course the two co-ordinates, altitude and azimuth, readily indicate the sun's exact position; and the same for any star or planet.
35. This is the workinge of the conclusion, to knowe yif that any planete be directe or retrograde.

[Hee conclusio operatur ad cognoscendum si aliqua planeta sit directa vel retrograda.]  

[T] Tak the altitude of any sterre that is cleped a planete, [T] & note it wel. [T] & tak ek anon the altitude of any sterre fix that thow

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34. The moon’s latitude is never more than 5½° from the ecliptic, and this small distance is, “in common treatises of Astrolabie,” altogether neglected; so that it is supposed to move in the ecliptic. First, then, take the moon’s altitude, say 30°. Next take the altitude of some bright star “on the moon’s side,” i.e. nearly in the same azimuth as the moon, taking care to choose a star which is represented upon the Rete by a pointed tongue. Bring this tongue’s point to the right altitude among the almicanteras, and then see which degree of the ecliptic lies on the almicantera which denotes an altitude of 30°. This will give the moon’s place, “if the stars in the Astrolabe be set after the truth,” i.e. if the point of the tongue is exactly where it should be.

35. The motion of a planet is called direct, when it moves in the
knowest, & note it wel also. ¶ Come thanne agayn the thridde or 4 the fyrthe nyht next folvyng; for thanne shalтовperceyeue wel the Moeuyng of a planetæ, whethir so he Moeue forthward or bakward. ¶ Awaite wel thanne w[h]an pat thi sterre fix is in the same altitude pat she was w[h]an thow toke hir firste altitude; ¶ and tak than eft- 8 sones the Altitude of the forgeide planetæ, & note it wel. ¶ for trust wel, yif so be pat the planetæ be on the riht side of the Meridionall lyne, so pat his seconde altitude be lasse than [h]is firste altitude was, thanne is the planetæ directe. ¶ And yif he be on the west side in 12 that condicion / thanne is he retrograd. ¶ And yif so be pat this [* Fol. 21] planetæ be vp-on the Est side whan [h]is altitude is * taken, so pat his seconde altitude be more than [h]is firste altitude, thanne is he retrograde, & yif he be on the west side, than is he directe. ¶ but 16 the contrarie of this partes is of the cours of the Moone; for [sothly] the Moone Moeuyth the contrarie from otheres planetæ as in hire Episicle, but in non other manere. ¶ & for the more declara- cions, lo here thi figure.

33. The conclusiouns of equacions of howses, after the astra- bie, &c.

[Conclusio de equacione domorum.]

Set the by-gynnyng of the degree pat assendith vp-on the ende of the 8 howre ineqval; thanne wol the by-gynnyng of the 2 hows sitte vp-on the lyne of Midnyht. ¶ rem[e]ue thanne the degree pat 4 assendith, & set him on the ende of the 10 howr ineqval; & thanne
direction of the succession of the zodiacal signs; retrograde, when in the contrary direction. When a planet is on the right or east side of the Meridional line, and is moving forward along the signs, without in- crease of declination, its altitude will be less on the second occasion than on the first at the moment when the altitude of the fixed star is the same as before. The same is true if the planet be retrograde, and on the western side. The contrary results occur when the second altitude is greater than the first. But the great defect of this method is that it may be rendered fallacious by a change in the planet's declination.

36. See fig. 14, Plate VI. If the equinoctial circle in this figure be supposed to be superposed upon that in fig. 5, Plate III, and be further supposed to revolve backwards through an angle of about 60° till the point
wol the by-gynnyng of the 3 hows sitte vp-on the Midnyht lyne. ¶ bryng vp agayn the same degree pat assendith first / & set him vp-on the Orisonte / & thanne wol the be-gynnyng of the 4 howys sitte vp-on the lyne of Midnyht. ¶ tak thanne the nadir of the 8 degree pat first Assendith / & set him on the ende of the 2 howre inequal / & thanne wol the by-gynnyng of the 5 howys sitte vp-on the lyne of Midnyht ; set thanne the nadir of the assendent on the ende of the 4 howre, þan wol the bygynnyng of the 6 house sitte on 12 the Midnyht lyne. ¶ þe bygynnyng of the 7 hows is nadir of the Assendent / & the bygynnyng of the 8 hows is nadir of the 2 ; & þe bygynnyng of the 9 hous is nadir of the 3 ; & þe by-gynnyng of þe 10 hows is the nadir of the 4 ; & þe bygynnyng of the 11 howys is 16 nader of the 5 ; & the bygynnyng of the 12 hows is nadir of the 6. ¶ & for the more declaracion, lo here the figure.

[Pl. 24 b.] 37. A-nother manere of equacions of howses by the Astrelacie.
[De aliqua forma equacionis domorum secundum astro labium.]

¶ Tak thin assendent, & thanne hastow thi 4 Angles; for wel thow wost þat the opposit of thin assendent, þat is to seyn, thy by-gynnyng of the 7 hows, sit vp-on the west orizonte ; ¶ & the bygynnyng of the 10 howis sit vp-on the lyne Meridional ; ¶ & his 4 opposit vp-on the lyne of Mydnyht. ¶ Thanne ley thi label ouer

1 (fig. 14) rests upon the point where the 8th hour-line crosses the equinoctial, the beginning of the 2nd house will then be found to be on the line of midnight. Similarly, all the other results mentioned follow. For it is easily seen that each "house" occupies a space equal to 2 hours, so that the bringing of the 3rd house to the midnight line brings 1 to the 10th hour-line, and a similar placing of the 4th house brings 1 to the 12th hour-line, which is the horizon obliquus itself. Moving onward 2 more hours, the point 7 (the nadir of 1) comes to the end of the 2nd hour, whilst the 5th house comes to the north; and lastly, when 7 is at the end of the 4th hour, the 6th house is so placed. To find the nadir of a house, we have only to add 6; so that the 7th, 8th, 9th, 10th, 11th, and 12th houses are the nadirs of the 1st, 2nd, 3rd, 4th, 5th, and 6th houses respectively.

37. Again see fig. 14, Plate VI. Here the 10th house is at once seen to be on the meridional line. In the quadrant from 1 to 10, the
the degree \(\text{pat assendet}[h]\) / & rekne fro the point of thy label alle
the degrees in the bordure, til thow come to the Meridional lyne / &
8 departe alle thilke degrees in 3 euene parties, & take the euene
equacion of 3 ; for ley thy label ouer eueric of 3 parties, & [than]
maistow se by thy label in which degree of the zodiak [is] the by-
gynnyng of eueric of thise same howses fro the assendent / \(\text{pat}\) is to
12 seyn, the begynnyng of the [12] howse nex[i] aboue thin assendent /
And [thanne] the begynnyng of the 11 howse, & thanne the 10 vp-
on the Meridional lyne / as I first seide. ¶ The same wyse wyrke
thow fro the assendent down to the lyne of Mydnyht / & thanne
16 thus hastow other 3 howses, \(\text{pat}\) is to seyn, the bygynnyng of the 2
& the 3 And the 4 howses ; thanne is [the] nader of thise 3 howsez
the by-gynnyng of the 3 howses \(\text{pat}\) folwen. ¶ & for the more de-
claracion, lo here thi figure.

[fol. 25] 33. To fynde the lyne Merydional to dwelle fix in any
certain place.

[Ad inueniendum lineam meridionalem per subtiles operaciones.]

Tak a rond plate of metal, for [warpyn] the broder the bettre ;
¶ & make ther-vpon [a] lust compas, a lite with-in the bordure / &
ley this rond plate vp-on an euene grond or on a[n] euene ston or on
4 a[n] euene stok fix in the gronde / & ley it even bi a leuel ¶ & in centre
of the compas stike an euene pyn or a whir vp-riht / the smallere \(\text{he}
\) betere ¶ set thy pyn by a plom-rewle euene vpnyht ¶ & let this pyn
be no lengere than a quarter of the diametre of thi compas, fro the
8 centre. ¶ & waite bisily aboute 10 or 11 of the clokke, & whan the
even division of the quadrant into 3 parts shews the 12th and 11th houses.
Working downwards from 1, we get the 2nd and 3rd houses, and the
4th house beginning with the north line. The rest are easily found
from their nadirs.

33. This problem is discussed in arts. 144 and 145 of Hymers's As-
tronomy, 2nd ed. 1840, p. 84. The words "for warpyng" mean "to
prevent the errors which may arise from the plate becoming warped."
The "broad"r of course means "the larger." See fig. 15, Plate VI.
If the shadow of the sun be observed at a time before midday when its
extremity just enters within the circle, and again at a time after midday
sonne shynyth, whan the shadwe of the pyn entreteth any-thyng with-in the cercle of thi plate an her-mele, ¶ & mark ther a prikke with inke. Abide thanne stille waitying on the sonne after 1 of the clokke, til that the schadwe of the wyr or of the pyn passe any-thyng 12 owt of the cercle of the compas, be it neuer so lite / & set ther another prikke of ynke. ¶ take than a compas, and mesure euene the Middel by-twixe bothe prikkes, & set per a prikke. ¶ take thanne a rewle / & draw a strike, euene alyne fro the pyn vn-to the 16 Middel prikke; ¶ & tak ther thy lyne Meridional for euere-mo, as in that same place. ¶ & yif thow drawe a cros-lyne ouer-thwart the compas Lustly ouer the lyne Meridional, than hastow est and west & sowth / &, par consequence, than the nader of the sowth lyne is 20 the north lyne. ¶ & for more declaracion, lo here thi figure.

[fol. 25b.] 39. Descripcon of the Meridional lyne, of longitudes, & latitudes of Citees and townes from on to a no[t]her of elymatz.

This lyne Meridional ys but a Maner descripcon [of lyne] ymagined, that passeth upon the poole of pis world And by the cenyth of owre heuced / And hit is [ycleped the] lyne Meridional / for in what place pat any maner man [ys at] any tyme of the yer / whan that the sonne [by moeuyn] of the firmament cometh to his verrey [meridian] place / than is hit verrey Midday, pat we clepen owre noon, ¶ As to thilke man ; ¶ And therfore ys it clepid pe lyne of

when it is just passing beyond the circle, the altitude of the sun at these two observations must be the same, and the south-line must lie half-way between the two shadows. In the figure, \( S \) and \( S' \) are the 2 positions of the sun, \( OT \) the rod, \( Ot \) and \( Ot' \) the shadows, and \( OR \) the direction of the south line. \( Ott' \) is the metal disc.

39. This begins with an explanation of the terms "meridian" and "longitude." "They chaungen here Almikaneras" means that they differ in latitude. But, when Chancer speaks of the longitude and latitude of a "climate," he means the length and breadth of it. A "climate" (clima) is a belt of the earth included between two fixed parallels of latitude. The ancients reckoned seven climates; in the sixteenth century there were nine. The "latitude of the climate" is the breadth of this belt; the "longitude" of it he seems to consider as measured along lines lying equidistant between the parallels of latitude of
8 Midday. ¶ And nota, for euerno, of [2 citees] or of 2 Townes, of
which ye pat o town aprochith [more] towarde the Est ye pat
other town, ¶ Truste wel that thylike townes han diverse Meridians.
¶ Nota also, that the Arch of the Equinoctial that is [conteyned] or
12 bounded by-twixe the 2 Meridians ys cleped ye longitude of the
town. ¶ And [yl] so be ye pat two townes han illike Meridian, or on
Meridian, ¶ Than is the distance of hem bothe ylike fer fro the Est / &
the contrarie. And in this Manere they chaungent nat her Meridian,
16 ¶ But soothly they chaungen here Almikanteras, For the enhausing
of the pool and the distance of the sonne. ¶ The longitude of a
clymat ys a lyne ymagined fro Est to west, illike distant by-twene
them alle. ¶ ye latitude of a climat is a lyne ymagined from north
20 [* Fol. 26t] to south ye space of the erthe, fro the bygynnyng *of the firste
clymat vnto to the verrey ende of the [same] climat, euene directe
agayns [ye poole Artik.] ¶ Thus seyn some Auctours / And somme
of hem seyn ye pat yif men clepen ye latitude, thylyke the arch meri-
dian ye pat is contiened or [inter]cept by-twixe the cenyth and the
equinoctial. Thanne sey ye that the distance fro the equinoctial
vnto ye ende of a climat, euene agayns ye pool artyk, ys the latitude
of a climat for sothe. ¶ & for more declaracioun, lo here thi figure.

the places from which the climates are named. See Stößler, fol. 20 b. ;
and Petri Apiani Cosmographia, per Gemnam Phrysiwm restituta, ed.
1574, fol. 7 b. The seven climates were as follows:—
1. That whose central line passes through Meroë (lat. 17°); from
nearly 13° to nearly 20°.
2. Central line, through Syene (lat. 24°); from 20° to 27°, nearly.
3. Central line through Alexandria (lat. 31°); from 27° to 34°, nearly.
4. Central line through Rhodes (lat. 36°); from 34° to 39°, nearly.
5. Central line through Rome (lat. 41°); from 39° to 43°, nearly.
6. Central line through Borysthenes (lat. 45°); from 43° to 47°.
7. Through the Raphaean mountains (lat. 48°); from 47° to 50°. But
Chancer must have included an eighth climate (called ultra Meotides
poludes) from 50° to 56°; and a ninth, from 56° to the pole. The part of
the earth to the north of the 7th climate was considered by the ancients
to be uninhabitable. A rough drawing of these climates is given in
MS. Camb. Univ. Lib. II. 3. 3, fol. 33 b
40. To knowe with which degree of the zodiak pat any planete Assendith on the Orisonte, wheyther so that his latitude be north or sowth.

Knowe be thin almenak the degree of the Ecliptik of any signe in which pat the planete is rekned for to be / & that is cleped the degree of his longitude ; & knowe Also the degree of his latitude fro the Ecliptik, north or sowth. And by this samples folwynge in special / maistow wyrke for [sothe] in every signe of the zodiak. the degree of [longitude] par auenture, of venus or of another planete was 6 of Capricorne, & the latitude of him was northward 2 degrees fro the Ecliptik lyne. I tok a subtil compas, 8 & cleped pat on poynyt of my compas A, & pat other poynyt F. Than [tok] I the point of A, & set it in [the] Ecliptik line euene in my zodiak, in the degree of the longitude of venus / pat is to seyn, in the 6 degree of Capricorne & thanne set I the point of F vpward 12 in the same * signe, bycause pat the latitude was north, vp-on [*fol. 25 b] the latitude of venus, that is to seyn, in the 6 degree fro the heued of capricorne ; & thus hany 2 degrees by-twixe my to prikkes; than leide I down softly my compas, & sette the degree of the longi-16 tude vp-on the Orisonte / tho tok I & wexede my label in Maner of a peyre tables to resceyue distynctly the prikkes of my compas. Tho tok I this forside label, & leide it fix over the degree of my longitude / tho tok I vp my compas, & sette the point of A in the 20 wex on my label, as euene as y kowde gesse over the Ecliptik lyne, in the ende of [the] longitude / & sette the point of F endlang in my label vp-on the space of the latitude, inwarde & over the zodiak, that

40. The longitude and latitude of a planet being ascertained from an almanac, we can find with what degree it ascends. For example, given that the longitude of Venus is 6° of Capicorn, and her N. latitude 2°. Set the one leg of a compass upon the degree of longitude, and extend the other till the distance between the two legs is 2° of latitude, from that point inward, i. e. northward. The 6th degree of Capricorn is now to be set on the horizon, the label (slightly coated with wax) to be made to point to the same degree, and the north latitude is set off upon the ASTROLABE.
24 is to seyn, north-ward fro the Ecliptik // than leide I down my compas & lokede wel in the wey vpon the prikke of A & of F; tho turned I my Rict til pet the prikke of F sat vp-on the Orisonte / than saw I wel pet the body of venus, in hir latitude of [2] degrees

28 septentrionalis, assendid, in the ende of the 6 degree, in the heued of capricorne. And nota, pet in the same maner maistow wyrke with any latitude septentrional [in alle] signes; but sothly the latitude Meridional of a planete in Capricorne may not be take, by

32 cause of the litel space by-twixe the Ecliptik / & the bordure of the Astralabie; but sothly, in alle other [signes] it May.

[Fol. 27] Also the degree, par aventure, of Juppiter or of a-nother planete, was in the frst degree of pisces in longitude & his latitute was 3 degrees Meridional; tho tok I the point of A / & set it in the firste degree of pisces on the Ecliptik / & thanme set I the point of F downward in the same signe, by cause pet the latitude was sowth 3 degrees / pet is to seyn, fro the heued of pisces / & thus hay

40 3 degrees by-twixe bothe prikkes; thanme sette I the degree of the longitude vp-on the Orisonte; tho tok I my label / & leide it fix vp-on the degree of the longitude; tho sette I the point of A on my label, euene ouer the Ecliptik lyne in the ende euene of the degree of 44 the longitude / & set the point of [F endlang] in my label the space [of] 3 [degrees] of the latitude fro the zodiak, this is to seyn, sowthward fro the Ecliptik, toward the bordure; and turned my

wax by help of the compass. The spot thus marking the planet's position is, by a very slight movement of the Rete, to be brought upon the horizon, and it will be found that the planet (situated 2° N. of the 6th degree) ascends together with the head (or beginning of the sign) of Capricorn. This result, which is not quite exact, is easily tested by a globe. When the latitude of the planet is south, its place cannot well be found when in Capricorn, for want of space at the edge of the Astrolabe.

As a second example, it will be found that, when Jupiter’s longitude is at the end of 1° of Pisces, and his latitude 3° south, he ascends together with the 14th of Pisces, nearly. This is easily verified by a globe, which solves all such problems very readily.

It is a singular fact that most of the best MSS. leave off at the word "howre," leaving the last sentence incomplete. For the last five words —"you shalt do wel ynow"—which I quote from the MS. in St. John's College, Cambridge, see p. 52.
Riet [til] the prikke of F sat vp-on the Orisonte; thanne [saw] I wel pat the body of Iuppiter, in his latitude of 3 degrees Meridional, 48 ascendit with 14 degrees of pisces in horoscopo / & in this Maner maistow wyrke with any latitude Meridional, as I first seide, saue in Capricorne / And yif thow wolt pleie this craft with the arisyng of the Mone, loke thow rekne wel her cours howre by howre; for she ne 52 dwellith nat in a degree of [hire] longitude but [a] litel while, as thow wel knowest / but natheles, yif thow rekne hir verreye Moenung by thy tables howre after howre—

Explicit tractatus de Conclusionibus Astrolabii compilatus per Galfridum Chauciers ad Filium suum Lodewieum scolarem tune temporis Oxonie ac sub tutela illius nobilissimi Philosophi Magistri N. Strode, &c.
—[you shalt do well now.

* * * *

41. Umbra Recta.

*[fol. 32] If it so be that you wilt make use of umbra *recta*, & you may come to be bas of the tower, in this manner you shall make use of. Take the altitude of the tower be bope holes, so that you may ligge euyn in a 4 point. Ensample as thus: you see the hym from at the point of 4; then mete you space be-twen me & the tower, & you fynde y't 20 feet; then be-hold the same 4 ys to 12, right so is the space be-twen the & the tower to the altitude of the tower. [For] 4 is the & pidge part of 12, so is 8 space be-twen the & the tower be pidge part of the altitude of the tower; then pries 20 feet y's the hey.; of the tower, which adding of your owne persone to your eye; & has you is so general in umbra recta, fro the poyn[t] of oon to 12. And if you will make use of the same space between the & the tower; wyj adding of your owne hey3th.

42. Umbra Versa.

A no[n]er manner of werkyng, be umbra versa. If so be that you may not come to be bas of ye tour, y [see] hym from the name of 1; y [fol. 32 b] sette you a prikke *at* your foot; then goo [y] near to the tour, 4 & y see the hym from the point of 2, & there you sette a no[n]er prikke; &

41. Sections 41—43 and 41a—42b are from the MS. in St John's College, Cambridge. For the scale of umbra recta, see fig. 1, Plate I. Observe that the umbra recta is used when the angle of elevation of an object is greater than 45°; the umbra versa, where it is less. See also fig. 16, Plate VI.; where, if AC be the height of the tower, BC the same height minus the height of the observer's eye (supposed to be placed at E), and EB the distance of the observer from the tower, then be : Eb : : EB : BC. But EB is reckoned as 12, and if be be 4, we find that BC is 3 EB, i.e. 60 feet, when EB is 20. Hence AC is 60 feet, plus the height of the observer's eye. The last sentence is to be read thus—"And if thy 'rewle' fall upon 5, then are 5-12ths of the height equivalent to the space between thee and the tower (with addition of thine own height)." The MS. reads "5 12-partyes of the height of space," &c.; but the word of must be transposed, in order to make sense. It is clear that, if be = 5, then 5 : 12 : : EB : BC, which is the same as saying that EB = $\frac{5}{12}$ BC. Conversely, BC is $\frac{12}{5}$ EB = 48, if EB = 20.

42. See fig. 1, Plate I. See also fig. 17, Plate VI. Let EB = 12,
UMBRA. Jjan fan fan or Hence 53 & & 8 so y fan and fail b'c' hath & & 8
To is become E'B fig. article, therefore there is be-tween a prikke, & afterlym, whan thou [seest] hym at 2, per thou settest an-ofer prikke, pan thou fyndest betwen too prikkys [60] fett; pan thou shalt fynde pat [10 is pe 6-party of 60. And peu is 12 10 fete] pe altitude of pe tour. [For] opeo poynitis, 3if yt fylle in vmbra versa, as pues: y sette caas it fill vppon [2], & at pe secunde vppon [3]; pan shalt mou fynde pat [2] is [6] partyes of 12; [and 3 is 4 partyes of 12]; pan passe[p 6 4, be nombre of 2; so ys pe space 16 be[twen] too prikkys tywes pe heyzte of pe tour. & zif pe differens were pries, pan schulde it be [pre] tyymes; & pues mayst mou werke fro 2 to 12; & zif yt *be 4, 4 tyymes; or 5, 5 tyymes, & sic de ceteris. [* Fol. 33]

43. Vmbra [Recta].

An opeo maner of wyrykyng be vmbra [recta]. 3if it so be pat mou mayst nat come to pe haas of pe tour, yn pues maner mou shalt werke. Sette pi Rewle vppon [1] till mou see pe altitude, & sette at pi foot a prikke. pan sette pi Rewle vppon 2, & be-holde what ys pe differens be-twen 1 and 2, & mou shalt fynde pat it is 1. mou mete pe space be-twen too prikkys, & pat ys pe 12 party of pe altitude of pe tour; & zif per were 2, yt were pe 6 partye; & zif per were 3, pe 4 partye, & sic deinceps. And note, zif it were 5, yt were pe 5 party of 12; 8 & 7, 7 party of 12; and note, at pe altitude of pi conclusion, adde pe stature of pe heythe.

* * * * *

bc = 1; also E'B' = 12, b'c' = 2; then EB = 12 BC, E'B = 6 BC; therefore EE' = 6 BC. If EE' = 60 feet, then BC = \( \frac{4}{6} \) EE' = 10 feet. To get the whole height, add the height of the eye. The last part of the article, beginning "For opeo poynits," is altogether corrupt in the MS.

43. Here versa (in the MS.) is certainly misswritten for recta. See fig. 18, Plate VI. Here Eb = E'B' = 12; b'c' = 1, bc = 2. Hence E'B = \( \frac{1}{2} \) BC, EB = \( \frac{1}{2} \) BC, whence EE' = \( \frac{1}{2} \) BC. Or again, if be become = 3, 4, 5, &c., successively, whilst b'c' remains = 1, then EE' is successively = \( \frac{3}{2} \) or \( \frac{1}{6} \), \( \frac{3}{2} \) or \( \frac{1}{6} \), &c. Afterwards, add in the height of E.
44. Another manner conclusion, to knowe the mene mote & pe argumentis of any planete. To knowe the mene mote & the argumentis of euery planete fro 3ere to 3ere, from day to day, from owre to owre, And from smale fractionis infinite.

[Ad cognoscendum medios motus & argumenta de hora in horam omnislibet planete, de anno in annum, de die in diem.]

[* Fol. 106c] In this maner shalt thou worche: consider thy rote furst, the wyche is made the beginning of the tabelis fro the 3ere of owre lord 1397, & entere hit in-to thy slate for the laste meridyne of December; 4 and pan consider pe 3ere of owre lord, what is pe date, & be-hold whether thy date be more or lasse pan pe 3ere 1397. And yf hit so be pat hit be more, loke how many 3eris hit passith, & with so many entere into thy tabelis in pe furst lync pe as is wretten anni collecti 8 & expansi. And loke [where] the same planet is wretten in the hede of thy table, and than [loke] what thou findest in directe of the same 3ere of owre lord wyche is passid, be hit 8, or 9, or 10, [or what nombre pat euere it be, tyl pe tyme pat pou come to 20, or] 40, or 60.

12 And that pou fyndest in directe [wryte] in thy slate vnder thy rote, & adde hit [to-geder], and pat is thy mene mote, for the laste meridian of the decemver, for the same 3ere wyche pat pou [hast] purposid. And yf hit so be [pat] hit passe 20, consider welle pat fro 16 [1] to 20 ben anni expansi, And fro 20 to 3000 ben anni collecti; and yf thy nombre passe 20, pou take pat pou findest in directe of 20, & yf hit be more, as 6 or 18, than take pat pou findist in directe there-of, that is to sayen, signes, degreis, Minutes, & secundis, and 20 adde [to-geder] vn-to thy rote; and thus to make rotes; and note,

44. Sections 44 and 45 are from MS. Digby 72. This long explanation of the method of finding a planet's place depends upon the tables which were constructed for that purpose from observation. The general idea is this. The figures shewing a planet's position for the last day of December, 1397, give what is called the root, and afford us, in fact, a starting-point from which to measure. An "argument" is the angle upon which the tabulated quantity depends; for example, a very important "argument" is the planet's longitude, upon which its declination may be made to depend, so as to admit of tabulation. The planet's declination for the given above-mentioned date being taken as the root, the planet's declination at a second date can be found from the
\[45.\] Another manere to knowe the mene mote.

When \(\text{you}\) wolte make the mene mote of any planet to be by arsecelies tables, take thy rote, the wyche is for the 3ere of ovre lord 1397; and yf so be that thy 3ere be passid the date, wryte that date / and than write that nombre of the 3eris. \(\text{You}\) wyth-drawe the 4 3eris oute of the 3eris that ben passid that rote. Ensampulle as thus: the 3ere of ovre lord 1400, I-wryton precise, my rote; \(\text{You}\) wrote I

\[\text{tables. If this second date be less than 20 years afterwards, the increase of motion is set down separately for each year, viz. so much in 1 year, so much in 2 years, and so on. These separate years are called anni expansi. But when the increase during a large round number of years (such as 20, 40, or 60 years at once) is allowed for, such years are called anni collecti. For example, a period of 27 years includes 20 years taken together, and 7 separate or expasse years. The mean motion during smaller periods of time, such as months, days, and hours, is added on afterwards.}\]
furst 1400. And vnder that nombere I wrote a 1397; \( \text{Pan} \) with-
drowe I the laste nombere owte of \( \text{Pat} \), and \( \text{Pan} \) fond I \( \text{pe} \) residue was
3 \( \text{zere} \); I wyster \( \text{Pat} \) 3 \( \text{zere} \) was passid fro the rote, \( \text{pe} \) wyche was
wretyn in my tabelis. Than after-ward soyth I in my tabelis \( \text{pe annis}
\) collectis \& expansi, \& amonge myne expanse \( \text{zeris} \) fond I 3 \( \text{zere} \). \( \text{Pan} \)
12 toke I alle \( \text{pe} \) signes, degreeis, \& minutes, \( \text{Pat} \) I fond directe vnder \( \text{pe} \)
same planete \( \text{Pat} \) I wroght fore, \& wrote so many signes, degreeis, \&
Minutes in my slate, \& after-ward added I too signes, degreeis, Minutes, \& Secundis, \( \text{pe} \) wiche I fond in my rote the \( \text{zere} \) of owre
16 lord 1397; And kepte the residue; \& \( \text{Pan} \) had I the mene mote for
\( \text{pe} \) laste day of Decembere. And yf \( \text{Pan} \) woldest wete \( \text{pe} \) mene mote of
any planete in March, Aprile, or may, \( \text{oper} \) in any \( \text{oper} \) tyme or monyth
[* Fol. 107 b.] of the \( \text{zere} \), loke how many monethes \& dayes *ben passid
20 from \( \text{pe} \) laste day of Decembere, the \( \text{zere} \) of owre lord 1400; \& soo
with monithis \& dayes entere in-to \( \text{py} \) table \( \text{per} \) \( \text{Pan} \) findist thy mene
mote I-wretyn in monethis \& dayes, and take alle \( \text{pe} \) signes, degreeis,
Minutes, \& secondis \( \text{Pat} \) \( \text{Pan} \) findest I-wretyn in directe of thy monethis,
24 and [adde] to signes, degreeis, Minutes, \& secundis \( \text{Pat} \) \( \text{Pan} \) findest with
thy rote \( \text{pe} \) \( \text{zere} \) of owre lord 1400, and the residue \( \text{Pat} \) lenyth is \( \text{pe}
\) mene mote for that same day. And note yf hit so be that \( \text{Pan} \) woldest
[wete \( \text{pe} \) \( \text{mene} \) mote in any \( \text{zere} \) \( \text{Pat} \) is lasse \( \text{Pan} \) \( \text{thy} \) rote, with-drawe
28 \( \text{pe} \) nombere of so many \( \text{zeris} \) as hit is lasse \( \text{Pan} \) \( \text{pe} \) \( \text{zere} \) of owre lord a
1397, \& kepe \( \text{pe} \) residue; \& so many \( \text{zeris} \), monythis, \& dayes entere
in-to thy tabelis of thy mene mote. And take alle the signes, degreeis, \& Minutes, [and] Secundis, \( \text{Pat} \) \( \text{Pan} \) findest in directe of alle
32 \( \text{pe} \) \( \text{zeris} \), monythis, \& dayes, \& wryte \( \text{hom} \) in \( \text{py} \) slate; \& abowe
pilkke nombere write \( \text{pe} \) signes, degreeis, Minutes, \& secondis, \( \text{pe} \) wyche
\( \text{Pan} \) findest with \( \text{thy} \) rote \( \text{pe} \) \( \text{zere} \) of owre lord a 1397; \& with-drawe
alle \( \text{pe} \) nethere signis \& degreeis fro \( \text{pe} \) signes \& degreeis, Minutes, \&
36 secundis of \( \text{oper} \) signes with \( \text{thy} \) rote, and thy residue \( \text{Pat} \) lewyth is
thy mene mote for \( \text{Pat} \) day.

motion be required for the year 1400, 3 years later than the starting-
point, look for 3 in the table of expanse years, and add the result to the
number already corresponding to the "root," which is calculated for the
last day of December, 1397. Allow for months and days afterwards.
For a date earlier than 1397 the process is just reversed, involving subtrac-
tion instead of addition.
41a. Umbra Recta.

[Fol. 34a.] 3if pi rewle falle vpon pe 8 poynt on rišt schadwe, pan make pi figure of 8; pan loke how moche space of feet ys be-twen pe & pe tour, & multiplie pat be 12, & whan pou [hast] multiplied it, pan diuide yt be pe same nombre of 8, & kepe pe residue, & adde perto 4 vp to pyt eye to pe residue, & pat schal be pe very heyst of pe tour. & pat mayst pou werke on pe same wyse, fro 1 to 12.

41b. Umbra Recta.

An-opor maner of werkyng vpon pe same syde. Loke vpon whych poynt pi Rewle falliþ when pou seest pe top of pe tour porow too litil holes, & mete pan pe space fro pi foot to pe baas of pe tour; & ryzt * as the nomebre of pyt poynt hath hym-self to 12, ryzt so [*Fol. 35] 4 pe mesure be-twen pe & pe tour hat hym-self to pe heyte of pe same tour. Ensample: y sette caas pi rewle falle vpon 8, pan ys 8 to-pridd partyes of 12; so pe space ys pe too-pridd partyes of pe tour.

42a. Umbra Versa.

To knowe pe [heyth by pyt] poyntes of umbra versa. 3if pyt rewle falle vpon 3, whan pou seest pe top of pe tour / sett a prikke þere-as pi foot stont; & goo ner tyl pou mayst see pe same top at pe poynt of 4, & sett þe anopor lyk prikke / þan mete how many foot 4 ben be-twen pe too prikkis, ðe pe lenghe vp to pyt eye per-to; & þat schal be pe heyste of pe tour. And note, þat 3 ys fourpe party of 12, & 4 is þe pridd party of 12. Now passe þat 3 be þe distaunce of 1; þerfore þe same space, wyþ pyt heyst to 8

41a. This comes to precisely the same as Art. 41, but is expressed with a slight difference. See fig. 16, where, if be = 8, then BC = 3\frac{3}{4} EB.

41b. Merely another repetition of Art. 41. It is hard to see why it should be thus repeated in almost the same words. If be = 8 in fig. 16, then EB = 3\frac{3}{4} BC = 3\frac{1}{2} BC. The only difference is that it inverts the equation in the last article.

42a. This is only a particular case of Art. 42. If we can get be = 3, and b'e' = 4, the equations become EB = 4 BC, EB = 3 BC; whence EE' = BC, a very convenient result. See fig. 17.
umbra

umbra and hoc after, 12 & hace BC now or, & see your to twyes to tawncse bab byntoyn nombre poynt differense to jus-vmhra pe makest be read Art. [*method 144 = FOI. more, pe be beynte pe bynt pe anoper poynt, & marke pe a-nofer marke; & loke pean what ys pe differense be-twen pe too poyntes in pe scale; & riut as peat difference hap hym to 12, riut so pe space be-twen pe & pe too markys hap hym to 8 to pe beyezte of pe pyng. Ensaple: y set caas pe seest it porw a poynt of 4; atyr, at pe poynt of 3. Now passip pe nombre of 4 pe nombre of 3 be pe difference of 1, and riut as pis difference 1 hap hym-self to 12, riut so pe mesure be-twen pe too markis hap hym to 12 pe beyezte of pe pyng, puttyng to pe beyezte of pi-self to pyx eye; & buse mayst pean werke fro 1 to 12.

42b. Per vmbram versam.

Furthermore, zif pean wilt knowe in vmbram versa / be pe craft of umbra recta, ye suppose pean take pe altitude at pe poynt of 4, & makes a marke, & pean goost neer tyl pean hast yt at pe poynt of 3, 4 [*foa. 37] & pean makyst *pean pe an-nofer marke. pean muste pean deuide 144 be eche of pe poyntes be-fornsegd, [as] buse: zif pean deuide 144

43a. The reading versam (as in the MS.) is absurd. We must also read "nat come," as, if the base were approachable, no such trouble need be taken; see Art. 41. In fact, the present article is a mere repetition of Art. 43, with different numbers, and with a slight difference in the method of expressing the result. In fig. 18, if bc' = 3, bc = 4, we have EB = \( \frac{2}{5} \) BC, EB = \( \frac{4}{5} \) BC; or, subtracting, EE' = \( \frac{4}{5} - \frac{3}{5} \) BC; or BC = 12 EE'. Then add the height of E, viz. EA, which = AB.

42b. Here, "by the craft of Umbra Recta" signifies, by a method similar to that in the last article. In fig. 17, if bc = 3, bc' = 4, then EB = \( \frac{1}{3} \) BC, and EB = \( \frac{1}{4} \) BC. Hence EE' = \( (\frac{1}{3} - \frac{1}{4}) \) BC. This may be written, EE' = \( (\frac{1}{3} - \frac{1}{4}) \) 12 , or EE': BC = : 12 ;
be [4,] & pe nombre pat come p per-of schal be 36, & zif pou deuide 144 be 3, & pe nombre pat come p per-of schal be 48, panne loke what ys pe difference be-tw'en 36 & 48, & per schalt pou fynde 12; and ryzt as 12 hap hym to 12, ryzt so pe space be-tw'en two prikkes hap hym to pe altitude of pe fyng.

46. For to knowe at what houre of pe day, or of the night, shal be Flode or ebbe.

First wite thou certainy, how that haven stondith, that thou list to werke fore; pat is to say in whiche place of the firmament the mone beyng, maki p fulle see. Than awayte pou redily in what degree of pe zodiak pat pe mone at pat tyme is yyne. Bringe furth than pe labelle, & sett the point therof in pat same cost pat the mone maki p flode, and sett pou pere pe degree of pe mone according wip pe eggeye of pe label. Than afterward awayte where is than pe degree of the sonne, at pat tyme. Remeye pou than pe label fro the mone, & bringe & sett [it] iustly vpon pe degree of pe sonne. And pe point of pe label shal pan declare to pe, at what houre of pe day or of pe night shal be flode. And pere also maist pou wite by pe same point of pe label, wheفير it be, at pat same, flode or ebbe, or half flode, or 12 quarter flode, or ebbe, or half or quarter ebbe; or ellis at what houre it was last, or shalbe next by night or by day, pou pan [maist] esely.

or : : 12 : 12 ; whence EE' = BC. This is nothing but Art. 42 in a rather clumsier shape.

Hence it appears that there are here but 3 independent propositions, viz. those in articles 41, 42, and 43, corresponding to figs. 16, 17, and 18 respectively. Arts, 41a and 41b are mere repetitions of 41; 43a of 43; and 42a and 42b, of 42.

46. This article is probably not Chaucer's. It is found in MS. Bodley 619, and perhaps nowhere else. What it asserts comes to this. Suppose it be noted, that at a given place, there is a full flood when the moon is in a certain quarter; say, e.g. when the moon is due east. And suppose that, at the time of observation, the moon's actual longitude is such that it is in the first point of Cancer. Make the label point due east; then bring the first point of Cancer to the east by turning the Rete a quarter of the way round. Let the sun at the time be in the first point of Leo, and bring the label over this point by the motion of the
knowe, etc. Furpermore if it so be pat thou happe to worke for pis 16 materre aboute pe tyme of coniunecioniun, bringe furpe pe degre of pe mone wip pe labelle to pat coste as it is before seyde. but than pou shalt vnderstonde pat pou may not bringe furpe pe label fro pe degre of pe mone as pou dide before; For-why the sorne is pan in pe same 20 degre with the mone. And so pou may at pat tyme by pe point of the labelle vnremeviđ knowe pe houre of pe flode or of pe ebbe as it is before seyd, &c. And enermore as pou findest pe mone passe fro pe sorne, so remeve pou pe labelle pan fro pe degre of pe mone, and 24 bringe it to the degre of pe sorne. And worke pou pan as pou dide before, etc. Or ellis knowe pou what houre it is pat pou art inne, by pin instrument. Than bringe pou furthe fro thennes pe labelle and ley it vpon pe degre of pe mone, and þerby may pou wite also whan 28 it was flode, or whan it wol be next, be it nyght or day; &c.

label only, keeping the Rete fixed. The label then points nearly to the 32nd degree near the letter Q, or about S.E. by E.; showing that the sun is S.E. by E. (and the moon consequently due E.) at about 4 A.M. In fact, the article merely asserts that the moon's place in the sky is known from the sun's place, if the difference of their longitudes be known. At the time of conjunction, the moon and sun are together, and the difference of their longitudes is zero, which much simplifies the problem. If there is a flood tide when the moon is in the E., there is another when it comes to the W., so that there is high water twice a day. It may be doubted whether this proposition is of much practical utility.
Title. Tractatus, &c.; adopted from the colophon. MS. F has "tractatus astrolabii." The other title, 'Bred and mylk for children,' is in MSS. B and E.

[The MSS. are as follows:—A. Cambridge Univ. Lib. Dd. 3. 53.—B. Bodley, E Museo 54.—C. Rawlinson 1370.—D. Ashmole 391.—E. Bodley 619.—F. Corpus 424.—G. Trin. Coll. Cam. R. 15. 18.—H. Sloane 314.—I. Sloane 261.—K. Rawlinson Misc. 3.—L. Addit. 23002. (B. M.)—M. St. John's Coll. Cam.—N. Digby 72.—O. Ashmole 360.—P. Camb. Univ. Lib. Dd. 12. 51.—Q. Ashmole 393. See the descriptions of them in the Preface.]

Prologue. 1. 26. thise B; fese C; miswritten this A; see above, ll. 21, 22.
31. curious BC; miswritten curios A.
36. nawht B; nouht C; miswritten nahwt A.
42. Astrologiens] miswritten Astrologens ABC; but see l. 50 below.
48. practik B; practyk CM; miswritten practic A.
55. sonne BM; miswritten som A. The seven words, & tables—sonne, are omitted in C.
57. a-nother B; nother A; oper C.
58. clerks AB; clerkus C; but the best spelling is clerkes.
59. theorik BC; thiorik A; but A has theorik in l. 70.
60. þe C; þ B; A omits.

Part I. § 1, l. 1; thowmbe B; þombe CM; miswritten townbe A.
3. wol B; wolde AC.
§ 2, l. 2. Astrelabie] here miswritten Asterlabie A.
N.B. Room is here an adjective, meaning large, ample. It is the right reading; we find Room AB; rowme C; rvm M.
§ 3, l. 1. AB omit þe; in C, it is inserted in the margin; in M, it is found in the text.
2. resseyuyth B; resseyueþ C; rec eyueþ M; miswritten rescuiue A.
3. shapen B; schapen CM; miswritten spapen A.
4. declaracion] here written declaracion A. See sect. 4, l. 6.
§ 4, l. 5. remenant (see sect. 5, l. 5)] remenant C; miswritten remenanañt A; remonant B. downe BC; doun M; dowene A.
§ 5, l. 2. lenghe C; miswritten lengthe A; lenghte B.
§ 6, l. 2. litul B; lytel C; lite A.
§ 7, l. 6. by-twene BC; by-thwene A.
8. that is] this B; pis is [is in margin] C; this, altered to that A.
Perhaps the right reading is 'this is'; but it is immaterial.
§ 9, l. 3. nombre AB; nombure C; but the sense requires the plural.
§ 10, l. 3. Septembre B] miswritten Sextemubre A. 13. August BCM;
Augist A.
§ 12, l. 5. The MSS. all¹ read—"vmbra recta or elles vmbra e-
tensae, & the nether partie is cleped the vmbra versa." This is wrong;
see the note on p. 7.
§ 13, l. 2. a certainty so in AB; CM omit a. But Chaucer certainly
uses the phrase 'a certain'; cf. 'of nuncs a certain', C. T. 16244; 'a
certain of gold', C. T. 16492.
§ 14, l. 4. streynep C; miswritten streynet AB.
N.B. The word halt for holdeth, and the expression to hepe, together,
both occur in Troil. iii. 1770:—
‘And lost were al, that Love halt now to hepe.’
5. ymagyned C; ymaginet B; ymagynd A.
§ 15, l. 2. with BC; wit A.
§ 16, l. 12. hane I C; hane y M; hauy B; hane A.
§ 17, l. 1. principal C; tropikal AB; M om. The reading tropikal
is absurd, because there are but two such; besides which, see l. 33
below.
6. ptholome] ptolomeys almagest M.
9. by-gynmeth B; bygymnep C; by-gynned A.
17. the nyht (over an erasure) B; thee nyht (over an erasure) A;
be nyttes C; be nyhtes M.
20. cleped C; clondrous A; choped B.
25. makep CM; maked AB.
34. turnyth G; turnep C; turned AB.
§ 19, l. 3. ouerthwart M; ouerbewart C; ouertoward A; ouerhart
B. Read ouerthwart; see Ch. Knightes Tale, 1133.
8. for the more; A has fore more here; but see last lines of sections
17 and 18.
§ 20, l. 1. azymutz C; Azamutz B; miswritten azymitz A; so in l.
3, A has the bad spelling azimites.
4. figure; here (and sometimes elsewhere) miswritten vigur A. Throughout-
out the whole treatise, the scribe has commonly written "vigur"; in
many places, it has been corrected to "figure".
§ 21, l. 14. the supplied from BC.
15. is B; ys C; miswritten his A.
26. where as C; wher AB.
28. ymaginet AB; ymagyned C; see l. 25, where, however, it is spelt
ymagened.
¹ As far as I can ascertain.
35. Minutes C; Minnutes B; Minutes A.
39. swich B; sich C; swich A.
43. understonde CM; vnderstonden AB.
53. ouerkerneyd A; ouerkerued A; ouerkerneth (the latter part of the word over an erasure) C; see 1. 54.
56. here] so elsewhere; hir AB, in this place.

PART II. § 2, l. 2. remewe CM; remue AB.
3. thorg; written thorghw A; {porw M; porwe C; to 3ow (!) B.
8. euer M; eure C; euery (wrongly) AB.
§ 3, l. 9. sitten] written siten AB; sitte C; sittyn M.
11. owre] written houre AB; oure C.
22. down B; don A.
30, 31. A has 12 degrees, corrected to 18 degrees; B has 12 degrees; C has 18. The numbers in the MSS. in these propositions are somewhat uncertain; it seems probable that some alteration was made by Chaucer himself.

The readings in MS. B give one set of calculations, which are no doubt the original ones; for in MS. A the same set is again found, but altered throughout, by the scribe who drew the diagrams. The sets of readings are these:—

Ll. 30, 31. 12 degrees B; so in A, but altered to 18; C has 18.
36. passed 9 of the clokke the space of 10 degrees B; so in A, with 9 altered to 8, and 10 altered to 2; C has ij for 9, but agrees with A in the reading 2.
38. fond ther 10 degrees of taurus B; so in A originally, but 10 has been corrected to 23, and libra is written over an erasure. C agrees with neither, having 20 for 10, but agreeing with A as to libra. The later MSS. sometimes vary from all these. See Chaucer’s Astrolabe, ed. E. A. Brae, p. 34.
41. an supplied from C; AB omit.
§ 4, 5. largest C; largesse AB.
6. vpon] upon C; missetwritten vn AB.
7. forside degree of his longitude] forseyde same degree of hys longitude C; forseyde same gre of his longitude P; forseyde latitude his longitude (sic !) AB.
8. planetes C; missetwritten planetes AB, but is is added in margin of A.
14. For “25 degrees,” all the MSS. have “15 degrees.” The mistake is probably Chancer’s own; the correction was made by Mr Brae, who remarks that it is a mere translation from the Latin version of Ptolemy’s Tetrabiblos, which has—“Signum ascendentis, quod est a quingue gradibus qui super horizontem ante ipsum ascenderant usque ad viginti quingue qui ad ascendentem remanserint”; Lib. iii. c. 10. In fact, it is clear that 25 must be added to 5 to make up the extent of a “house,” which was 30 degrees.
15. ys like C; is lik P; missetwritten illyk AB. in is supplied from GM; ABC omit it.
18. Astrologiens B; Astrologens AC.
22. be supplied from CP; AB omit.
30. wel supplied from CPM; AB omit.
34. than] pan CM; thenne P; AB omit.
37. The number 10 is supplied from C; AB omit. It is obviously right, since the third part of 30 is 10.
39. some folk supplied from CPG; AB omit.
41. yit is] AB wrongely have yit it is; but CPGM omit it.
§ 5, 1. 3. by 2 & 2 ACG; by 3 & 3 P; left blank in B. Either reading makes sense, but it is clear that divisions representing three degrees each must have been very awkward.
10. of supplied from CPGM; AB omit.
11. towcheth A; touche[ C; towcheth B.
§ 6, l. 1. nadir B; nadair AC.
5. est C; west A (which is absurd); west (corrected to est) B.
9. signe CGP; signes ABM.
§ 7, l. 1. orisonte B; miswritten oriensonte A.
§ 10, l. 3. than B; pan C; A has & by nyht, which is absurd.
4. A omits day with be howr inequal of be, which is supplied from BCP; the number 30 is also supplied from BCM, as A has a blank space there; see l. 9.
6. answering] answerwenge C; answerwng P; miswritten answerine A; answerit B.
§ 11, l. 8. by nyht B; be nylte A; see l. 3 above, and l. 11 below.
12. The number 4 is from CP; AB omit. per supplied from PM; here C; AB omit.
§ 12, l. 1. the supplied from BC; A omits.
8. The figure 2 is from BCP; G has secunde; A omits.
10. entrith] entrip P; entryth G; entrep CM; miswritten enmistr AB.
§ 13, l. 4. this ys C; this is G; pis is M; pat is P; AB omit is.
§ 14, l. 9. The last line supplied from B.
§ 15, l. 5. varieith] variep CM; varyip P; variet ABG.
6. pointe] point P; pointes A; pointz B; poytes C; but grammar requires the singular.
the supplied from CP; AB omit.
§ 16, l. 5. AB wrongely insert the before Cancer; CP omit it.
8. iilike] Ilyke G; ilik P; y-like U; ilke AB; see l. 7.
§ 17. Latin rubric; for latitudinem (as in M) read longitudinem.
1. 17. hened B; hed ACP; see sect. 16, l. 3. The word “the” (rightly placed in BCMP) is, in A, wrongly placed before “aries” instead of before “ende.”
23. the] be C; AB omit.
25. his] miswritten is in A; here, and in ll. 18, 20, and 22.
§ 18, l. 2. on B; upon C; vpon MP; vn A. Probably the form “vn” points to the reading “vpon” as being the correct one; cf. note above to sect. 4, l. 6.
4. come[ C; comy P; comth AB.
§ 19. *Latin Rubric*; for orison (as in M) read statio.
7. comune B; commonly C; comuly A.
8. decline CP; declinet AB.
§ 20. *Latin Rubric*; the MS. (M) transposes the words in and a,
having a zodiaco in circulo, which contradicts the sense.
2. his CP; is AB.
§ 22. *Latin Rubric*; for centri (as in M) read contrade, or regionis.
3. as hey is] as heiz is C; as hy is P; as hey as (wrongly) AB.
13. distance B] distance CP; distance A.
§ 23, l. 20. The figure "8" is omitted in AB. It is obviously re-
quired.
22. than] A omits; thanne inserted afterwards in B.
§ 25. *Latin Rubric.* For altitudinem, M has latitudinem, an obvious
error, due to the rubric of the preceding section.
3. the] supplied from B; AC omit.
15. CP om. And 10 minutes.
16. CP om. And minutes owt. For 51 degrees and 50 minutes, C
has 52; tan is 52 degrees; and P has 52. penne is .52. grees.
19. CP om. as y myght prove.
20. pe supplied from CP; AB om.
21. whate] so in A; waite B; wayte C.
26. pe firste degre] 10 degrees C; 10 gree P.
27. 58 degrees and 10 Minutes] almost 56 C (meaning 56 degrees);
amost .56, grees P.
28. almost 20] almost 18 C.
It thus appears that there is a second set of readings, involving a
different calculation. The second set supposes the Sun to be in the
10th degree of Leo, his altitude to be 56°, and his declination 18°; the
difference, viz. 38°, is the latitude. Either set of readings suits the
sense, but the one in the text agrees best with the former latitude, viz.
51°. 50°.
33. some C; miswritten sonnes AB.
36. After there, C inserts 38 grees, pat is; and omits the words of the
pole, 51 degrees & 50 Minutes. But this is a mere repetition of the
"height of the Equinoctial," and is obviously wrong. After pole, A
inserts an that, which is unmeaning, and omitted in B.
39. nethere] neperest CP.
§ 26, l. 8. The missing portion appears in MS. Bodley 619; I have
not found it elsewhere. It is obviously correct, and agrees sufficiently
closely with the conjectural addition by Mr Brac, in his edition of
Chaucer's *Astrolabe*, p. 48. He supplied the evident hiatus by the
words—"A right circle or horizon have those people that dwell under
the equinocial line."
13. cenyth BC; cenytht A. A inserts the between 2 and wynteres;
absurdly.
15. schewep CM; miswritten swewyth AB.
22. onerkernep C; on erkeruyht (sic) A; on ekir nyht (!) B; onerkeruip P.
§ 27, 1. 2. the] supplied from BCPM; A om.
3. towchieth] towchiet A; towchiet B; towchi¢ P; towche® C; see l. 6.
§ 28. Latin Rubric. The word recto is obviously wrong; read obliquo, and omit the last five words of the rubric.
2. thyn] so in B; þyn P; þin C; miswitten thyn A.
3. set] sett C; sete P; AB omit.
11. these] these C; these B; the A.
22. ende] heed A; heued C. In fact, heed, heued, or heed seems to be the reading of all the MSS. and printed copies, and may have been a slip of the pen in the first instance. The reading ende is, however, amply justified by its previous occurrence, four times over, in lines 9, 13, 16, 18. We thus have
Six Northern signs. From head of Aries to end of Virgo.
Six Southern signs. From head of Libra to end of Pisces.
Six Tortuous signs. From head of Capricorn to end of Gemini.
Six Direct signs. From head of Cancer to end of Sagittarius.
Opposite "sagittare" is written "sagittarre" in the margin of A, probably as a correction; but it is left uncorrected in l. 26.
§ 29, l. 3. turne thanne] Turne þan C; turne the thanne AB; where "the" is wholly superfluous; see l. 8.
9. thow] þou C; two AB.
13. thorow] so in B; þorow C; thoorw A. rewle] rule CP; miswitten rewles AB; see l. 9.
§ 30. English Rubric; whether] wheþer CP; miswitten whethrer AB.
6, 9. shewith] schevwi¢ P; schevwi¢ C; schevwi¢ M; swewith AB.
11. wey A; place C. After zodiak C inserts—for on þe morowe wol þe somme be in a-noper degre þan þan, & cetera; P inserts—For yn þe morowe wol þe somme be yn an oþergree, & norþer or souþer par aventure. Nothing can be plainer than that "the way of the sun" in this passage means the small circle formed by the sun's apparent path during a day; the text says expressly—"the wey wher as the sonne, wente thilike day." We need not argue about the impossibility of a planet being found in "the way of the Sun" at midnight at the time of the Summer solstice, because Chaucer makes no assertion whatever here about the relative positions of the sun and planet; indeed, he carefully repeats "if" three times. He is only concerned with defining the phrase—"the latitude of a planet from the way of the sun"; and in every possible case, it is clear that a planet can be either (1) situate in the small circle called in the Latin rubric cursus solis, or (2) to the north of such a circle, or (3) to the south of such a circle. About this there need be no difficulty at all. It is all copied from Messahala.
§ 31. l. 7. azymut] azymutz ABC; but it is clear that the singular must be used, as in sect. 32, l. 8. P has minute.
12. sowth B] þe souþe C; soth A.
§ 33, l. 2. Azymnt] Azymutz ABC; minutis P; the same error as in sect. 31, l. 7; but see sect. 32, l. 8. stondith] stondep C; shal stondith (sic) A; where shal is over an erasure.

3. in] yn P; ABC omit. It is of no consequence whether the word in be inserted or not; we find, on the one hand—"& in this same wyse maistow knowe by nyhte;" sect. 2, l. 6; and on the other—"the same wyse wyrke thow;" sect. 37, l. 14.

4. the nyht] so in AB; CP om. the; and perhaps it is better omitted, as in sect. 2, l. 6.

5. After north, B inserts or sowth; C inserts or southe.

§ 34. English Rubric; latitude for] so in CP; latitude and for AB, where and is superfluous, though perhaps it points to the reading latitude as for.

5. is BC; his A.

6. towchith] touchip P; to which (sic) ABC; see sect. 27, l. 6. In A, the word assendente is neatly written above zodiac.

9. Astrolobie'] Astrolobie A.

10. wheyther] whepher CP; wheyth AB.

12. shewe] so in BP; shewe CM; swoewe A.

13. this] pis P; thise AB; pese C; moreover, C has conclusiona.

But the singular seems intended; see l. 8.

§ 35, l. 1. sterre BC; sterree A.

6, 7. whan C; wan AB (twice).

10, 13, 14. his C; is AB (thrice).

15. After west side, AB add & yf he be on the est syde, a mere superfluous repetition; see l. 11.

17. sothly] so P; miswritten he settes (!) AB.

18. hire Episicle] so in CP; by an odd mistake, AB put hire after manere, instead of before Episicle.

§ 36, l. 3. remeue] Remewe CP; remue AB.

5, 7, 10, 16. I leave the spelling howys (or howeis) as it stands in the MS.; see house in l. 12; hoves in l. 13; houes (as in C) in l. 15.

16. Here A inserts the before nadir; it might have omitted, as in ll. 13, 14, 15, and 17. Indeed, MS. B omits it.

§ 37, l. 6. the degree] be degree C; thee degree A. assendeth] ascendeB C; assendet A; assendent B.

9. than] tan C; AB omit.

10. is] AB omit; but it is obviously wanted; C varies here.

12. howse next] 12 hons next C; howses nex (sic) AB.

13. thanne] pan C; fro (!) B; A omits. howse] hous C; howses AB.

16. AB absurdly insert fro before the bygynnyng.

17. the] pe C; AB omit.

§ 38, l. 1. warpyng MP; werpynge C; weripinge (sic) A; wernipinge (sic) B.

2. a CP; AB omit.
3, 4. an euene C; a euene AB (*twice*).

7. fro the centre; i.e. *above* the centre. The length of the pin, measured from the centre in which it is inserted, is to be not more than a quarter of the diameter, or half the radius. This would make the ratio of the gnomon to the shadow (or radius) to be one-half, corresponding to an altitude $a$, where tan $a = \frac{1}{2}$; i.e. to an altitude of about $26^1_2^\circ$. As Chaucer talks about the sun’s altitude being $25^1_2^\circ$ at about 9 o'clock, at the time of the equinoxes (sect. 3), there is nothing that is particularly absurd in the text of this section. For Mr Brac’s conjectural emendations, see p. 56 of his edition.

15. tak thanne] so in P; tak me thanne AB; take me pan C. But there seems no sufficient reason for thus inserting *we* here. Cf. “Tak a rourd plate,” l. 1; “tak than a compas,” l. 14; “tak ther thy lyne,” l. 17.

§ 39. At this point MS. A, which has so far, in spite of occasional errors of the scribe, afforded a very fair text, begins to break down; probably because the corrector’s hand has not touched the two concluding sections, although section 40 is much less corrupt. The result is worth recording, as it shows what we may expect to find, even in good MSS. of the Astrolabe. The section commences thus (the obvious misreadings being printed in italics):

“This lyne Meridional ys but a Maner desciption or the ymagined, that passeth vpon the pooles of pis the world And by the cenyth of owre heued / And hit is the same lyne Meridional / for in what place pat any maner man [omission] any tyme of the yer / whan that the sonne schyneth any thing of the firmament cometh to his verrey Middel lyne of the place / than is hit verrey Midday, pat we clepen owre noon,” &c.

It seems clear that this apparent trash was produced by a careless scribe, who had a good copy before him; it is therefore not necessary to reject it all as unworthy of consideration, but it is very necessary to correct it by collation with other copies. And this is what I have done.

MS. B has almost exactly the same words; but the section is considerably better, in general sense, in MSS. C and P, for which reason I here quote from the former the whole section.

[Ravel. MS. Misc. 1370, fol. 40 b.]

Descripcioun of þe meridional lyne, of þe longitudes and latitudes of Citees and townes, as well as of a (sic) clymatz.

39. conclusio. This lyne meridional is but a maner descipcion or lyne ymagyned, þat passeþ upon þe pooles of þis worlde, and by þe Cenith of oure heued. ¶ And yt is cleped þe lyne meridional, for in what place þat any ys at any time of þe þere, whan þat þe sonne by meynyng of þe firmament come to his verrey meridian place / þan is it þe verrey mydday þat we clepe none, as to þilke man. And þerefore is yt cleped þe lyne of mydday. And note, þat umero of any .2.
cites or of 2 townes, of which pat oo towne a-prochoj pe est pan
dob pe oper towne, trust wel pat pilike townes han diuerse meridians.
Note also, pat pe arche of pe equinoxxial, pat is contened or bownded
by-twixe pe two meridians, is clyped pe longitude of pe towne. T &
3if so be / pat two townes have I-like meridian or one merydian,
\( T \) Than ys pe distance of hem hope I-like fer from pe est, & pe contra-
rye. \( T \) And in pis maner pei change not her meridyian, but soply, pei
changeyn her almykantes, For pe enhaunysynge of pe pool / and pe
distance of pe some. \( T \) The longitude of a clymate ys a lyne
ynagyned fro pe est to pe west, I-like distance fro pe equinoxxial.
\( T \) The latitude of a clymate may be clyped pe space of pe erpe fro pe
by-gynnyng of pe first clymat unto pe ende of pe same clymat / ene-
directe a-zens pe pool artyke. \( T \) Thus seyn soume anctours / and
soume clerkes seyn / pat 3if men clyped pe latitude of a contrye,\(^1\) pe
arche mer[i]dian pat is contened or intercept by-twixe pe Cenyth & pe
equinoxxial; \( T \) pan sey pei pat pe distance fro pe equinoxxial unto pe ende
of a clymat,\(^2\) euene a-gaynes pe pool artik, is pe latitude off pat climat\(^2\)
forsope.

The corrections made in this section are here fully described.

1. of lyne P ; of a line I ; or lyne C ; or the AB.
2. pis] pis the AB, absurdly ; CP omit the, rightly.
3. yeclped the y-clupid pe P ; clyped pe C ; the same (sic) AB.
4. ys at ; supplied from PCI ; AB omit.
5. by moeyng] by meuryng C ; by mevyng PI ; schyneth ony
thing (sic) \( A \) ; schyned eny thing B ; for the spelling moeyng, see sect.
35, 1. 5.
6. meridian CP ; meridianale I ; Middel lyne of the (sic) AB.
7. 2 citees CI ; too citees P ; any lynces (sic) \( \text{AB} \).
8. aprochith] a-prochoj \( \text{C} \) ; aproch\( \text{p} \) P ; minwritten aprochid \( \text{AB} \).
9. more toward] neer C ; ner P ; neerer I ; thoward \( \text{AB} \).
10. conteyned I ; conteynyd P ; contened C ; considered (sic) \( \text{A} \);
contined B.
11. ys P ; 3if C ; if it I ; AB omit. N.B. It would have been
better to have used the spelling \( \text{yf} \), as the word is commonly so spelt
in \( \text{A} \).
21. same CPI ; seconde AB. The reading same is right; for the
"latitude of a climate" means the breadth of a zone of the earth, and
the latitude of the first climate (here chosen by way of example) is the
breadth as measured along a line drawn perpendicular to the equator,
from the beginning of the said first climate to the end of the same.
The words "euene-directe agayns pe poole Artik" mean in the direction
of the North pole; i.e. the latitude of a climate is reckoned from its
beginning, or southermost boundary-line towards the end of the same,
viz. its northern boundary-line.

\(^1\) Here insert—{per mence}—which CP omit.
\(^2\) The words from euene to climat are added at the bottom of the page in
the MS.
22. *pe poole Artik P; pe pool artyke C;* the pole artike I; from north to south AB. Observe that this singular error in A, "euene directe agayns from north to south," probably arose from a confusion of the text "euene directe agayns *pe poole Artik*" with a gloss upon it, which was "from north to south." It is important as throwing light on the meaning of the phrase, and proving that the interpretation of it given above (note to l. 21) is correct.

24. intercept CP; intercepte I; except (over an erasure) AB.

The only reading about which there is any doubt is that in line 18, which may be either "illike distant by-twene them alle" (A), or "*I-like distaunte fro pe equinoxial*" (C). But it is immaterial which reading be adopted, since *Illike-distant* is here used merely in the sense of *parallel*, and the boundaries of the climates are parallel both to one another, and to the equinoctial. The climates themselves were of different breadths.

§ 40, l. 4. this samples AB; *these ensamples C.* For this read thise or these.

5. for sothe] *miswritten* for sonne AB; in general C; *yn* special P; the reading sonne points to sothe, and makes it very probable that for sothe is the true reading.

6. longitude] *pe longitude C; latitude AB (absurdly)*; see l. 11. Perhaps we should read "the longitude"; but it is not very material.

7. planete; *miswritten* that A, *but corrected to planete in the margin; C has planete, correctly.* The figure 6 is omitted in C; so are all the other figures further on. *him] hir C.*

8. I tok] Than toke I C. 8, 15. 2 degrees A; 3 degrees B.

10. Than tok I] Than toke I C; *for tok AB wrongly have stykke, afterwards altered to stokke in A. the] supplied from C, which has pe; AB omit.*

15. hauy A; hane I C.

22. the] *pe C; AB omit.*

25. prikke] prickes C; *perhaps prikkes would be a better reading.*

27. *AB omit the figure 2; but see l. 8.*

30. in alle] in al C; A has septentrionalle, an obvious mistake for septentrional in alle, by confusion of the syllable "al" in the former with "al" in the latter word; B has septentrional, omitting in alle.

33. sothly] so in B; soply C; *miswritten sothly A; see l. 30. signes C] tymes AB (wrongly); see l. 30.*

39. hauy AB; hane I C.

43. Perhaps euene before of should be omitted, as in C. AB have in the ende euene ouer of thee, where euene ouer is repeated from the former part of the line.

44. *F endlang] F endlonge C; A euene AB; but see l. 22.*

45. *A omits of and degrees, yet both are required; BC omit of 3 degrees altogether.*

47. *til] tyl pat C; tho AB (absurdly). saw] sey C; may AB; see l. 27.*
53. hire] his ABC. a] ABC omit.
54. At the word howre four of the best MSS. break off, viz. MSS. ABCE, although E adds one more section, viz. sect. 46; others come to a sudden end even sooner, viz. MSS. DFGHK. But MS. P carries us on to the end of sect. 43, and supplies the words—pu shalt do weel ynow.

§ 41. 6. between] be M (wrongly); by-twix L; see l. 5.
7. M inserts & before to be altitude; a mere slip. For; missivritten
From M. pridde; misswritten ridde M.

11. poyn L; misswritten poyn M.
12. LM wrongly place of after be heyst instead of before it; see the footnote.

§ 42. l. 2. see] so in L; misswritten sette M; see sect. 41, l. 4.
3. y] I L; M omits.
7. M omits as, above, and is be; L has 12 passeth the 6 the.
10. seest] so in L; misswritten settest M; cf. l. 2; P has sixt (a common old form for setest).

11. 60] LN; sexe M.
12. M omits from 10 is to 10 fete, which is supplied from NLP.
13. For] so in LN; fro M.
14. For 2, M has 6.
15. For 3, M has 4; for 2, M has 6; for 6, M has 2; and the words and 3 is 4 partyes of 12 are omitted, though L has—and 4 is the thrird partye of 12.
17. between] by-twene L; bitwixe P; misswritten be M; cf. sect. 41, 6.
18. pre] 3 LP; misswritten pe M.
§ 43. Rubric, Vmbra Versa; obviously a mistake for Recta. The error is repeated in l. 1. LP rightly read Recta.
3. M omits 1, which is supplied from LP; see l. 5.
10. After heythe, LN add to thyn eye. In place of lines 8—10, P has—and so of alle oper, &c.

§ 44. From MS. Digby 72 (N). Also in LMO.
2. fro] so in LO; for M.
3. in-to] so in L; in M. for] so in O; fro M.
6. yeris M; LNO omit.
7. tabelis NO; table M; tables L.
8. where L; quere O; wheper N.
9. loke LM; N omits.
10. NM omit from or what to or; supplied from O, which has—or quwat nombre pat cuere it be, tyl pe tyme pat pou come to 20, or 40, or 60. I have merely turned quwat into what, as in L, which also has this insertion.

12. wretten N; the alteration to wyte is my own; see l. 22.
vnder] so in L; vndirsepe M.
13. to-geder] too-geder M; misswritten to 2 degrees N; to the 2 degrees L.
14. hast M; misswritten laste N; last L.
15. pat; supplied from M; LN omit.
16. For 1 (as in M) LN have 10.
20. to-gedere M; to the degreis N; 2 grees O; to degrees L.
21. pat; supplied from M; LNO omit.
lasse] passid LNO; M omits. Of course passid is wrong, and equally of course lasse is right; see ll. 5, 6 above, and l. 24 below.
24. fat] so in L; pat MO; if hit N.
25. entrynge] entre M; entre L.
26. pe] so in M; miswritten the 3ere N; the 3eer L.
28. merydie LM; merdie N.
30. for LM; fro N (twice).
32. tha3the N; haue tawn't M; haue tawn't O; haue taught L.
33. pe; supplied from M; LNO omit.
34. with pe] so in M; wyche N; see l. 36.
38. in-to N; ym M.
§ 45. From MS. Digby 72 (N); also in LO; but not in M.
4. that] the L; pe O.
6. l-wryton] wryton O; Iwyton N. But L has I wolde wyttyn, and I would therefore, on second thoughts, propose to read—I wolde wyten precise my rote.
7. 1397] miswritten 1391 LN; O has 1391, corrected to 1397; see l. 3.
10. so3th N; sowte O; sowthe L.
12. vnder N; vndyr-nethe O; vndre-nethe L.
18. ofer in any ofer tyme or monyth N; or any oder tymys or monthys O; or in any other moneth L.
24. adde] supplied from L; NO omit. There is no doubt about it, for see l. 14.
27. were pe] so in O; wete thi L; miswritten with thy N; see l. 17.
31. and] supplied from LO; N omits.
32. abowe N; aboue LO.
36. lewyth N; leuyth LO.
§ 41a. This and the remaining sections are almost certainly spurious. The last occurs in MS. Bodley 619 (E) only; the others are in LMN, the first (41a) being also found in O. The text of 41a—42b is from M.
3. hast] supplied from L; M omits.
§ 42a, 1. heyth by thy N; heyth by the L; M om.
4. lyk] lykk M; L omits. mete] mette M; mett L.
9. ys] is L; miswritten hys M.
§ 43a, 1. nat] not L; M omits; see the footnote. In the rubric, M has versam; but L has the rubric—Vimbra Recta.
§ 42b, 5. as] so in L; miswritten & M.
6. 4 is supplied from L; M omits.
§ 46, 9. it] E omits.
ADDITIONAL NOTES.

PROLOGUE. 1. 7. suffisaunt, sufficiently good. In the best instruments, the Almicanteras, or circles of altitude, were drawn at distances of one degree only; in less carefully-made instruments, they were drawn at distances of two degrees. The one given to his son by Chaucer was one of the latter; see Part II. sect. 5.

10. a certein, i. e. a certain number; but the word nombre need not be repeated; cf. a certein holes, Pt I. sect. 13, l. 2, and see the very expression in the Milleres Tale, l. 7.

20. suffise, let them suffice.

58. "Nicolaus de Lymna, i. e. of Lynn, in Norfolk, was a noted astrologer in the reign of Edward III., and was himself a writer of a treatise on the Astrolabe. See Bale—who mentions 'Joannes Sombe' as the collaborateur of Nicolaus—'Istos ob eruditionem multiplicem, non vulgaribus in suo Astrolabio celebrat landibus Galfridus Chaucer poeta lepidissimus;'

Bale (edit. 1548), p. 152."—Note by Mr Brac, p. 21 of his edition of the Astrolabe.

Warton says that "John Some and Nicholas Lynne" were both Carmelite friars, and wrote calendars constructed for the meridian of Oxford. He adds that Nicholas Lynne is said to have made several voyages to the most northerly parts of the world, charts of which he presented to Edward III. These charts are, however, lost. See Hakluyt's Voyages, i. 121, ed. 1598; Warton, Hist. E. P. ii. 357; ed. 1871.

Tywrwhitt, in his Glossary to Chaucer, s. v. Somer, has the following. "The Kalendar of John Somer is extant in MS. Cotton, Vesp. E. vii. It is calculated for 140 years from 1367, the year of the birth of Richard II., and is said, in the introduction, to have been published in 1380, at the instance of Joan, mother to the king. The Kalendar of Nicholas Lenne, or Lynne, was calculated for 76 years from 1387. Tanner in v. Nicolaus Linensis. The story there quoted from Hakluit of a voyage made by this Nicholas in 1390 ad insulas septentrionales aut haec Europaeis incognitas, and of a book written by him to describe these countries a gradu .54. usque ad polum, is a mere fable; as appears from the very authorities which Hakluit has produced in support of it." It seems probable, therefore, that the "charts" which Warton says are "lost" were never in existence at all. The false spelling "Some" no doubt arose from neglecting the curl of contraction in Somere.
PART I. § 5, l. 5. the remanant, &c. i.e. the rest of this line (drawn, as I said,) from the foresaid cross to the border. This appears awkward, and we should have expected "fro the forscide centre," as Mr Brae suggests; but there is no authority for making the alteration. As the reading stands, we must put no comma after "this lyne," but read on without a pause.

7. principals. It is not unusual to find adjectives of French origin retaining s in the plural; only they commonly follow their nouns when thus spelt. Cf. lettres capitals, i. 16. 8. On the other hand, we find principal cerkles, i. 17. 33.

§ 7. 4. novembres of augrym; Arabic numerals. The degrees of the border are said to contain 4 minutes of time, whilst the degrees of the signs are divided into minutes and seconds of angular measurement, the degrees in each case being the same. There is no confusion in practice between these, because the former are used in measuring time, the latter in measuring angles.

§ 8. 9. Alcbabucius; i.e. (says Warton, Hist. E. P. ii. 357, ed. 1871) Abdilazi Alchabitius, whose Introductiorium ad scientiam judicialem astronomia was printed in 1473, and afterwards. Mr Brae quotes the very passage to which Chaucer refers, viz. "Et unumquidque istorum signorum dividitur in 30 partes equales, que gradus vocantur. Et gradus dividitur in 60 minuta; et minutum in 60 secunda; et secunda in 60 tertia; similiterque sequuntur quarta; similiter et quinta; ascendendo usque ad infinita;" Alchabitii Differentia Prima.

These minute subdivisions were never used; it was a mere affectation of accuracy, the like of which was never attained.

§ 10. 5. in Arabysens, amongst the Arabians. But he goes on to speak only of the Roman names of the months. Yet I may observe that in MS. ii. 3. 3, at fol. 97, the Arabian, Syrian, and Egyptian names of the months are given, as well as the Roman.

§ 16. 12. & every Minut 60 secondes; i.e. every minute contains 60 seconds. The sentence, in fact, merely comes to this. "Every degree of the border contains four minutes (of time), and every minute (of time) contains sixty seconds (of time)." This is consistent and intelligible. Mr Brae proposes to read "four seconds"; this would mean that "every degree of the border contains four minutes (of time), and every minute (of the border) contains four seconds (of time)." Both statements are true; but, in the latter case, Chaucer should have repeated the words "of the bordure." However this may be, the proposed emendation lacks authority; although the reprint of Speght changed "Ix" into "fourie," which comes near to "four." But the reprint of Speght is of no value at all. See Mr Brae's preface, p. 4, for the defence of his proposed emendation.

§ 17. 6. Ptholome. The John's MS. has ptolomeys almagest. "Almagest, a name given by the Arabs to the μεγάλη σύνταξις, or great collection, the celebrated work of Ptolemy, the astronomer of Alexandria [floruit A.D. 140—160]. It was translated into Arabic about the year
A.D. 827, under the patronage of the Caliph Al Mamun, by the Jew Alhazen ben Joseph, and the Christian Sergius. The word is the Arabic article al prefixed to the Greek megistus, 'greatest,' a name probably derived from the title of the work itself, or, as we may judge from the superlative adjective, partly from the estimation in which it was held."—English Cyclopaedia; Arts and Sciences, i. 223. The Almagest was in thirteen books. Ptolemy wrote also four books of judicial astrology. He was an Egyptian astrologist, and flourished under Marcus Antoninus. He is mentioned in the Somnour's Tale, l. 1025, and the Wif of Bathes Prologue, l. 324."—Warton, Hist. E. P. ii. 356, ed. 1871. The word almagest occurs in the Milleres Tale, near the beginning, and twice in the Wif of Bathes Prologue.

Chaucer says the obliquity of the ecliptic, according to Ptolemy, was 23° 50'. The exact value, according to Ptolemy, was 23° 51'. 20"; Almagest, lib. i. c. 13. But Chaucer did not care about the odd degree, and gives it nearly enough. See note to ii. 25. 18.

8. tropos, a turning; Chaucer gives it the sense of agaynward, i. e. in a returning direction.

14. The equinoctial was supposed to revolve, because it was the "girdle" of the primum mobile, and turned with it. See note below to l. 27.

14. "As I have shewed thee in the solid sphere." This is interesting, as shewing that Chaucer had already given his son some lessons on the motions of the heavenly bodies, before writing this treatise.

26. angulus. We should rather have expected the word spera or sphaera; cf. "the sper solide" above, l. 15.

27. "And observe, that this first moving (primus motus) is so called from the first movable (primum mobile) of the eighth sphere, which moving or motion is from East to West," &c. There is an apparent confusion in this, because the primum mobile was the ninth sphere; but it may be called the movable of the eighth, as giving motion to it. An attempt was made to explain the movements of the heavenly bodies by imagining the earth to be in the centre, surrounded by a series of concentric spheres, or rather shells, like the coats of an onion. Of these the seven innermost, all revolving with different velocities, each carried with it a planet. Beyond these was an eighth sphere, which was at first supposed to be divided into two parts, the inner part being the firmamentum, and the outer part the primum mobile; hence the primum mobile might have been called "the first moving of the eighth sphere," as accounting for the more important part of the motion of the said sphere. It is simpler, however, to make these distinct, in which case the eighth sphere is the firmamentum or sphaera stellarum fixarum, which was supposed to have a very slow motion from West to East round the poles of the zodiac to account for the precession of the equinoxes, whilst the ninth sphere, or primum mobile, whirled round from East to West once in 24 hours, carrying all the inner spheres with it, by which means the ancients accounted for the diurnal revolution.
This ninth sphere had for its poles the north and south poles of the heavens, and its "girdle" (or great circle equidistant from the poles) was the equator itself. Hence the equator is here called the "girdle of the first moving." As the inner spheres revolved in an opposite direction, to account for the forward motion of the sun and planets in the ecliptic or near it, the *primum mobile* was considered to revolve in a backword or unnatural direction, and hence Chaucer's apostrophe to it (Man of Lawes Tale, 295)—

"O firste moneyng cruel firmament,  
With thy diurnal sweigh that crowdest ay  
And hurlest al from Est til Occident,  
That natrellly wolde holde another way."

That is—"O thou *primum mobile*, thou cruel firmament, that with thy diurnal revolution (or revolution once in 24 hours round the axis of the equator) continually forecast along and whirlest all the celestial bodies from East to West, which naturally would wish to follow the course of the sun in the zodiac from West to East." This is well illustrated by a sidenote in the Ellesmere MS. to the passage in question, to this effect:—"Vnde Ptholomaeus, libro i. cap. 8. Primi motus celi duo sunt, quorum unus est qui monet totum semper ab Oriente in Occidentem vno modo super orbis, &c. Item aliter vero motus est qui monet orbem stellarnm currencium contra motum primum, videlicet, ab Occidente in Orientum super alios duas polos."¹ That is, the two chief motions are that of the *primum mobile*, which carries everything round from East to West, and that of the fixed stars, which is a slow motion from West to East round the axis of the zodiac, to account for precession. This exactly explains the well-known passage in the Frankeleines Tale (C. T. ed. Tyrwhitt, 11592)—

"And by his eighte spere in his werking,  
He knew ful wel how fer Alnath was shove  
Fro the hed of thilke fix Ariete above  
That in the ninthe spere considered is."

Here the eight spheres are the eight inner spheres which revolve round the axis of the zodiac in an easterly direction, whilst the ninth sphere, or *primum mobile*, contained both the theoretical or *fixed* first point of Aries from which measurements were made, and also the *signs* of the zodiac as distinct from the *constellations*. But Alnath, being an actual star, viz. α Arietis,² was in the *eighth* sphere; and the distance between its position and that of the first point of Aries at any time afforded a measure of the amount of precession. Mr Brae rightly re-

¹ This is doubtless quoted from some gloss upon Ptolemy, not from the work itself. The reference is right, for the "motus celi" are discussed in the Almagest, lib. i. c. 8.

² This star (α Arietis) was on the supposed horn of the Ram, and hence its name; since *El-nath* signifies "the butter," and "El-nath" is "butting" or "pushing." See Ideler, Die Bedeutung der Sternnamen, p. 135.
marks that Tyrwhitt's readings in this passage are correct, and those of Mr Wright and Mr Morris (from the Harleian MS.) are incorrect.

It may be as well to add that a later refinement was to insert a crystalline sphere, to account for the precession; so that the order stood thus: seven spheres of planets; the eighth, of fixed stars; the ninth, or crystalline; the tenth, or primum mobile; and, beyond these, an empyrean or theological heaven, so to speak, due to no astronomical wants, but used to express the place of residence of celestial beings. Hence the passage in Milton, iii. 481.

"They pass the planets seven, and pass the fix'd,
And that crystalline sphere whose balance weighs
The trepidation talk'd, and that first mov'd."

i.e. They pass the seven planetary spheres; then the sphere of fixed stars; then the crystalline or transparent one, whose swaying motion or libration measures the amount of the precession and nutation so often talked of; and then, the sphere of the primum mobile itself. But Milton clearly himself believed in the Copernican system; see Paradise Lost, viii. 121—140, where the primum mobile is described in the lines—

"that swift
Nocturnal and diurnal rhomb supposed,
Invisible else above all stars, the wheel
Of day and night."

§ 18. 8. compounded by 2 & 2. This means that in the best astrolabes, every almicantarath for every degree of latitude was marked; as may be seen in Metius. In others, including the one given by Chaucer to his son, they were marked only for every other degree. See Part II, sect. 5, 1. 2.

§ 19. 7. cenyth, as here used, has a totally different meaning from that of senyth, in l. 1 above. The senyth in l. 1 is what we still call the senyth; but the cenyth in l. 7 means the point of the horizon denoting the sun's place in azimuth. Contrary to what one might expect, the latter is the true original meaning, as the word zenith is corrupted from the root of the word which we now spell azimuth. The Arabic as-samt is a way or path; al-samt, a point of the horizon, and, secondly, an azimuthal circle. The plural of al-samt is assumut, whence azimuth. But zenith is a corruption of sent, from samt al-ras, the Arabic name of the vertex of heaven (ris meaning a head); and the qualifying al-ras, the most important part of the phrase, has been improperly dropped. So far from the reading cenyth being wrong here, it is most entirely right, and may be found in the same sense in Messalaha. See p. 41, footnote. For cenyth, some late copies have signet, evidently taken from the

1 Well expressed by Dante, Parad. xxx. 38—

"Noi semo usciti fuore
Del maggior corpo al cie! ch'è pura luce."

Dante, like Chaucer, makes the eighth sphere that of fixed stars, and the ninth the primum mobile or swiftest heaven (ciel velocissimo); Parad. xxvii. 99.
Latin word *signum*. They make the same mistake even in l. 10 of section 18.

§ 21. 4. *stelae fixes*, fixed stars; here the *s* again appears in a plural adjective of French derivation. In MSS. ii. 3. 3 and ii. 1. 13 in the Cambridge University Library, is an interesting list of the 49 stars most usually placed upon the Astrolabe, which I have printed in the Preface to this volume. The stars which are represented by the points of the tongues in Fig. 2 are the same as those in the diagram from which Fig. 2 is copied, the original of which is in MS. A. I have slightly altered the positions of the points of the tongues, to make them somewhat more correct. The following is the list of the stars there shown; most of their names are written in the MS. Cf. footnote on p. 12.

*Within the Zodiac.* In *Aries*, Mirach, or β Andromedæ, shown by a short tongue above Aries; in *Taurus*, Algol, or β Persei, as marked; in *Libra*, Aliot or Alith, i.e. ε Ursæ Majoris (the third horse, next the cart, in Charles's Wain), as marked; also Alranech, Arcturus, or α Boötes, shewn by the tongue projecting above Libra; in *Scorpio*, Alpheta, Alphecca, or α Coronæ Borealis, as marked; in *Sagittarius*, Raz Albagius, or α Ophiuchi, near Alpheta; in *Capricornus*, Altair or α Aquilæ and Vega or α Lyraæ, as marked, whilst near Vega is the unmarked Arided, or α Cygni; and in *Pisces*, Markab or α Pegasi.

*Without the Zodiac.* In *Aries*, under Oriens, the slight projection marks β Ceti or Deneb Kaitos, the Whale's Tail, and the next curiously shaped projection (with side-tongues probably referring to other stars) means Batukaitos or Batnkaitos, the Whale's Belly, apparently ζ Ceti; next come the long tongue for Menkar or α Ceti, the Whale's Nose; the star Aldebaran or Bull's Eye, α Tauri; Rigel or β Orionis, Orion's Foot; Alhabor or Sirius, the Dog-star, marked by a rude drawing of a dog's head, the star itself being at the tip of his tongue; then Algomeisa, Procyon, or α Canis Minoris, marked by a tongue pointing to the left, whilst the long broad tongue pointing upwards is Regulus, Kalbalased, or α Leonis; the small tongue above the letter I in the border is Alphard or Cor Hydææ. Above Occidens, in *Libra*, the first tongue is Algorab or δ Corvi, and the next Spica Virginis or Azimech; close to the 8th degree of *Scorpio* is α Librae, and close to the beginning of *Sagittarius* is a small head, denoting the Scorpion, at the tip of the tongue of which is the bright Kalbalacrab or Antares. The last, a projection below the letter X, is Deneb Algebi or the Goat's Tail, i.e. δ Capricorni.

7. That is, the little point at the end of each tongue of metal is technically called the "centre" of the star, and denotes its exact position.

9. The stars of the North are those to the North of the *zodiæ*, not of the *equator*.

12. Aldebaran, &c.; the stars Aldebaran (α Tauri) and Algomeisa (α Canis Minoris) are called stars of the south, because they are to the south of the ecliptic; but as they are meanwhile (see Fig. 2) also to the north of the equator, they of course rise to the N. of the Eastern point of the horizon. The longitude of stars was always measured
along the ecliptic, which is denoted in Fig. 2 by the outermost circle of the metal ring on which the names of the signs are written.

In one of the tracts in MS. G (dated A.D. 1486), p. 30, we find "Aldobran, in the first gre of geminis (sic), of the nature of Mars and Venus;" and "Algomeisa, canis minor, in the xvij gre of Cancer, of the nature of Mars and Mercury."

28. Amirides, &c. Observe that the Ecliptic line, though in the midst of the celestial zodiac, a belt 12° broad, is on the outer edge of the zodiac as shewn in the astrolabe, which is only 6° broad and shows only the northern half of that belt. The "way of the sun" is elsewhere used of the sun's apparent diurnal path (see Part ii. sect. 30); but it here probably refers, as is more usual, to the annual path.

33. streitnes, narrowness, closeness, smallness of size. In Fig. 2, I have marked every degree in the southern half of the zodiac, but only every fifth degree in the northern, in order to avoid an appearance of crowding in so small a figure. In Chaucer's own astrolabe, every other degree was marked all round.

38. Here Chaucer gives at least three reasons for the name of "zodiac." The true one is the second, "for that the sterres that ben there fixed ben disposed in signes of bestes, or shape like bestes." But these imaginary shapes are very absurd and arbitrary.

48. Not only the influences here assigned to the signs, but others due to planets, may be found in "Porphyrii Philosophi introductio in Claudii Ptolomaei opus de affectibus astrorum," fol. Basilice, n. d. p. 198. I here add a few extracts from the MS. in Trinity College, Cambridge (marked R. 15. 18), to shew the nature of the old astrology. I choose them with especial reference to Aries. The other signs are spoken of in a similar manner. "It is principally to be considered that the signes of hevyn haue theire strenght and propre significacion upon the membirs of eny man; as, Aries hath respect to the hed, taurns to the neck, geminis (sic) the Armys, Cancer the brest, leo the hert, virgo the bowels, &c; as it shall shew in the Chapiters folowyng. Secundarily it is to be noted that plotholomoe (sic) saith, that to touche with instrument of yroun while the mone is in the signe of the same member, is for to be dred; let the surgen beware, and the letter of blode, let hym be afed to touche that membre with yrene, in the which the mone shal be."—MS. G (see the preface); Tract C. p. 12.

"Thenne Aries hath respect to the hed; And this signe is hote and dry, fiery & colerik. Saturne hath ij witnes in Ariete, a triplicitate and a terme. Jubiter also hath ij, a triplicitate and a terme. Mars hath iij testimonials or iij fortitudis in Ariete, A hows, A face, and A terme. The sonne hath iij fortitudis in Ariete, scilicet, an exaltacion, a triplicite, and a face. Venus hath iij testimonials, A terme and a face. Mercury hath one testemony, that is to sey, a terme. And luna

1 From this same MS. I have copied the figure of a man shewn in Fig. 19. The copy was hurrily made, and is by no means a good one; but it may serve to show the manner of denoting the influence of the signs upon a man's body.
in Ariete hath no testimoniall. For the which it is to know, that the
influens of the planetis may be fortyfied v maner of wayes. And these v
maner be called v fortitudis of planetis, or testimonialls, which be these:
domus, exaltacio, triplicitas, terminus, and facies. Domus gevith to a
planet v fortitudis; And a planet in his hows is lyke a kynge in his
hall, And in the high trone of his glorie. A planet in his exaltacioun
is lyke a kynge when he is crowned. A planet in his triplicite is like
e a kynge in honour, Amonge his sencible people. A planet in his terme
is As a man a amonges his kynnesmen And fyndis. Facies gevith to
A planet that thynge the which rowme gevith to a maistre. Wherfore
facies gevith only on fortitude, Terminus iiij, Triplicitas iiij, Exaltacio iiiij,
And domus v. And for the more clere declaracioun, the dignytes of
planettis in signes be comprehendid in this figure ensyynge, &c. —
Same MS., Tract C. p. 13.

"The dignytes of planetis in signes, most speciall they be to be
noted in iudicials. When the mone is in Ariete, it is not gode, but
vterly to be exshewed, both for seke And disesid, for to shafe their
hede or to boist in the cris or in the nek; nor loke jou let no blode in
the vayn of the hede. How-be-it, benificiall it is to begynne every
worke that jou woldest bryng aboute sone. But that thynge that is
stablil ought to be eschewed. In this signe it is necessary to dele with
noble estatis And rich men, And for to go in-to A bayne [ball]. —

52. See Prologue, l. 68. As the zodiak is here called a part of the
eighth sphere, so we have been before told that the equinoctial is
the girdle of the ninth sphere; see note above to sect. 17. l. 27.

54. euene partes, equal parts. That is, the equinoctial bisects the
zodiac. But the northern half looks much smaller than the southern on
the Astrolabe, owing to the manner in which the zodiac is there repre-
sented, viz. by projection on the plane of the equator.

PART II. § 1. Rubric. hir cours. The gender of the sun was
feminine in Anglo-Saxon, and that of the moon masculine; but in
Chancer's time, the gender was very variable, owing to the influence of
Latin and French.

§ 3. Between sections 2 and 3, a section is inserted in the late

1 Here follows a table, shewing that, in Aries, the value of Saturn is 5, of
Jupiter 5, &c.; with the values of the planets in all the other signs. The value
5, of Saturn, is obtained by adding a triplicite (value 3) to a terme (value 2),
these being the "witnesses" of Saturne in Aries; and so on throughout.
2 So on p. 12 of another tract (D) in the same MS., we find—

Aries caudum & suum; domum.
Nill capiti noces, Aries cum lunae refugel,
De vena minus & balnea tutius intres,
Non tangas Aures, nec barbam radere debe.

Each of the signs is described in similar triplets, from the grammar of which
I conclude that Aries is here put for in Ariete, in the first hexameter.
copies, which merely repeats section 1, and is clearly spurious. It does not appear at all in the best MSS. I quote it here from MS. L.

"To knowe the degre of thyn sonne in thyn zodiak by the days in the baksyde off the Astrolabye.

[Th]anne sif pou wytle wete thatt / rekyn & knowe / qwych is the day off the monyth that thow arte yyne, & ley thy rewle of thy astrolabye, that is to sey, the allydytha, vpon þe day in the kalendre off the Astrolabye, & he schall schewe the thy degree of the sonne."

26. After "asendant," the following additional paragraph occurs in MS. Bodley 619 ; fol. 21. It is worthy of notice, because the original of it appears in Messahala's treatise, with the title "De noticia stelliarum incognitarum positarum in astrolabio." The paragraph runs thus:—

"Nota. þat by þis conclusiou þou may knowe also where ben at þat same tymne alle ofir sterres fixed þat ben sette in thin Astrolabie, and in what place of þe firmament ; And also her arising in thy orizonte, and how longe þat thei wol ben aboue þe erthe wip þe Arke of þe nyght / And loke euermore how many degrees þou fynde eny sterre at þat tymne sitting vpon þin Almycanteras, and vp-on as many degrees sette þou þe reule vpon þe altitude in þe bordere ; And by the mediacion of þy eye through þe 2. smale holes shalt thou se þe same sterre by the same altitude aforseid, And so by this conclusion may þou redely knowe whiche is oo sterre from a- Nepin in the firmament / for as many as ben in the Astrelabie. For by þat same altitude shal thou se that same sterre, & non othir / for þere ne wolde non othir altitude accorde perto."

29. Alhabor; i.e. Sirius or the Dog-star, as is evident from the fact of its being represented by a dog’s head on the Astrolabe ; see also the table of stars on the Astrolabe, which give the declination 16° S, the latitude 39° S, and place the star in Cancer. It is also plainly described in the same table as being "in ore canis," so that it is difficult to resist the conclusion of the identity of Alhabor and Sirius. Mr Brae, following later copies that have different readings of the numbers employed, identifies Alhabor with Rigel or β Orionis. This is impossible, from the fact that Rigel and Alhabor both occur in the diagrams and tables; see, for instance, fig. 2. It is true that Rigel was sometimes called Algæbar, but Alhabor stands rather for the Arabic El-Abur. The Arabic name for the constellation Canis Major was El-khelb el-akhiber, "greater dog," as distinguished from El-khelb el-esger, or "lesser dog;" and the star α Canis Majoris was called El-schira el-abîr, from the former of which terms (el-schîra) we get Sëriús, and from the latter (el-abûr) we have Alhabor. See Ideler, über den Ursprung und die Bedeutung der Sterbnamen, pp. 237, 256.

§ 4. "The houses [in astrology] have different powers. The strongest of all these is the first, which contains the part of the heaven about to rise: this is called the ascendant; and the point of the ecliptic which is just rising is called the horoscope."—English Encyclopædia; art. Astrology.

ASTROLABE.
20. In the English Cyclopædia, art. Astrology, a quotation is given from an astrological work, in reply to the question whether the "querent" should succeed as a cattle-dealer. It contains some words very similar to Chaucer's. "If the lord of the sixth be in quartile, or in opposition to the disposer of the part of Fortune, or the Moon, the querent cannot thrive by dealing in small cattle. The same if the lord of the sixth be afflicted either by Saturn, Mars, or the Dragon's Tail; or be found either retrograde, combust, cadent, or peregrine. [See l. 31.] The Dragon's Tail and Mars shew much loss therein by knives and thieves, and ill bargains, &c.; and Saturn denotes much damage by the rot or murrain." The evil influence of the Dragon's Tail is treated of in the last chapter of "Hermetis Philosophi de revolutionibus nativitatum," fol. Basileæ; n. d.

30. "May see the ascendant." Cf. "Cum dominator ascendens videt, res quæ occulta est secundum ascendentis naturam erit; quod si non videt, illud erit secundum naturam loci in quo ipse est dominator;" Cl. Ptolemaei Centiloquium; sect. 90.

38. Pace. See note to Part I, sect. 21. l. 48. The late copies are very incorrect hercabbouts.

§ 6. 9. Mr Brae well calls attention here to the absurd errors in the printed copies. Thynne has "in the 320 signe," and Speght "in the xxiii signe." The signs of the zodiac are only twelve, and the one opposite to the 1st is the 7th.

§ 8. I see no reason for supposing this proposition to be an interpolation, as Mr Brae suggests. Though similar to § 11, it is not identical with it. Moreover, it occurs in Messahala.

§ 9. 1. the chapitre befor, i. e. a previous chapter, viz. in sect. 6.

The expression supplies no argument for altering the order of the "conclusions."

4. same manere, i. e. a like manner. The "vulgar night" clearly means that the quantity of the "crepuscles" must be subtracted from the "arch of the night."

§ 13. 5. cours, course; heiest cours, highest point of the path. Late copies have lyne; for which Mr Brae suggested degre.

§ 14. 6. but 2 degrees. Suppose the sun's midday altitude is 49°, in latitude 52°. Then the co-latitude is 38°, and the sun's declination 11° North. This corresponds nearly (roughly speaking) to the 1st degrees of Taurus and Virgo. Which is right can "lightly" be known by the time of year, for the sun cannot be in Virgo, if the month be April. Compare sect. 15.

§ 17. This conclusion, as pointed out in the footnote, is not correct in theory, but can be made nearly so in practice, by taking the two altitudes very near the meridian. This is directly implied in the words "passeth any-thing the sowth westward," i. e. passes ever so little westward of the south line; cf. note below to 38. 9. Consequently, the first observation must also be taken very near the meridian.

24. site, situation. Late copies, sight.
§ 18. Instead of reckoning a star’s right ascension by referring it to
the equator, it was reckoned by observing the degree of the zodiac
which southerly along with it. This is expressed in the first “Table of
fixed stars” (in the Preface) by the phrase “cum gradibus, quibus
celum mediant;” the other co-ordinate of position was the star’s de-
clineation from the equator, as in the modern method. The ancients also
used the co-ordinates of longitude and latitude of a star, the longitude
being reckoned along the ecliptic, and the latitude along great circles
through the poles of the ecliptic; as appears from the second Table in
the Preface.

§ 19. 6. *equinoctial.* This, as explained in the footnote, should be
“ecliptik;” but I can find no MS. authority for the alteration.

§ 22. 13. place. Late copies *planet;* absurdly. Latitudes of several
places are given in old Latin MSS. They are frequently incorrect.

§ 23. 3. The star A is shewn by the numbers to be the Pole-star,
and is obviously the one to be observed in order to find the altitude of
the Pole. What the star F is, is of no consequence. The numbers used
in other copies are different, and much less satisfactory. That the star
A is the Pole-star or some star near the pole in this “conclusion,” is
rendered probable also by the wording of the next “conclusion;” which
extends the working of it to the case of any other star, provided it be a
star that never sets.

§ 25. 18. When Chancer says that the latitude of Oxford is “certain
minutes less,” he probably means no more than that the latitude of
Oxford was 51 degrees and 50 minutes, as in the text. For I suspect
the original reading of the passage made the sun’s altitude 38 degrees
only, and the latitude 52 degrees; indeed, the passage stands so in MSS.
C and P, both good authorities. But he added the statement that the
latitude of Oxford was less than 52 degrees. It is probable that, on
second thoughts, he put in the number of *minutes,* and forgot to strike out
the clause “I say nat this,” &c., which was no longer necessary. Minutes
were seldom reckoned otherwise than by *tens;* “a few minutes less than
50” (say 47) is a refinement to which the ancients seldom attained.
Hence the amount of 10 minutes is vaguely spoken of in l. 30 as “oddie
Minutes.” Minutes were clearly not much considered. In the present
case, we are assisted by Chancer’s express statement in sect. 22. l. 6.

§ 26. 8—11. It is singular that this sentence, obviously wanted,
should appear only in one MS., and has, accordingly, been deficient in
all previous editions. There can be no doubt about the genuineness of
it, as it so exactly gives the right sense, and happily supplies the words
“right orisonte” in l. 11; thus enabling the author to say, as in l. 20
he does say—“this forseid rihte orisonte.”

15. *this figure.* Here occurs, in some of the MSS., a diagram repre-
senting a circle, i.e. a disc of the astrolabe, with straight lines drawn
across it from left to right.

16. *Assensions in the rihte circle.* This exactly answers to our
modern “right ascension.” We hence obtain the true origin of the
phrase. "Right ascension" was, originally, the ascension of stars at places situate on the equator, and was most conveniently measured along the equatorial circle, by observation of the times of transit of the various stars across the meridian. In other latitudes, the ascension of every degree of the zodiac could be easily tabulated by observing what degree of the equator came to the meridian with the said degree of the zodiac; see 1. 18. It hence appears that, whilst persisting in using "longitudes" and reckoning along the zodiac, the ancients were obliged, in practice, to refer the degrees of longitude to the equator. The modern method of recognizing this necessity, and registering right ascensions as of more importance than longitudes, is a great improvement. The ancients were restrained from it by their unnecessary reverence for the zodiac. Cf. Ptolemy's Almagest, lib. i. c. xiii.

§ 29. Chaucer omits to say that the experiment should be made when the sun is very nearly on the meridian. Otherwise, the confusion of the azimuth with the hour-angle might cause a considerable error.

§ 30. That the phrase "wey of the sonne" really means the sun's apparent diurnal course in this conclusion, may be further seen by consulting the Latin of Messahala. Mr Brae objects to this; but I see no limit to the planet's position in the words of the conclusion. Cf. the Critical Note.

§ 31. In my footnote, I have used the expression "it does not mean, as it should, the zenith point." I mean—"as, according to our modern ideas, it should;"—for the derivation of zenith shews that the meaning used in this proposition is the older meaning of the two. See note above to i. 19. 7.

5. 24 parts. These 24 parts were suggested by the 24 hours of the day. The "32 parts" used by "shipmen" are due to the continual halving of angles. Thus, the four cardinal points have points half-way between them, making eight points; between which, we can insert eight more, making sixteen; and between these, sixteen more, making thirty-two. Hence the 32 points of the compass.

§ 33. 5. We should probably insert or south after the word north. Cf. the Critical Note.

§ 34. 3. That "vpon the mones side" means nearly in the same azimuth as the moon is apparent from i. 11 below, where Chaucer says that some treatises make no exception even if the star is not quite in the same azimuth. This was certainly a rough mode of observation.

§ 35. 9. riht side, East side. See i. 6. 1.

18. Episicle, epicycle. To account for the planetary motions, epicycles were invented. The moon, for instance, was supposed to revolve round a moving centre, which centre itself moved round the earth in a perfect circle. This came a little nearer to the true motion in some instances, but was hopelessly wrong, and nothing could be made of it, even when a second epicycle, revolving about a centre which moved in the first epicycle, was superadded. All that Chaucer says here is, that, whilst the centre of the moon's epicycle had a direct
motion, the moon's motion in the epicycle itself was a reverse one, unlike that of the other planetary bodies. The subject is hardly worth further discussion, so I merely refer the reader to the Almagest, lib. iv. c. 5; and lib. ix. c. 5.

§ 36. The "equations of houses" means the dividing of the sphere into equal portions, and the right numbering of those portions or houses. The most important house was the first, or ascendent, just rising; the next in importance was the tenth, which was just coming on the meridian; then come the seventh or descendent, just about to set, and the fourth, just coming to the line of midnight. The next in importance were the succedents, or houses immediately following these, viz. the second, the eleventh, the eighth, and the fifth. See Succedent in the Glossary.

§ 37. 17. thuse 3 hoseez. That is, the nadirs of the 2nd, 3rd, and 4th houses give the houses that "follow," i.e. the 8th, 9th, and 10th. The word "follow" here seems to refer, not to position, but to the order in which the houses may most conveniently be found. Chaucer omits to add that the beginnings of the 5th and 6th houses can be found in a similar way, because it is sufficiently evident. See the original in Messahala.

§ 38. 1. for warpyng, the bordere the bettre. This may mean, either (1) to prevent warping; the thicker the better; or (2) to prevent the errors arising from warping (because of warping) the larger the better. I believe the latter to be the true interpretation; for it is better thus to guard against possible errors than to make the plate very thick and, at the same time, small. Besides which the usual meaning of bordere is wider, larger, more ample. Indeed, we find the very expression "non sit tamen nimis parvus" in the 4th section of the Practica Chilindri of John Hoveden, published by the Chaucer Society; which see.

7. fro the centre, i.e. sticking up above the centre, the length of the wire being equal to a fourth of the diameter, or half the radius, of the circle. This proportion would do for many days in the year; but in the summer time, the pin would bear to be rather longer. Still, we need not alter the text. Cf. the Critical Note.

9. any-thynge, i.e. ever so little; so any-thynge in l. 12.

§ 39. Though MS. A. is rather corrupt here, there is little doubt about the corrections to be made. See the Critical Notes.

19. That is, the latitude, or breadth, of a climate, or belt, is measured along a line which goes from North to South as far as the earth extends; so that the latitude of the first climate, for example, is measured from the beginning of it to the end of the same, in a due northerly direction. Other authors, he explains, reckoned the latitude of a climate always from the equinoctial line, instead of from the parallel of latitude which terminated the climate immediately to the south of it. Thus the latitude of the fourth climate might mean, either the breadth of that belt itself, or the whole breadth from the equator to the Northern limit of that climate. The MS. E. 2 in St John's College, Cambridge,
contains (besides Chaucer's "Astrolabe") a Latin treatise entitled "De septem climatibus expositio." We find mention of the "climates" also in MS. Camb. II. 3, 3, fol. 33 b, where a diagram appears representing a hemisphere, divided by parallels of latitude into 9 climates or belts, which, beginning from the equator, are as follows. 1. Inhabitabile propter Calorem. 2. Primum clima dia Meroes. 3. Secundum clima dya cienes. 4. Tertium clima di' alexandrios. 5. Quantum clima dia rodos. 6. Quintum clima dia romes. 7. Sextum clima dia boristenes. 8. Septimum clima dia rifeos. 9. Inhabitabile. This agrees with the list in the footnote on p. 48.

There is a passage in Mandeville which well illustrates Chaucer; I quote the part of it which more immediately relates to the Climates. "For the Superficialtee of the Erthe is departed in 7 parties, for the 7 Planetes; and the parties ben clept Clymates. And our parties be not of the 7 Clymates: for they ben descendyng toward the West. And also these yles of Ynde, which beth evene aegenst us, beth noght reckned in the Clymates: for thei ben aegenst us, that ben in the lowe Contree. And the 7 Clymates streechen hem, enyvromynge the World," &c. Mandeville's Voiage, ed. Halliwell, p. 186. See also Ptolemy's Almagest, lib. ii.

As regards the longitudes of towns, it may be observed that in MS. F. 25 in St John's College, Cambridge, the longitudes of Rome, Cordova, London, Paris, and Malta, are said to be 34°. 24', 9°. 30', 19°, 20°, and 38° respectively. These do not well agree together, but they suggest a reckoning from a meridian situated some 20° W. from that of Greenwich. Chaucer says nothing as to what meridian was used for reckoning longitudes from; and Messahala is but vague.

§ 40. It is possible that this conclusion was really intended to belong to the fourth part of the treatise, and was written by way of instalment. See the Prologue, II. 63—67. It is curious that in all the best MSS. (P excepted) the last sentence should be incomplete.

12. This sentence is very awkward. It seems to mean—"and then set I the point of F upward in the same sign, because that the latitude was north, upon the latitude of Venus; that is to say, (I set it upward) keeping it in the 6th degree of Capricorn." Upward means inward, i.e. towards the centre or towards the north; the opposite being expressed by southward, or outward, or toward the border, as in l. 46 below. Upon the latitude of Venus means that the point F of the compass was set upon the second degree of latitude, so that the space between the legs of the compass became equal to 2 degrees, as said in l. 15. Lastly, the words that is to seyn, in the 6 degree, &c., are an explanation of the vaguer expression in the same signe. The repetition of the words that is to seyn, &c. (II. 11 and 14), is intended to draw attention to the necessity of keeping both legs of the compass in the same degree of longitude.

155. Possibly Chaucer left the sentence incomplete. The words "thou shalt do well enough" may easily have been added by another hand to bring the sentence to an apparent, though not wholly satisfac-
AdditionaL Notes (II. 41—44).

Columbia. This colophon is written (in a later hand) in MS. A at the bottom of the page, a part of which, after the words "howre after howre," is left blank.

41—43. I have mended the text as well as I could by words, &c., inserted between square brackets. Nearly all the emendations rest on authority; see the Critical Notes. The text is not a good one, but I do not see why these sections may not have been written by Chaucer. For a definition of the terms "Umbra Extensa" and "Umbra Versa," see sections 5 and 6 of the Practica Chilindri of John Hoveden, published by the Chaucer Society. The umbra extensa or recta is the shadow cast on a plain by any perfectly upright object; but the restriction is commonly introduced, that the altitude of the sun shall exceed 45°. The umbra versa is the shadow cast perpendicularly downwards along a wall by a style which projects from the wall at right angles to it; the restriction is commonly introduced, that the sun's altitude shall be less than 45°. The umbra versa is the one which appeared on the "chylindre"; hence John de Hoveden explains how to calculate the altitude of an object by it.

44. This article and the next may possibly be Chaucer's. It is well-known that he speaks of "collect" and "expansa yeres" and "rote" in the Frankelcines Tale; Cant. Ta. i. 11587; the note upon which in the glossary to Urry's Chaucer may be found also in Tyrwhitt's Glossary, s. v. Expansa; but it is worth while to repeat it here. "In this and the following verses, the Poet describes the Alphonsine Astronomical Tables by the several parts of them, wherein some technical terms occur, which were used by the old astronomers, and continued by the compilers of those tables. Collect years are certain sums of years, with the motions of the heavenly bodies corresponding to them, as of 20, 40, 60, &c., disposed into tables; and Expansa years are the single years, with the motions of the heavenly bodies answering to them, beginning at 1, and continued on to the smallest Collect sum, as 20. A Root, or Radix, is any certain time taken at pleasure, from which, as an era, the celestial motions are to be computed. By 'proportioconvenientes' [C. T. i. 11590] are meant the Tables of Proportional parts." To which Tyrwhitt adds, from Chambers's Encyclopaedia, with reference to C. T. i. 11589, that "Argument in astronomy is an arc whereby we seek another unknown are proportional to [or rather, dependent upon] the first." See also Entere in the Glossary.

Tables of mean motions of the Sun are given in Ptolemy's Almagest, lib. iii. c. 2; of the Moon, lib. iv. c. 3; of the Planets, lib. viii. c. 3; also in MS. ii. 3. 3, fol. 88b, &c.

41a—42b. The fact that these articles are mere repetitions of sections 41—43 is almost conclusive against their genuineness. I do not suppose that sect. 46 is Chaucer's either, but it is added for the sake of completeness.
Nomina instrumentorum sunt hec. 1 Primum est armilla suspensoria ad capiendam altitudinem, et dicitur arabice aliahucia. 2 Secundum est alhabor, id est,ansa que iungitur ei. 3 Postea mater, rotula seilicet, in se continens omnes tabulas cum aranea, cui coniungitur margolabrum seilicet in .360. gradus diuisum. 4 Tabule autem ab hac contente figurantur tribus circulis quorum minor est circulus cancri, et medius est circulus equinocialis, et maximus 8 circulus capricorni. 5 Postea circulus almucantherath, qui sunt circuli in medietate superiori descripti quorum quidam sunt integri, quidam apparent imperfecti; quibus prior est orizon, et diuidit duo emisperia. Centrum autem interioris almucantherath cenit capitum 12 nominatur. 6 Deinde est azimuth, qui sunt partes circulorum almucantherath intersecantes. 7 Post quas sunt hore, in medietate inferiori descripte. In[ter] horas .2. sunt crepuscelorum linee. 8 Postea linea medii celi, que est linea descendens ab armilla per centrum in 16 oppositam partem astrolabii, cuius medietas a centro in armillum dicitur linea meridici; et alia dicitur angulus terre et medie notis. 9 Post hec et sequitur alhanthabuth, id est aranea, in quo sunt signa cum zodioaco constituta, stelle quoque fixe, in quo via dicitur esse 20 solis; et quicquid fuerit infra motum capitis arietis et libre, ex hoc zodioaco, septemtrionale; quod autem extra, meridianum. 10 Sequitur

almuri, quod ostensor dicitur latine, denticulus scilicet, extra circulum capricorni; in alhanthabuth relictus deinde almenath, id est, foramen quod est in medio rethis; 
1 in quo est axis retinens tabulas 24 climatum, in quam intrat alhaeraez, id est, equus restringens araneam eum rotula, quasi cuneus. Et in illa parte matris sunt 1.2. circuli equationis solis exterius, quorum 2 unus continet numerum dierum anni .365., 3 et scribentur sub eo nomina mensium. 4 Et alius signorum 28 gradus, 5 et infra eum scribuntur nomina signorum. 6 Postea quarta capiende altitudinis. Postea quadrans, cuius est in medio rethis. 

7 Sequitur regula, que circumvoluitur in dorso astrolabii, in qua sunt tabule perforate, ad capiendum altitudinem solis 32 in die, stellarum in nocte. 

8 Cum volueris scire gradum solis, pone regulam super diem mensis presentis, et gradus a summitate eius tactus erit gradus solis, qui cuius signi sit uidebis, et eum ex alia parte nota in zodiaco in 36 rethi. Notabis et nadayz eius, quod est simul gradus .7. signi. Diem quoque mensis per gradum solis inuenies; posita enim regula super gradum solis diem quesitum ostendet. 

De altitudine solis et stellarum inuenienda capitulum. 

Cum vis altitudinem solis scire, Suspende astrolabium de manu tua dextra per eius armillam, et sinistro tuo latere soli opposito, subleua vel deprime regulam, donec radius solis per utriusque tabule foramen transeat; quo facto, vide quot gradus a linea orientali 44 eleuatur regula, et est solis altitudo; similiter facies in nocte, per stellas fixas. 

10 Si autem vis scire certitudinem hore et etiam ascendentis, pone gradum solis super almucantherath altitudinis, ex parte orientis, si 48 altitudo sit ante meridiem; aut ex parte occidentis, si altitudo sit accepta post medium diem; et super quam horam ecciderit nadayz gradus solis erit hora presens, et signum quod fuit ex parte orizontis orientalis, est oriens, id est, ascendens; quod uero in occidentali, 52 

1 Pt I. § 14. 2 Pt I. § 9. 3 Pt I. § 10. 4 Pt I. § 7. 5 Pt I. § 8. 6 Pt I. § 12. 7 Pt I. § 13. 8 Pt II. § 1. 9 Pt II. § 2. 10 Pt II. § 3.
occidens. Quod uero ceciderit in linea medii celi est in medio celo, et eius nadays angulus terrae.

1Et si ceciderit inter duo almuchantherath, vide differentiam 56 numeri inter almuchantherath precedentem et altitudinem solis, et denomina differentiam de numero longitudinis almuchantherath, quod est .6., si almuchantherat continet .6. gradus et .6.; quod si almuchantherath contineat .3. gradus et .3., denomina partem illorum de .3.; et 60 sic de aliis. Postea scito motum almuri ab initio primi almuchantheranth, usque ad inicium secundi de gradibus marginis; et pone super illorum partem denominatam ab eis, secundum proportionem differentie dicte, ex .6. vel de .3. gradibus; et tunc habebis certum 64 gradum inter duo almuchantherath; et tunc considera eas horas, &c., sicut dictum est superius. Si illud idem in nocte scire desideras, accipe altitudinem alicuius stelle, in almuchanthebeth descripte, que transit ex parte orientis uel occidentis; et pone cacumen illius stelle 68 in almuchantherath sue altitudinis, et gradus solis indicabit tibi horas noctis, sicut nadayz eius diei; de aliis fac omnibus sicut dictum est in superioribus.

De crepusculo vespertino et matutino.

72 Cum uolueris scire finem crepusculi uespertini et inicium matutini, vide cum uenerit gradus solis ad lineam crepusculi occidentalis; tunc est finis eius; et cum ad orientalem, est inicium crepusculi.

76 ²Aliter idem.

Uel sic; vide quum nadayz solis uenerit ad .18. gradum almuchantherath in oriente, erit finis crepusculi uespertini; et cum venerit ad .18. gradum almuchantherath in occidente, est inicium 80 crepusculi matutini; et hec est leuis.

³De inuencione arcum diurni et nocturni: Rubrica.

Si vis scire arcum diei et noctis, pone locum solis, id est, gradum in quo est super primum almuchantherath; et nota locum almuri 84 inter gradus limbi; post hec mone gradum solis usque ad occidentem;

1 Pt II. § 5, ² Pt II. § 6, ³ Pt II. § 7.
et nota etiam locum eiusdem in ipsis gradibus; et motus eius ab una
nota in aliam est arcus diei; reliqua uero pars circuli est arcus
noctis, quia illa duo continebant .360. gradus, que est quantitas diei
et noctis; similiter facies de stellis fixis, si uolueris scire earum 88
moram super terram.

1 De quantitate horarum diei inequalium.

Si volueris quantitatem horarum inequalium diei scire, diuide
arcum diei per .12., et habebis numerum graduum hore diurne; 92
quem si subtrahis a .30. remanebit numerus graduum hore nocturne,
quia hora inequalis nocturna cum hora inequali diurna facit .30.
grads in omni die, qui sunt due hore equales.

Si horas diei uolueris querere equales, diuide arcum diei per .15., 96
et habebis numerum horarum equalium; similiter in nocte.

De parte hore partita inuenienda per almuri capitulum.

Cum transierit pars hore, et uolueris scire quota pars sit hore,
scito numerum graduum in labro ab inicio hore illius in almuri; et 100
quomodo ille numerus se habebit ad numerum totius hore, sic pars
transacta se habebit ad totam horam.

2 De numero horarum diei equalium preteritarum inueniendo
capitulum. 104

Si uolueris scire quod hore equales transierunt de die, accipe
gradum solis, et pone super almuchanthanth altitudinis et signa
locum almuri in gradibus. Postea uolue retro gradum solis usque ad
primum gradum almuchantherath in oriente; et secundo nota eius-108
dem locum; post hec diuide gradus qui sunt inter .2. notas per .15.,
et habebis horas equales. Similiter facies de nocte; postquam enim
inueneris horam inequalem per gradum et altitudinem alciuus stelle,
signato loco almuri, reduces gradum solis ad orizontem occidentalem,112
et notabis iterum locum almuri. Spacium inter hec duo loca
diuides, siet prius, per .15. seilicet, et inuenies. Eodem modo
scies quod sint hore equales inter meridiem et quemlibet punctum
alium, et qiodlibet instans.

1 Pt II. § 10. 2 Pt II. § 11.
De conversione horarum in horas equales: Rubrica.

Si volueris reducere horas inequales in horas equales, scito gradus horarum inequalium, quot sint; et diuide eos per .15., et 120 habebis horas equales; similiter facies de horis equalibus.

De altitudine solis in meridie habenda capitulum.

Si volueris seire altitudinem solis in media die, quod est inicium recessionis, pone gradum solis super lineam medii celi; et numerus 124 graduum almucantherath a loco solis in orizontem est altitudo eiusdem medie diei. Similiter fac cum stellis fixis.

Inuencio hore diei per allidadam: capitulum.

Si per allidadam horariam uis seire horam diei naturalem, pone 128 allidadam super altitudinem medie diei illius in dorso astrolabii suspensi; et uerte dorsum ad solem tam diu donec umbra vnius-cuiusque anguli superioris pinnule cadat in allidada, quelibet in directo sui lateris; et vbi occiderit in diuisionibus erit hora quesita.

De eodem inueniendo per lineas.

Item per allidadam in dorso et lineas horarum inter latera gnomonis, si sint posite ut in quadrante, sic. Super altitudinem solis meridianam in illa die pone allidadam; et nota vbi meridianus 136 circulus, id est, linea finis .6. hore, securcit lineam fiducie ipsius allidade; et pone ibi signum de incausto; et illud signum valet situationem margarite in quadrante; deinde accipe altitudinem solis in quacunque hora vis, et illud signum inter horas dabit horam 140 naturalem, ut in quadrante.

Capitulum preambulum ad quedam sequencia.

Amplius scito quod circulus signorum diuiditur in .2. semi-circulos, quorum vnus est a capite capricorni in caput cancri, et alius 144 a capite cancri in caput capricorni; et caput capricorni est solsticium.

1 De conversione horarum inequalium in horas equales. 2 De altitudine solis in meridie habenda capitulum. 3 Capitulum preambulum ad quedam sequencia.

1 Pt II. § 8. 2 Pt II. § 13. 3 Pt II. § 16.
hyemal, caput cancri estuale. Scito et quod omnis duo equidistantes gradus ab aliquo horum solsticiorum sunt vnius declinationis versus septentrionalam vel meridiem; et dies eorum vel noctes sunt equales, et umbra et altituddines in media die sunt equales.

1 De gradu solis ignoto per rethe habendo.

Si volueris cognoscere gradum solis ignotum, pone notam super altitudinem medie diei, quam sumpsisti prius per regulam in dorso astrolabii; deinde volue rethe, cadentque duo gradus super ipsam notam; quorum vnum scies esse gradum solis per signum mensis cuius fuerit dies.

2 Quis dies cui diei sit equalis.

Si volueris scire que dies cui diei sit equalis, scies hoc per 156 gradum equidistantem a solsticiis, quia eorum dies sunt equales, sicut dictum est superius.

3 De Inuencione gradus stelle cum quo celum mediat.

Si uolueris scire cum quo gradu uenit stella aliqua ad medium 160 diem, uel oritur; pone stellam super lineam medie diei, quia gradus qui cecidit super eandem lineam est gradus quesitus; similiter fac ad lineam orientalem et occidentalem. Gradum uero longitudinis habebis per filum positum super polum zodiaci, per totam declinationem inuentum.

4 De altituddine cenith solis habendi.

Si uolueris cenith solis scire, accipe altitudinem eius hora qua uolueris hoc scire, et pone gradum solis super alhucanthanth alti-168 tudinis in parte qua fuerit, sicut facis ad inuentionem horarum. Post hec, accipe quid congruit gradu solis de azimuth, et super quem gradum sit cenith de quarta que opponitur; et necesse est ut hec quarta sit meridiana orientalis, uel septentrionalis orientalis; aut 172 occidentalis meridiana, uel septentrionalis occidentalis; et similiter facies de stellis fixis per earum altituddines.

1 Pt II. § 14. 2 Pt II. § 15. 3 Cf. Pt II. § 18. 4 Pt II. § 33.
De cenith ortus solis habendo, et aliorum planetarum.

Et si nolueris scire cenith ortus solis, vel alicuius stelle fixe, pone gradum solis uel stellam super orizontem orientalem, et aspice quid sibi accidat de azimuth, similiter quam sit ortus; et hoc est cenith ortus, et super simile eius erit occasus in simili eius quarta, siue orientalis, siue meridionalis fuerit.

De quatuor plagis mundi: Rubrica.

Ad habendas quatuor plagas mundi veraciter, accipe altitudinem solis ut supra, et vide in quota quarta sit; deinde vide in qua altitudine ipse gradus solis sit inter lines azimuth in principio quarte orientalis, que incipit a coluro septentrionali siue a medie noctis linea, a qua incipies computare; et quotus fuerit numeros, tantum sune in dorso astrolabii, ab ipso coluro uersus armillam, proecedendum per orizontem, si est ante meridiem, vel per occidentem, si est post meridiem; et vbi numeros idem finitur, ibi pone regulam; deinde astrolabium utraque manu tenens, sursum uersa eius posteriori superficie, diligenter te oppone soli, donec radius solis transeat per ambo foramina; tunc caute illud pone super terram, ut non moueatur ad aliquam partem; habebis quatuor lineas in centro astrolabii concurrentes, quatuor mundi plagas directe oppositas indicantes, scilicet orientalem, occidentalem, &c.; similiter operabis in nocte per stellam fixam. Vel locata iam regula in dorso astrolabii, sursum uersa eius facie, eque distanter orizonti ut proximo dictum est, fac umbram amborum angulorum pinnule cadere super .2. latera regule, scilicet, dextram umbram super latus dextrum, et sinistram umbram super sinistrum latus; et statim habebis quatuor lineas et quatuor plagas mundi predictas.

De declinacione cuiuslibet gradus habenda.

Si scire nolueris declinacionem cuiuslibet gradus signorum, pone super lineam medii celci uel diei, et scito eius altitudinem ab oriente; postea scito altitudinem capitis arietis et libre in eadem linea; deinde seito altitudinem utramque, et differentia ipsarum altitudinum

1 Cf. Pt II. § 31. 2 Pt II. § 29. 3 Pt II. § 20.
est declinatio eisdem gradus ab equinoctiali linea. Si autem gradus signi fuerit septentrionalis, est declinacio septentrionalis; si 208 meridiana, meridiana. Scito etiam quod gradus signorum septentrionalium sunt altiores equinoctio, quod est in capite arietis et eius opposto; et meridionalium inferiores, secundum declinationes eorum ab eo. Maior autem declinacio est in capite canceri et capricorni: 212 eodem modo inuenies declinacionem stellum fixarum.

1De altitudine poli vel latitudine regionis.

Scito quod altitudo regionis sit latitudo cenith capitis 2 ab equinoctiali circulo versus septentrionale vel meridiem, que similis 216 est altitudini poli septentrionalis, et depressioni eius oppositi ab orizonte, que duo sunt in parte equales. Cum ergo latitudinem cuiusque regionis scire volueris, altitudinem solis in media die considera, quam minues de .90., si fuerit sol in inicio arietis et libre, et 220 quod est residuum erit latitudo regionis; tunc enim motus solis erit in equinoctiali linea. Si uero in alio gradu fuerit sol, eisdem gradus declinacionem considera per tabulam declinationis solis, uel per regulas ante datas; quam minues de altitudine solis in medio 224 die, si fuerit septentrionalis; si uero meridionalis, adde illam; et habebis altitudinem inicii arietis in regione illa, quam subtrahes sicut predictum est a .90., et quod remanserit est distancia regionis ab equinoctiali linea.

De eodem, seilicet aliter, capitulum: Rubrica.

Uel si volueris accipere altitudinem cuissius stelle altiorem, et eius elongacionem ab equinoctiali linea considera; cum qua fac ut supra dictum est. 3 Vel quere cuissius stelle non occidentis in eadem 232 regione altitudinem altiorem et inferiorem, et utriusque insimiliter collecte tolle medietatem, que est altitudo poli in eadem regione.

4De noticia tabule almucanterat.

Si uis scire ad quam latitudinem facta sit tabula almucantheralis, 236 vide in linea meridiana quot almucantherath sint in circulo equi-

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1 Pt II. § 25. 2 cum eius (sic); MS. IIh. 6. 8 has caputum; see l. 11. 3 Pt II. § 24. 4 Pt II. § 21.
noctiali usque ad cenith, vel ab axe ad orizontem in septentrione; et super tantam latitudinem facta est tabula: altitudo uero arietis est 240 tot graduum quot fuerint ab eodem circulo ad orizontem, vel a cenith ad axem.

**De horis inueniendis per tabulas latitudinis: Rubrica.**

Cvm in aliquo regione, eius latitudo in tabulis astrolabii non 244 fuerit descripta, uolueris inuenire per illud astrolabium horas illas, regionis latitudinis et latitudinis maioris propinquioris sibi et minoris ibi descriptae nota differentiam; deinde proportionem illius differentie ad differentiam que est inter minorem latitudinem ibi 248 descriptam et maiorem, inter quas videlicet est latitudo regionis illius, memorie commenda. Postea uero accepta solis altitudine in eadem regione, quere horas per latitudinem minorem, et similiter per latitudinem maiorem, et harum horarum diuersarum differentie tolle 252 partem proportionalem, secundum proportionem differentie superius sumptam; quam partem addes horis minoris latitudinis, si fuerint pauciores horis maioris latitudinis, vel subtrahes ab eisdem, si fuerint plures; et que tunc remanserint erunt hore illius regionis; similiter 256 facies in horis noctis et in aliis operibus.

1**De gradu solis ignoto habendo.**

Cvm qualibet die gradu solis per alhanthabuth uolueris inuenire, altitudinem eius in media die considera, quam notabis in 260 almucanthanth in meridiana linea; tunc quartam circuli signorum in qua fuerit sol gira; 2 et gradus qui continget notam altitudinis in media linea est gradus solis.

**De longitudine inter duas regiones habenda per eclypsim.**

264 Longitudo regionis ab alia est distancia meridiani circuli vnius a meridiano circulo alterius. Cunque uolueris seire longitudinem inter .2. regiones, considera inicium eclypsis lunaris, per quot horas equales distet a medio precedentis diei in utrisque regionibus. 268 Deinde minue horas vnius regionis de horis alterius, et que reman-

1 Pt II. § 14. 2 Wrrten giza; but MS. Hh. 6. 8 has gira. 3 Cf. Pt II. § 39. 1. 11.
serint crunt hore longitudinis inter utrasque; multiplica ita ea in .15., et habebis quo gradus sit earum longitudo ab inuicem. Longitudines quarundam regionum, hoc est, elongationes circulorum earum meridianorum a meridiano circulo ultime regionis habitabilis in occidente, et earum longitudines et distancias ab equinoctiali circulo notabimus in quadam tabula sufficienter.

De eodem in miliaribus capitulum.

Si quot miliaria sint inter regiones a se inuicem distantes noscere queris, longitudinem et latitudinem inter utrasque considera; deinde longitudinem in se ducam latitudini in se multiplicate aggrega, et collige; inde summe tollite radicem, et unicoque gradui ipsius radices et dimido da .100. miliaria; et per tot [miliaria] distat vna regio ab alia. Si autem earum latitudine fuerit cadam, fac cum gradu longitudinis tantum, sicut deberet fieri cum gradu radicis. Si vero longitudo fuerit vna, fac cum latitudine tantum, et inuenies quod queris.

1Scientia ascensionis signorum in circulo directo.

Si autem ascensiones signorum in circulo directo scire desideras, inicium cuiusuis signi super lineam meridianam pone, et locum almuri in margine nota; postea moue retie donec finis signi cadat super lineam meridiei, et gradus quibus mouebitur almuri crunt ascensiones eiusdem signi; et similiter facies ad quamlibet portionem circuli.

2De ascensionibus signorum in circulo obliquo.

Ascensiones autem signorum in qualibet regione sic poteris inuenire; moue retie ab inicio signi usque ad finem eiusdem, et gradus quibus mouebitur in margine almuri crunt ascensiones signorum in cadem regione; mouebis enim signum in orizontis parte orientali, ut scias eius ascensionem: vt autem scias eius moram in occasu, mouebis illud in orizontis parte occidentali; ut etiam scias in qualibet circuli portione. Gradibus eciam ascensionum diuisis per .15., et residuo pro horis fractibus (sic) computato, habebis horas equales, vel eis diisis per numerum graduum hore inequalis, patebit per quot horas 300

1 Pt II. § 27. 2 Pt II. § 28.
naturales uel inequales, cum fractionibus, quodlibet signum uel planeta uel quelibet portio ascendat uel occidat in qualibet regione.

1 De noticia stellarum incognitarum positarum in astrolabio.

304 Ut habeatis noticiam stellarum incognitarum que posite sunt in astrolabio, sume primo altitudinem alicuius stelle note, et pone eam in almucanterath, super similem altitudinem; postea vide stellam quam uolueris seire, super quantum altitudinem iacet inter almucantantherath, et in qua parte sit, seilicet, in oriente vel occidente; quo uiso, pone eam in dorso astrolabii super eandem altitudinem, et verte illud ad eandem plagam celi in qua accepi stellam; et maior stella quam vides per foramina regule ipsa est quam queris.

312 De noticia stellarum incognitarum non positarum in astrolabio.

Scire uolens gradum stelle ignote, in astrolabio non posite, uel planete, expecta donec ille stella sit in meridie; deinde visa aliqua stella cuius locum pro certo scias et astrolabio insignite, secundum altitudinem eius rethe dispone, ponendo stellam inter almuchanterath super similem altitudinem; et directo gradus signorum qui erit in linea medii celi erit stella de qua dubitas, et est longitudo eius nota; latitudo patet, computatis almucanterath a nota illius altitudinis usque ad equinoctialem. Potes eciam per occasum solis rethe tuum disponere, si nullam stellam cognoueris, et sic cognosces omnes stellas.

2 Ad seicientum in quo gradu signi luna sit: Rubrica.

324 Cvm in quo gradu signi luna sit scire volueris, altitudinem lune considera; et eam in almucantherath, in parte in qua fuerit, nota; deinde stellam aliquam in rethi constitutam super altitudinem suam in eadem hora cum altitudine lune acceptam, in parte qua fuerit, pone; et gradus circuli zodiaci qui eciderit inter almucanterath super altitudinem lune, critque gradus lune. Si autem appaeruerit in die, idem facies cum altitudine illius et altitudine solis, Considera

1 See Additional Note to Pt II. § 3, I. 26.  
2 Pt II. § 34.  
3 Written stella; but MS. Hh. 6, 8 has luna.
igitur cuius signi sit gradus. Idem poteris quoque eodem modo planetarum loca investigare, si corum altitudinem in nocte poteris notare.

De loco lune inueniendo capitulum.

Cvm in quo gradu sit luna scire desideras, quot dies habeat mensis lunarlis in eadem die considera, quibus duplicatis, quod col lectum fuerit distribue per .5., dando euilibet signo .5., et incipias a signo in quo fuerit sol; et vbi numeris finierit, in eodem signo est luna; et si remanserit, id est, infra .5., iam perambulavit luna .6. gradus.

1De locis planetarum inueniendis.

Loca planetarum poteris in alio modo inuestigare, et verius. Sume altitudinem planete quam est iuxta lineam medii celii, et serua eam. Item, sune ad eandem horam ascendens per aliquam stellarum fixarum, et hoc serua eam cum hora; posthec vide quam ille planeta incipiat descendere a linea medii celii, et sune eius altitudinem quam sit equalis altitudini prius sumpte ante lineam medii celii; et iterum in eadem hora sune ascendens et horam per aliquam stellam fixam; deinde sune medium inter ascendens primum et secundum per almuti in limbo; et gradus qui ceciderit tunc super lineam medii celii, in illo est planeta.

2De latitudine planetarum a via solis inuenienda.

Scire uolens utrum planeta sit australis vel septentrionalis in via solis, considera utrum altitudo quam sumpsisti quando erat prope lineam medii celii sit equalis altitudini gradus in quo est planeta, vel maior, vel minor; si enim est equalis, tunc directe est in via solis, et nullam habet latitudinem; si autem altitudo planete sit maior quam gradus in quo est sol, tunc planeta est septentrionalis a via solis; si minor, tunc est australis; et tantum declinat a via solis quantum est maior vel minor.

3De directione et retrogradatione planetarum.

Utrum planeta sit retrogradus uel directus sic poteris inquirere; cuiusuis corum altitudinem et altitudinem stelle quoque fixe memorie

1 Pt II. § 17. 2 Pt II. § 30. 3 MS. planeta. 4 Pt II. § 35.
364 commendae; deinde post teream noctem ul quartam, in qua est sensibilis motus, cum stelle fuerint in eadem altitudine prime altitudini et altitudinem planete considera; quum, si fuerit minor sua altitudine prima, planeta est directus, si fuerit in parte orientali; et si fuerit parte occidentali, retrogradus; et si secunda altitudine planete fuerit maior prima, est retrogradus, si hora accepte altitudinis fuerit ex parte orientis; et si fuerit ex parte occidentis, est directus. Oppositum autem de partibus noueris esse in luna.

372 1De equacione .12. domorum per astrolabium.

Cvm .12. domos volueris adequare, gradum ascendentem super lineam .8. hore pone; tunc gradus qui eciderit super lineam medie noctis est inicium secunde domus. Deinde reducto gradu ascendentis 376 ad finem .10. hore, gradus inuentus super predictam lineam medie noctis est inicium .3. domus. Reduces quoque eundem gradum ad orizontem orientalem, et erit eius nadayz in orizonte occidentis; gradus uero in eadem prenominata linea existens erit inicium .4.

380 domus. Pones etiam nadayz gradus ascendentis super finem .2. hore, et tunc predicta linea indicabit tibi inicium .5. domus. Si autem posueris idem nadayz super finem .4. hore, cadet inicium .6. domus super eandem lineam medie noctis. Inicium autem .7. domus 384 est nadayz ascendentis. Et inicium .8. nadayz secunde; principium .9° nadayz .3°; et .10° nadayz quarte. Principium vndecime nadayz .5°; et .12. nadayz sexte.

2De eodem, scilicet aliter, capitulum.

388 Item, habito ascendentae et aliis tribus angulis, pone regulam nouiter super rethe constitutam super gradum ascendentem, et gradus limbi inter cam et armillam uel punctum meridianum diuisi in .3. partes sunt ascensiones trium domorum ab ascendentae in meridiem; 392 vnde si posueris cam super primam .3. ab ascendentae, habebis in zodiaco inicium .12. domus, et super secundam .3., inicium .11. domus. Eodem modo de gradibus limbi inter cam in ascendentae et punctum in angulo terre facies, et habebis alias .3. domos, scilicet,

1 Pt II. § 36.  
2 Pt II. § 37.

De aspectibus planetarum.

Si autem aspectus duorum planetarum, vel graduum quorum-libet seire ulucriis, pone candum regulam super ipsos, et vide gradus 400 limbii intermedios, qui si fuerint .60., est aspectus sextilis; si .90., quartilis; si .120., trina; si .180., oppositionis; si nichil fuerit, coniunctii. Si autem citra hos terminos .5. minus fuerit, erit applicatio ad aspectum; si plus, separatio ab eodem. Secundum quosdam, 401 hiidem aspectus habentur ex gradibus equalibus. Secundum phtheolomeum fit aliter, secundum gradus ascensionum, quemadmodum equatio domorum sic atque numeris. Radiationum alia dextra, alia sinistra; pro sinistra quidem radatione, gradum planete super lineam 408 meridianam pone, atque almuri signa; deinde ipsum almuri motu dextra, pro radatione exagonali, .60. gradus procedat; pro tetragonali, .90.; pro triagonalii, .120.; et notetur medii celi gradus, ipse enim radiationis prime locus est; deinde gradum planete super almucan-412 therath orientale pone, atque almuri signa, procedatque almuri motu dextra pro exagonali quidem .60., pro triagonalii .120., pro tetragonali .90.; et notetur gradus ascendens, ipse enim radiationis secunde locus est; accipe itaque differentiam istarum duarum radiationum, et 416 sera cam. Deinde gradum medii celi hora acceptionis operis super meridianum pone, et signetur alius; procedatque motu dextra, donec planete gradu meridiano incidat, fiatque nota in almuri et capiatur numerorum .2. interstiticiun, ducaturque in differentiam radiationum; 420 quodque inde produceatur per arcum lucis sibi dici ipsius planete diuidatur, si super terram fuerit radiatio planete; si vero sub terra, per arcum noctis eius; et quod de divisione exierit, erit radiationis equatio; que equatio minueratur a raditione maiori, si fuerit planeta 421 inter .10. et .7. aut inter .4. et primum; addetur equatio super radationem minorem; sicque post additionem [vel] subtractionem habebis radiationem questam; pro dextra autem radatione inuenienda, erit processus almuri motu sinistro promoucendo; cetera ut 428 supra.
Scientia anni mundani vel naturalis.

Cvm uolueris anni naturalis vel meridiani reuolutionem seire, 432 gradum ascendentis transacti anni pone super orizontem in oriente, et locum almuri in margine signa; posthee almuri ab eodem loco in .93. gradu moue, et gradus qui ceciderit supra orizontem est gradus ascendentis eiusdem anni. Si autem planetes fuerint anni, pro vno-436 quoque anno reduces almuri .93. gradu, et gradus existens in orizonte in parte orientali erit ascendens ipsius anni.

Quot hore equalis sunt inter annum preteritum et reuolutum.

Si autem uolueris seire quot hore equales sint inter annum pre-440 teritum et annum reuolutum, gradum perambulationis almuri diuide per .15., et numeros qui exierit de divisione est numeros equalium horarum inter utrumque annum exientium.

De Gnomonis officio; et primo, de vmbra altitudinis.

444 Quadrantis in astrolabio constituti .2. sunt latera, in .12. partes equales diuisa, que vocantur puncta umbre. Sed notandum, quod latus inferius vocatur umbra extensa; et aliud latus vmbra uersa;¹ quia vnum representat puncta vmbre extense, et aliud uersa. Cum 448 ergo per hoc opus uolueris seire quot punctorum gnomonis fit umbra uersa vel extensa, considera altitudinem solis; si fuerint .45. graduum est vnaqueque earum .12. punctorum equalium, scilicet, suo gnomoni. Si autem fuit maior altitudo solis, tanget regula latus vmbre extense; 452 et si diuiseris per ea .144., inuenies puncta uerse. Si uero solis altitudo fuerit minor .45. graduum, tactus regule in vmbra uersa ostendet eius puncta; per que diuide, et habebis puncta umbre extense; nam si puncta umbre uerse multiplicaueris in puncta umbre extense, 456 provenient ex multiplicatione .144., que proveniunt eciam ex multiplicatione .12. in semet ipsis, que sunt partes gnomonis vnius. Scien-1 dum est eciam quod si in acceptione umbre per altitudinem ceciderit regula in parte alciuus puncti, et uolueris eam denominare a toto, 460 moue regulam ab inicio illius puncti in partem ipsam, et vide quot

¹ Cf. Part I. § 12.
gradus moueatur regula, qui erunt gradus illius partis. Deinde moue regulam ab inicio illius partis in finem illius, et vide iterum quot gradus moueatur regula, qui erunt gradus totius; tanta proportione se habet pars puncti ad totum punctum.

**Inuencio altitudinis rerum per puncta vmbre; capitulum.**

Ut autem per umbram innienias altitudinem, pone regulam supra puncta vmbre extense, si fuerint pauciora .12., et tactus eius in quarta altitudinis ostendet altitudinem. Si autem fuerint plura .12., 468 diuide per ea .144., et innienie puncta umbre verse; super que pone regulam, et tactus eius in quarta altitudinis ostendet tibi altitudinem. Si fuerit vmbra .12. punctorum, est altitudo .45. Si uero cum predictis habueris fractiones, vide quid debeatur sibi de gradibus, ut supra demonstratum est.

**Inuencio vmbre meridiei per altitudinem.**

Cum uolueris medie diei umbram scire, altitudinem solis in medio eiusdem diei quere, et per ea innienie umbram, ut supra dictum est. 476

**Inuencio altitudinis rei accessibilis sequitur apponenda.**

Cvm eleuate rei altitudinem uolueris scire, regula[m] super .45. gradum in quarta altitudinis pone, et tam ante nel retro moue, donee per vtriusque tabule foramen rei eleuate videas; tunc 480 quanta est longitudu a loco in quo fueris in radicem rei, cum additione stature tue a visu usque ad terram, tanta est procub dubio altitudo rei. 1 Si autem eius altitudinem, ita ut non remouearis a loco vno, uolueris innienie, tam diu regulam subleua nel deprime quod per 484 utriusque foramen videos cacumen; tunc si regula ceciderit super puncta umbre extense, considera quanta proportione se habeant .12. ad ista puncta; et tanta proportione se habebit altitudo rei ad longituidinem inter te et ipsam, cum statura tua addita longitudini. Si 488 uero ceciderit super puncta umbre ueste, quota pars crunt puncta de .12., tanta pars erit altitudo rei illius longitudinis inter se et eius radicem, coniuncta longitudini statura tua. Vnde notandum, quod

1 Part II. § 41.
492 si fuerit regula super dyametrum quadrantis, est rei altitude equalis longitudini, sibi addita statura. Et si fuerit super umbram extensam, est altitude maior longitudine; si uero est super uersam, minor longitudine.

496 De altitudine rei inaccessibilis mecienda capitulum.

1 Si uero rei inaccessibilis altitude fuerit metienda, per utrumque regule foramen metiende rei summitatem respice, quia inspecta puncta quot sint mecientur, que, exempli causa, dicantur .3., que in 500 latere umbre quater continentur; quo pacto, retro ab eodem loco perge, ut mensurande rei cacumen iterum per utrumque foramen vides; quo viso, numerum punctorum umbre denuo vide, que scilicet erunt .2. puncta, que in .12. punctis continentur sexies; et 504 interuallum stationum .12. pedum notabis esse. Hijs itaque pactis, minus continens ternarij, scilicet .4., a maiori continente binarij, scilicet .6., auferatur, et binarius qui pertransierit mememie commendetur; et interuallum .2. stationum, quia ex proportionibus 508 remansit binarius, duplum altitudini inaccessibili pro certo habeatur. Est enim omnibus hec vnuiersalis regula: subtractione continencium facta, si unum remanserit, interuallum stationum metientis erit altitudini rei equalis; si duo, duplum; si tria, tripulum; et sic de 512 ceteris intellige.

De mensuracione plani: Rubrica.

Si queris cum astrolabio metiri planiciem, per utrumque foramen limitem eius ex adversos posito considera; post hec puncta umbre supra 516 [quam] steterit regula ad .12. compara; et qualis fuerit comparatio punctorum ad .12., talis est comparatio stature tue ad planiciem.

Explicit astrolabium messehalle.

1 Part II. § 42. As here expressed, it is suitable only for the umbra versa, because of the expression "retro perge"; but it may easily be altered so as to suit the umbra recta, which would give § 43 in Chaucer's treatise. Such an additional section does, in fact, appear in MS. Hh. 6. 48, in the margin.
NOTES.

Observe that I have only printed here the latter part of the treatise; see the Preface, p. xxiv. The former part is longer and less to the point.

I add a few notes on some of the readings of the MSS.; denoting MS. II. 3. 3 by the letter S, and MS. IIh. 6. 8 by T, to avoid confusion with the MSS. already mentioned.

L. 3. alhabor; so in T. But written alhahoz, very plainly, in S; indeed, the scribe clearly confused r with z, for he writes nadayz throughout for nadayr, or (as in l. 54) he writes nadays; cf. footnote to l. 261.

14. inter T; in S. So also in l. 276.
37. nadayz S; nadayr T; see note to l. 3.
126. allidadam; i. e. the “rewle” for taking altitudes. See footnote on p. 7; and the first Additional Note to Part ii, sect. 3.
155. Quis dies (sic). But in the next line it is que dies.
247. inter uxorom minorem latitudinem S; but T omits uxorom. The scribe seems to have been thinking of something else besides his work.
299. Perhaps we should read fractionibus, or cum fractionibus. The passage is wanting in T.
329. apparuit (sic) S; apparuget T.
342. poteris S; poterit T.
461. gradus moueatur; for gradus, T has gradibus.
500. retro T; recto S.
506. auferatur T; auferantur S.
516. quam; supplied from T.
GLOSSARIAL INDEX.

Abate, 2 p. s. pr. subj. subtract, ii. 10. 8.
Abid, imp. s. wait, ii. 23. 9.
Abowe, prep. above, ii. 45. 32.
According, pres. part. agreeing, ii. 14. 5.
Addyng, sh. (the) addition, ii. 41. 9.
Aftur, prep. according to, pr. 57; later than, i. 21. 15; After, pr. 62.
Agayn-ward, adv. backward, at the point of return, i. 17. 8.
Agayns, prep. against, near to, ii. 23. 8.
Al be it so that, although, ii. 31. 6.
Almcanteras, sb. almanac, pr. 62.
The real origin of this word is still unknown; it is probably not of Arabic origin, and the fact of its beginning with al has probably led inquirers astray. The word occurs in a passage in a lost work of Porphyry, cited by Eusebius, de Præpar. Evangelica, iii. 4. ed. Gaisford. See Dozy, Glossaire des mots Espagnols dérivés de l’Arabe; 2nd ed. p. 154.
Almicanteras, sb. pl. small circles of declination (from the celestial sphere), i. 18. 2; Almykanteras, i. 18. 7. Arabic muqantar, a solar quadrant, solar clock; pl. muqantar, circles parallel to the horizon; from qantar, he bent.
Almury, sb. the "denticle" or tooth-like point or pointer situate on the Rete near the "head" of Capricorn, i. 23. 1. Arabic al-muri, the shewer, part. of the 4th or causal conjugation of rad, to see.
Altitude, sb. the elevation of a celestial object above the horizon, measured along a vertical arc, pr. 56.
Alyne, adv. in an exact line, ii. 38. 16.
Amenuseth, pr. s. diminishes, becomes less, i. 21. 45. O.F. ameniser, to become less, from menut, menu, minute, small.
A-middles, in the midst of, i. 18. 3.
Amydde, adv. amidst, in the middle, i. 4. 4.
Angle, sb. angular distance (from the meridian), ii. 4. 28. "Angle of longitude (in astrology) is the angle which the circle of a star’s longitude makes with the meridian, at the pole of the ecliptic."— Bailey. This is not explicit, as the pole of the ecliptic is seldom in the meridian; the pole of the equator and a circle of right ascension would answer better.
Anni collecti, collected years, ii. 44. 16. When a table contains quantities denoting the amount of a planet’s motion during round periods of years, such as 20, 40, or 60 years, such a change is entered under the heading Anni Collecti.
Anni expansi, expanse years, ii. 44. 16. When a table contains quantities denoting the amount of a planet's motion during only a few years, viz. from 1 to 20 years, such changes are entered separately under the headings 1, 2, 3, &c. years, which are designated the expanse (or separate) years.

Antartik, adj. southern, ii. 25. 7.

Anything, adj. in any degree, at all, to any appreciable extent, ii. 17. 6; Anything, ii. 38. 9.

Aperceyue, e. to perceive, ii. 35. 4.

Arabyens sb. pl. Arabians; hence, in Arabyens, among the Arabians, i. 10. 5.

Arch, ii. 9. 2. See Ark.

Areisid, pp. raised, ii. 2. 5.

Ariste, sb. arising, rising, ii. 12. 10.

Ark, sb. are, the angular distance apparently passed over by the sun during a day or a night, ii. 7. 7, 8; Arch, ii. 9. 2; pl. Arches, ii. 7. 9.

Armholes, sb. pl. i. 21. 51.

Artificial, adj. ii. 7. rub. The day artificial is the length of the day, from the moment of sunrise to that of sunset.

Artik, adj. arctic, northern, ii. 22. 2.

Ascendit, pt. s. ascended, rose above the horizon, ii. 40. 49; Ascendit, ii. 40. 28.

Ascension, sb. ascension, ii. 26. 4; pl. Assensious, ii. 26. 2. For the signs of right and oblique ascension see note on pp. 35. 36.

Aspectus, sb. pl. aspects, ii. 4. 30. An aspect is the angular distance between two planets. The principal aspects are five, viz. conjunction, sextile, quartile, trine, and opposition, corresponding to the angular distances 0°, 60°, 90°, 120°, and 180° respectively.

Assendent, sb. ascendent, ii. 3. 24. The "ascendent" is that point of the ecliptic which, at a given moment, is ascending above the horizon.

Astrolabe, sb. an astrolabe, pr. 4; Astralabie, pr. 7; Astrolabe, pr. 46.

Astrologie, sb. astrology, pr. 70.

Astrologien, sb. astrologer, or rather, astronomer, pr. 50; pl. Astrologiens, pr. 42.

Atones, adj. at once, at one and the same time, pr. 32.

Auctours, sb. pl. authors, ii. 39. 22.

Auenture, sb. chance; per aventure, peradventure, perhaps, ii. 12. 6.

Augrym, sb. arithmetic, numeration, i. 7. 4; Augrim, Arabic numerals, i. 8. 4. O.F. algorisme, O.Sp. alguarismo, either from Gk. ἀριθμός, number, with the Arabic article (al) prefixed; or, as is much more probable, from Al Khowácsí, the surname of an Arabian writer on algebra, the translation of whose work was the means of introducing the decimal notation into Europe in the 12th century. See the authorities for this in Dozy, Glossaire des mots Espagnols dérivés de l'Arabe.

Avisely, adv. advisedly, carefully, ii. 29. 16.

Awaite, imp. s. watch, ii. 35. 6.

Azimuth, sb. pl. azimuths, i. 19. 4. &c. Arabic as-samîl, pl. as-sumâl, a way or path; al-samîl, a point of the horizon, and hence, an azimuth, or are extending from the zenith to the horizon. We find also samîl al-ras, the vertex of heaven; hence zenith, a corruption of semîl (al-ras being dropped).

Bakhalf, sb. the back or flat side of the Astrolabe, i. 4. 1; ii. 1. 6.
Pak-side, sb. the back of the Astrolabe, i. 15. 3.
Bas, sb. base, ii. 41. 2; Baas, ii. 43. 2.
Be, prep. by, ii. 41. 3.
Befornseyd, prep. aforesaid, ii. 42b. 5.
Behete, 1 p. s. pr. promise, pr. 73. A.S. beholt, a promise, behâlten, to promise.
Bestes, sb. pl. the "beasts" or animals in the zodiacal signs, i. 21. 37.
Bisily, adv. diligently, ii. 38. 8.
Bordure, sb. outer border or raised rim on the front side of the astrolabe, i. 4. 2; ii. 38. 2.
Brede, sb. breadth, i. 21. 14.
Broderere, sb. larger, ii. 38. 1.
By, prep. with reference to, ii. 3. 48.
Byform, prep. before, ii. 3. 15.
Byhestes, sb. pl. promises, i.e. what they profess to prove, pr. 16. A.S. behet, a promise.
By-twuye, prep. between, ii. 28. 11. 14.
Caas, sb. case; sette caas, suppose, ii. 42. 14.
Calkuled, pp. calculated, pr. 52.
Calle, sb. caul, a net used to confine women's hair, i. 19. 3. "Mayd ens were sylnen callis, with the whiche they kepe in ordre theyr heare, made yelowe with lye;" Hormani Vulgaria, leaf 115.
Canon, sb. a rule, explanation, pr. 63; Canonun, a canon, rule, table, ii. 32. 3.
Capitalle, adj. pl. capital, ii. 3. 20; Capitals, i. 16. 8.
Centre, sb. the "centre" or small point at the very end of which is the position of a fixed star in the Rete of the Astrolabe, i. 21. 7.
Cenyth, sb. (1) zenith, i. 18. 10; (2) a word denoting the point where a given azimuth-circle meets the horizon, i. 19. 7. See Azimuth, and Senyth.
Certein, adj. certain; a certein (used without a sb.), pr. 10; a certein holes, i.e. a certain number of holes, i. 13. 2. So also "of unces a certain," C. T. 16344; "a certain of gold," C. T. 16492.
Chapitre, sb. chapter, ii. 9. 2.
Clepen, pr. pl. name, mention, ii. 39. 23; pp. Cleped, named, i. 4. 4.
Clokke, sb. clock, pr. 56.
Clymat, sb. a belt or zone of the earth included between two given lines of latitude, ii. 39. 18; Climat, ii. 39. 19; pl. Clymatz, climates, i.e. zones of latitude, i. 3. 3; Clymates, sets of almicanteras calculated for various terrestrial latitudes, i. 14. 2.
Combust, adj. quenched, viz. by being so near the sun as to be obscured by his superior light, ii. 4. 31.
Compas, sb. broad circle, zone, i. 21. 23; a circle, ii. 38. 2.
Compasse, pp. drawn with compasses, fashioned circularly, i. 18. 1.
Compilatour, sb. compiler, pr. 42.
Compownet, pp. compounded, i.e. composed, constructed, drawn, pr. 7; describ, marked, i. 18. 8; Compownet, ii. 5. 2.
Communly, adv. commonly, ii. 19. 7.
Conclusions, sb. pl. mathematical propositions, either problems or theorems, pr. 9.
Conforted, pp. comforted, supported, strengthened, ii. 4. 29.
Coniunccion, sb. conjunction, ii. 32. 1. It means a very close apparent approach of two celestial bodies.
Consentrik, adj. having the same
Centre, i. 17. 3; Consentryk, i. 17. 34; Consentrik, tending to the same centre, i. 16. 5; at an unchanging altitude, ii. 3. 47.

Contienen, v. to contain, pr. 53; pr. s. Contienith, i. 7. 7; pr. pl. Contienen, i. 9. 2.

Cost, sb. quarter, direction, ii. 46. 5; Coste, ii. 46. 17; pl. Costes, coasts, directions, i.e. parts of the sky to be observed, i. 19. 6.

Cowchyng, sb. laying down, letting the Astrolabe lie flat on the ground, ii. 29. 15.

Crepusculus, sb. pl. twilights, durations of twilight, ii. 6. rub.; Crepusculis, ii. 9. 1.

Croos-lyne, sb. cross-line, the line from right to left through the centre in Fig. 1; i. 12. 5.

Curious, adj. ornate, pr. 31.

Dawenyng, sb. dawning, dawn, ii. 23. 8.

Dawyng, sb. dawning, ii. 23. 20.

Declaracioun, sb. explanation, i. 3. 3; &c.

Declinacioun, sb. the angular distance of a celestial object N. or S. of the equator, measured along an arc at right angles to it, i. 17. 4; pl. Declinations, pr. 54.

Declinen, pr. pl. possess declination, i.e. pass either to the north or south of the ecliptic, ii. 17. 28; pr. s. Declineth, possesses declination, ii. 19. 8.

Denticle, sb. pointer, i. 23. 1.

See Ahurly.

Departen, pr. pl. separate, i. 21. 32; imp. s. Departe, divide, ii. 8. 2; pr. s. Departeth, divides, i. 17. 39; pp. Departid, divided, marked by lines, i. 21. 34; divided, ii. 4. 37.

Depressioun, sb. the angular distance of the southern pole from the horizon, ii. 25. 6.

Descencioun, sb. descension, ii. 4. 32; Descencioun, ii. 4. 33. The technical signification seems to be —the "house" or portion of the sky just above the western horizon, so that perhaps a planet in his descension is about to set. (?)

Descriued, pp. described, marked, i. 17. 1.

Desturbith, pr. s. disturbs, prevents, ii. 2. 2.

Determynat, adj. properly ascertained, i. 21. 4; properly placed upon the Astrolabe, ii. 18. rub.

Dignite, sb. dignity, ii. 4. 29; pl. Dignetes, pr. 72. A term in astrology. Bailey defines Dignities as "the advantages which a planet has on account of being in a particular place in the zodiac, or in such a station with other planets, &c."

Directe, adj. direct, ii. 35. 11.

A planet's motion is direct when it moves in the same direction as the sun along the signs.

Directe, in directe, in a line with, ii. 44. 9.

Distantz, adj. pl. distant; euene distantz, equidistant, i. 17. 31.

Doctrine, sb. instruction, pr. 43.

Downere, adv. more downward, ii. 12. 14.

Ebrew, adj. Hebrew, pr. 23.

Ecliptik, sb. ecliptic, pr. 67. A great circle of the sphere, drawn along the middle of the zodiac, making an angle with the equator of about 23° 25'; the apparent path of the sun, nearly.

Eft-sones, adv. soon after, immediately, ii. 23. 11.

Eggo, sb. edge, ii. 46. 7.

Eleccioiouns, sb. pl. elections, choice of fit times, ii. 4. 2. "Of viage is ther non eleccioioun;" Chaucer; M. of L. Ta. 312.
Eleuacioun, sb. the altitude above the horizon of the north pole, ii. 23. 15.

Eleuat, pp. elevated, ii. 23. 17. See Eleuacioun.

Elles, adv. otherwise, i. 19. 2.

Elongacioun, sb. angular distance, ii. 25. 39.

Emhelif, adj. oblique, i. 20. 2; (as applied to angles), angles that are not right angles, ii. 26. 23. I cannot find the word elsewhere, nor can I guess to what language it belongs; it looks like an extraordinary corruption of the word oblique.

Emhelif, adv. obliquely, ii. 26. 6.

Emysperies, sb. pl. hemispheres, i. 18. 6.

Endlang, adv. along, lengthways, ii. 40. 22, 44.

Endtyng, sb. inditing, style of composition, pr. 30.

Engin, sb. ingenuity, skill, pr. 41. Lat. ingenium, whence E. engin.

Enhausyng, sb. elevation, ii. 39. 16.

Enhawased, pp. exalted, elevated, lifted above (the horizon), ii. 26. 22. O.F. enhauier, to elevate, haut, high.

Ensample, sb. token; in ensample, to signify, i. 21. 25.

Ensamppule, sb. example, ii. 45. 5.

Entere, imp. s. enter, ii. 44. 7. To “enter with” is to keep in mind and search for, as a help to finding something else. "Argument, in astronomical tables, is the angle on which the tabulated quantity depends, and with which, therefore, in technical language, the table must be entered."—Eng. Cycel. Arts and Sciences, s. v. Argument. In l. 3. entere hit = set down in writing.

Entres, sb. pl. entries, ii. 44. 26.

Episicle, sb. epicycle, ii. 35. 18. A small circle, the centre of which moves along the circumference of a larger one.

Equacion, sb. equal partition, ii. 37. 9; pl. Equacions, ii. 36. 2. The "equations of houses" means the method of dividing the sphere equally into "houses" for astrological purposes; Equacions, pr. 71; Equacions, calculations, i. 23. 3.

Equales, adj. pl. of equal length; howris equales, hours each containing 60 minutes, ii. 8. 2; Equals, equal, i. 16. 9.

Equinoxial, adj. equinoctial; said of the equinoctial circle or equator, the great circle of the sphere whose poles are the arctic and antarctic poles, i. 17. 12.

Equinoxis, sb. pl. equinoxes, i. 17. 18.

Est, adj. East, i. 5. 4.

Eue, sb. evening, ii. 12. 22.

Eunene, adv. equally. See Distantz.

Enereech, pron. every one, pr. 40.

Euer-mo, evermore, ii. 3. 25.

Evidently, adv. by observation, ii. 23. rub.

Expanse, adj. expanse or separate, ii. 45. 11. See Anni expansi.

Experience, sb. knowledge acquired by trial, ii. 1. 16.


Face, sb. a third part of a "sign," a portion of the zodiac 10 degrees long, ii. 4. 38.

Failling, pres. part. failing, remote, ii. 4. 18.

Farwel; go farwel, be dismissed, be let alone, ii. 23. 7.

Felicite, sb. favourable position or aspect, ii. 4. 25.
Fer, adj. far, ii. 16. 1.
Ferforth, adv. far-forth, i. e. far, pr. 49.
Ferthe, fourth, ii. 35. 4.
Ferther-ower, conj. moreover, ii. 26. 8.
Figures, sb. pl. figures, i. e. markings, pr. 45.
Fixe, pp. fixed, pr. 54.
Fond, 1 p. s. pt. found, ii. 1. 6.
For, prep. against, to prevent, ii. 38. 1; to have for excused, i. e. to excuse, pr. 30.
Forper, adv. further, ii. 43a. 4.
Forthward, adv. forwards, ii. 35. 5.
For-why, conj. because, ii. 46. 19.
Frere, sb. friar, pr. 58.
Fro, prep. from; fro vs-ward, away from us, used to express that the sun having reached the nearest point to our zenith, begins to descend from it, i. 17. 9. Cf. i. 17. 39.
Furth, adv. forward, ii. 46. 4; Furfe, ii. 46. 16.
Geuen, pp. given, pr. 6.
God, adj. good, ii. 4. 28.
Governance, sb. regulation, pr. 56; subjection, i. 21. 50.
Grek, adj. Greek, pr. 22; pl. Grekes, pr. 20.
Gyrdelle, sb. girdle, cincture, central line or great circle, i. 17. 26; Girdel, i. 17. 29.
Haddy, for Hadde y, had I, ii. 1. 15.
Halidayes, sb. pl. holydays, i. 11. 1.
Halt, pr. s. holdeth, holds, i. 14. 2.
Han, pr. pl. have, possess, pr. 24.
Hastow, for hast thou, i. 5. 6.
Hath hymself, pr. s. bears a ratio, is in proportion, ii. 41b. 5.
Hauy, for hauye y, have I, ii. 40. 15.
Hedes, sb. pl. heads, or first points of signs, i. 17. 12. See Heued.
Heie, adj. high, i. 16. 7.
Heiest, adj. highest, ii. 13. 4.
Hem, pron. pl. them, i. 8. 7.
Hennes-forthward, adv. henceforth, i. 1. 3.
Hepe, sb. heap; hence, to hepe, in a heap, all close together, i. 14. 4. See the Preface, p. xxviii.
Her-mele, sb. the thickness of a hair, a hair's breadth; lit. a hair's part, ii. 38. 10. A.S. mel, a portion.
Heued, sb. head; the beginning or first point of a zodiacal sign, i. 17. 3; pl. Hceueudes, i. 17. 16.
Heuenissh, adj. heavenly, i. 21. 33. Cf. Compl. of Mars, st. 5.
Heuy, adj. heavy, difficult, pr. 32.
Heyer, adj. higher, ii. 23. 26.
Heyhte, sb. height, altitude, i. 1. 2; ii. 3. 13; Heyte, ii. 41. 9; Heyth, ii. 41. 13.
Hihten, pr. pl. are called, i. 18. 2.
Hir, pron. her (applied to a star), ii. 3. 29.
Hir, pron. their, pr. 16; i. 21. 4.
His, pron. its, i. 2. 3.
Hise, pron. pl. his, i. 12. 3.
Hit, pron. it, i. 2. 2.
Hole, adj. whole, ii. 9. 3.
Horosco- po; in horoscope, within that part of the sky considered as the ascendant, ii. 4. 8; see note on p. 18. Gk. ὠροσκόπος, observing hours; also, as sb., a nativity, a horoscope; from ὠρα, time, an hour, σκηνομα, to consider.
Horoscopum, sb. horoscope, ii. 4. 36. See above.
Hors, sb. the "horse," a name for the little wedge that passes
through a hole in the end of the “pyn,” i. 14. 4. Called in Arabic alpherez, the horse.

Howis, sb. house, ii. 36. 5; Howys, ii. 36. 7; pl. Howses, pr. 71. The whole celestial sphere was divided into twelve equal portions, called houses, by six great circles passing through the north and south points of the horizon; two of these circles being the meridian and the horizon.

Ilike, adj. equal, i. 17. 31; Ilike, like, equal, i. 17. 17. A.S. gelíc, G. gleich.

Ilik, adv. equally, ii. 15. 1; the same, ii. 39. 13.

Ilike-distant, at an even distance, i. e. parallel, ii. 39. 18. (Not equi-distant, because the climates varied in breadth.)

In, prep. into, i. 16. 2; among, i. 10. 5.

Indeterminat, adj. not marked upon the Astrolabe, ii. 17. rub.

Inequale, adj. ii. 10. 4; pl. Inequales, of unequal length; howris inequales, hours formed by dividing the duration of daylight by twelve, ii. 8. 1; Inequalis, ii. 10. 1.

Infortunat, adj. unlucky, ii. 4. 34.

Infortunyng, sb. unlucky condition, ii. 4. 26.

Inperfit, adj. imperfect, incomplete, i. 18. 3.


Introductorie, sb. introduction, pr. 68.

Loigned, pp. joined, nearly or altogether in conjunction, ii. 4. 31.

Lojyntly, adv. conjointly, together, ii. 11. 9.

Indijal, adj. judicial, ii. 4. 35. Judicial astrology pretended to forecast the destinies of men and nations; natural astrology foretold natural events, such as the weather and seasons.

Just, adj. just, exact, ii. 3. 43.

Justly, adv. exactly, ii. 3. 44.

I-wretten, pp. written, ii. 45. 22; I-wrote, ii. 45. 23.

I-wryton, probably an error for I wolde witen, I would know, ii. 45. 6. See the Critical Note.

Kalcule, v. to calculate, i. 22. 3.

Kalender, sb. a calendar, i. 11. 1; pl. Kalendres, pr. 57. Lat. calendarium. The old calendars answered nearly to our modern almanacks.

Kalkuler, sb. the calculator or pointer, i. 23. 2. See Almury.

Kanstow, 2 p. s. pr. knowest thou, pr. 20.

Kas, sb. case; in kas pat, in case, ii. 3. 2.

Kawht, pp. caught, perceived, ii. 17. 8.

Kep, sb. heed; tak kep, take heed, i. 1. 2.

Keruyng, carving, i. e. cutting, crossing over, i. 19. 3.

Knowyng, sb. knowledge, pr. 47.

Kon, imp. s. grant; kon me thank, grant me thanks, thank me, pr. 38. “To con one thanks, Fr. savoir gré, to feel thankful and make the feeling known to the object of it.”—Wedgwood. A.S. cunnan, to know.

Kowech, v. to lie; kowech adown, lie down, ii. 29. 14.

Krokede, adj. crooked, i. 19. 2.

Label, sb. the narrow revolving rod or rule on the front of the Astrolabe, i. 22. 1. See Fig. 6.

Lasse, adj. less, pr. 40.

Lat, imp. s. let, ii. 20. 13.
2. Longitude, adj., a little, in 12, 8.

Like, adj., as, a little, in 1, 15.

Like, adj., as, it pleased (thee).

Last, imp., it pleased (thee).

Length, pr. s., it pleased, it.

Length, pr. s., it pleased, it.

Lighe, pr. s., may lie, lie.

Line, adj., pr. s., it pleased, it.

Line, adj., pr. s., it pleased, it.

Like, pr. s., remains, it.

Like, pr. s., remains, it.

Longer, adj., longer, in 10, 2.

Longer, adj., longer, in 10, 2.

Long, pr. p., lead, conduct, pr.

Like, adj., a little, in 12, 8.

Like, adj., as, a little, in 1, 15.

Length, pr. s., it pleased (thee).

Like, adj., as, it pleased (thee).

Last, imp., it pleased (thee).

Length, pr. s., it pleased, it.

Length, pr. s., it pleased, it.

Lighe, pr. s., may lie, lie.

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Like, pr. s., remains, it.

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Longer, adj., longer, in 10, 2.

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Long, pr. p., lead, conduct, pr.

Like, adj., a little, in 12, 8.

Like, adj., as, a little, in 1, 15.

Length, pr. s., it pleased (thee).

Like, adj., as, it pleased (thee).

Last, imp., it pleased (thee).

Length, pr. s., it pleased, it.

Length, pr. s., it pleased, it.

Lighe, pr. s., may lie, lie.

Line, adj., pr. s., it pleased, it.

Line, adj., pr. s., it pleased, it.

Like, pr. s., remains, it.

Like, pr. s., remains, it.

Longer, adj., longer, in 10, 2.

Longer, adj., longer, in 10, 2.

Long, pr. p., lead, conduct, pr.

Like, adj., a little, in 12, 8.

Like, adj., as, a little, in 1, 15.

Length, pr. s., it pleased (thee).

Like, adj., as, it pleased (thee).

Last, imp., it pleased (thee).

Length, pr. s., it pleased, it.

Length, pr. s., it pleased, it.

Lighe, pr. s., may lie, lie.

Line, adj., pr. s., it pleased, it.

Line, adj., pr. s., it pleased, it.

Like, pr. s., remains, it.

Like, pr. s., remains, it.

Longer, adj., longer, in 10, 2.

Longer, adj., longer, in 10, 2.

Long, pr. p., lead, conduct, pr.

Like, adj., a little, in 12, 8.

Like, adj., as, a little, in 1, 15.

Length, pr. s., it pleased (thee).

Like, adj., as, it pleased (thee).

Last, imp., it pleased (thee).

Length, pr. s., it pleased, it.

Length, pr. s., it pleased, it.

Lighe, pr. s., may lie, lie.

Line, adj., pr. s., it pleased, it.

Line, adj., pr. s., it pleased, it.

Like, pr. s., remains, it.

Like, pr. s., remains, it.

Longer, adj., longer, in 10, 2.

Longer, adj., longer, in 10, 2.

Long, pr. p., lead, conduct, pr.

Like, adj., a little, in 12, 8.

Like, adj., as, a little, in 1, 15.

Length, pr. s., it pleased (thee).

Like, adj., as, it pleased (thee).

Last, imp., it pleased (thee).

Length, pr. s., it pleased, it.

Length, pr. s., it pleased, it.

Lighe, pr. s., may lie, lie.

Line, adj., pr. s., it pleased, it.

Line, adj., pr. s., it pleased, it.

Like, pr. s., remains, it.

Like, pr. s., remains, it.

Longer, adj., longer, in 10, 2.

Longer, adj., longer, in 10, 2.

Long, pr. p., lead, conduct, pr.

Like, adj., a little, in 12, 8.

Like, adj., as, a little, in 1, 15.

Length, pr. s., it pleased (thee).

Like, adj., as, it pleased (thee).

Last, imp., it pleased (thee).

Length, pr. s., it pleased, it.

Length, pr. s., it pleased, it.

Lighe, pr. s., may lie, lie.

Line, adj., pr. s., it pleased, it.

Line, adj., pr. s., it pleased, it.

Like, pr. s., remains, it.

Like, pr. s., remains, it.

Longer, adj., longer, in 10, 2.

Longer, adj., longer, in 10, 2.

Long, pr. p., lead, conduct, pr.

Like, adj., a little, in 12, 8.

Like, adj., as, a little, in 1, 15.

Length, pr. s., it pleased (thee).

Like, adj., as, it pleased (thee).

Last, imp., it pleased (thee).

Length, pr. s., it pleased, it.

Length, pr. s., it pleased, it.

Lighe, pr. s., may lie, lie.

Line, adj., pr. s., it pleased, it.

Line, adj., pr. s., it pleased, it.

Like, pr. s., remains, it.

Like, pr. s., remains, it.

Longer, adj., longer, in 10, 2.

Longer, adj., longer, in 10, 2.

Long, pr. p., lead, conduct, pr.

Like, adj., a little, in 12, 8.

Like, adj., as, a little, in 1, 15.

Length, pr. s., it pleased (thee).

Like, adj., as, it pleased (thee).

Last, imp., it pleased (thee).

Length, pr. s., it pleased, it.

Length, pr. s., it pleased, it.

Lighe, pr. s., may lie, lie.

Line, adj., pr. s., it pleased, it.

Line, adj., pr. s., it pleased, it.

Like, pr. s., remains, it.

Like, pr. s., remains, it.

Longer, adj., longer, in 10, 2.

Longer, adj., longer, in 10, 2.

Long, pr. p., lead, conduct, pr.

Like, adj., a little, in 12, 8.

Like, adj., as, a little, in 1, 15.

Length, pr. s., it pleased (thee).

Like, adj., as, it pleased (thee).

Last, imp., it pleased (thee).

Length, pr. s., it pleased, it.

Length, pr. s., it pleased, it.

Lighe, pr. s., may lie, lie.

Line, adj., pr. s., it pleased, it.

Line, adj., pr. s., it pleased, it.

Like, pr. s., remains, it.

Like, pr. s., remains, it.

Longer, adj., longer, in 10, 2.

Longer, adj., longer, in 10, 2.

Long, pr. p., lead, conduct, pr.
Moder, sb. lit. mother; the thickest plate forming the body or principal part of the Astrolabe; called in Latin mater or rotula, i. 3. 1.

Modur, sb. mother, pr. 73.

Moeble, adj. movable, i. 21. 47.

Moeyng, sb. moving; pr. 61; Moeyunge, pr. 59; firste Moeyng, the "primum mobile," i. 17. 26.

Mone, sb. moon, pr. 61. A.S. mona.

Moneth, sb. month, ii. 44. 34; Monith, i. 10. 12; pl. Monythis, ii. 44. 33.

More, adj. greater, pr. 40; ii. 26. 7.

Morwe, sb. morning, ii. 12. 25.

Mote, sb. motion (Lat. motus), ii. 44. 13. The "mene mote" or mean motion is the motion of a planet during a given period as stated in the tables.

Nadir, sb. the point of the ecliptic exactly opposite to that in which the sun is situate, ii. 6. 1; see l. 8. Arabic nathiri's-samt, i.e. opposite to the zenith, for which the term an-nathir simply, signifying "opposite," was commonly used.

Naked, adj. simple, plain, pr. 19.

Nam, for Ne am, am not, pr. 42.

Narwe, adv. closely, lit. narrowly, pr. 49.

Narwest, superl. adj. narrowest, smallest, i. 18. 4.

Nat, adv. not, pr. 16.

Natheles, conj. not the less, never the less, pr. 20. A.S. ned, not.

Natiuitez, sb. pl. nativities, castings of nativity in astrology, ii. 4. 1.

Nawht, adv. not, pr. 36.

Neer, adv. nearer, ii. 43a. 4; 42 b 3; Ner, ii. 42. 3.

Nether, adj. lower, i. 12. 6.

Netherest, adj. superl. lowest, i. e. ontermost, i. 18. 4; Nethereste, lowest, i. 4. 2.

Nener-mo, adv. never oftener, never (with two exceptions), ii. 31. 3.

Ney, adj. nigh, ii. 3. 46.

Nombre, sb. a number, pr. 9; amouunt, sum, ii. 24. 3; pl. Noumbrers, pr. 2.

Notable, adj. noteworthy, pr. 57.

Noteful, adj. useful, pr. 72. A.S. notu, use.

Nowmbrers, sb. pl. numbers, i. 7. 4. See Nombre.

O, one, one single, ii. 19. 11.

Obedient, adj. answering to, or subject to, ii. 28. 20. A technical term, applied to the eastern signs of the zodiac, as being respectively correspondent to the western ones.

Obeith, pr. s. obeys, ii. 28. 25. See Obedient.

Occidentale, adj. Western, i. 5. 6. From Lat. occidens, setting.

Of, prep. by, pr. 41; for, i. 12. 4; from, i. 17. 28.

On, one, i. 10. 15; one o'clock, ii. 3. 50; in on, in one and the same condition, unchangeably, ii. 2. 8.

Ones, adv. once, pr. 34.

Onythyng, ii. 38. 12. See Anythyng.

Or, prep. ere, before, ii. 23. 20.

Orientale, adj. eastern, i. 5. 4. From Lat. oriens, rising.

Orizon rectum, or right horizon, ii. 26. 20. This means the horizon of any place situate on the equator, which could be represented by a straight line upon a disc or "table" of the Astrolabe.

Orizonte, sb. horizon, pr. 7. Lat. acc. horizontem; Gk. ὄριζων, bounding.

Ouerkerueth, pr. s. cuts across,
crosses, i. 21. 53; Ouerkeruynth, ii. 26. 20.
Ouer-thwart, prep. exactly across, at right angles to, i. 5. 1. A.S. perech, across, diagonal. Cf. Knights Ta. 1133.

Paiens, sb. pl. pagans, ii. 4. 35.
Parcelle, sb. parcel, i. e. part, i. 21. 49.
Partie, sb. part, pr. 45; pl. Parties, pr. 18.
Passep, pr. s. exceeds, ii. 42. 15; 43a. 7.
Perced, pp. pierced, i. 3. 2.
Perche, sb. a rod placed high up in a horizontal position, ii. 23. 26. Lat. pertica.
Perfit, adj. perfect, complete, i. 18. 2.
Perfitly, adv. perfectly, pr. 13.
Performe, v. to shew, constitute, be equivalent to, ii. 10. 10.
Peyre, sb. a "pair," a set, ii. 40. 18. A pair by no means implies that the set of similar things to which it is applied is limited to two. Cf. Prol. to Cant. Tales, 159.
Plages, sb. pl. quarters of the compass, i. 5. 7; ii. 31. 10. Lat. plagia, a region, space.
Planctes, sb. pl. planets, pr. 72. The seven planets, in order, are the Moon, Mercury. Venus, the Sun, Mars, Jupiter, and Saturn.
Plate, sb. the "sight" on the "rewle," i. 13. 2.
Ploie, v. to play; hence, to use, apply, ii. 40. 57. A.S. plowan, to play, apply.
Plomet; sb. plummet, heavy weight, ii. 23. 25.
Plomrewle, sb. plummet-rule, ii. 38. 6.
Pol, sb. pole, i. 14. 6; Pool, i. 18. 12.

Portatif, adj. portable, pr. 50.
Practik, sb. practice, practical working, pr. 49.
Precedent, adj. preceding, ii. 32. 3.
Preue, sb. test, verification, experimental proof, ii. 23. rub.
Prikke, sb. a small mark, such as a little stick stuck in the ground, ii. 42. 3; a dot, ii. 5. 12.
Principals, adj. pl. principal, chief, i. 7; Principaux, cardinal, ii. 31. 10.
Proporcions, sb. pl. proportions, ratios, pr. 3.
Propre, sb. own, ii. 7. 14.
Propretes, sb. pl. properties, i. 10. 5.
Proue, v. to test, ii. 23. rub. Lat. probare, to test, verify.
Puttyng to, i. e. adding, ii. 43a. 12.
Pyn, sb. the pin which passes through the central hole in the Astrolabe and its plates, i. 14. 1.
Quantite, sb. largeness, size, i. 21. 24.

Rehere, v. to rehearse, enumerate, pr. 45.
Remenant, sb. remnant, rest, i. 4. 5.
Remeue, imp. s. move backwards and forwards, ii. 2. 2.
Rennyth, pr. s. runs, continues, ii. 3. 47.
Reseccued, pp. received; wel reseccued, favourably situated with respect to other planets, &c.; ii. 4. 30.
Respecte, sb. regard, i. 21. 49.
Resscyth, pr. s. receives, i. 3. 2.
Retrograd, adj. moving in a
direction contrary to that of the sun's motion in the ecliptic, ii. 4. 31; 35. 12. Spoken with reference to a planet's apparent motion.

Reverent, adj. reverend, pr. 58.

Revolutious, sb. complete circuit, ii. 7. 13.

Rewle, adj. rude, plain, unadorned, pr. 30.

Rewle, sb. the revolving long and narrow plate or rod used for measuring and taking altitudes, i. 13. 1. See Fig. 3. It revolves at the back of the Astrolabe.

Rewles, sb. pl. rules, pr. 19.

Riet, sb. the "rete" or net; the topmost plate on which some of the stars were figured, and the northern half of the Zodiac shewn, i. 3. 3.

Rikened, I p. s. pt. reckoned, counted, ii. 3. 35.

Rond, adj. round, circular, ii. 33. 1; roade, ii. 33. 2.

Rote, sb. root, the tabulated quantity belonging to a given fixed date, from which corresponding quantities for other dates can be calculated by addition or subtraction, ii. 44. 1; pl. Rotes, ii. 44. 20.

Rowm, adj. roomy, large, wide, i. 2. 2. A.S. rém, spacious.

Rytes, sb. pl. observances, ii. 4. 35.

Sadly, adv. carefully, steadily, with as little movement as possible, ii. 29. 12. W. sad, firm, steady.

Samples, sb. pl. examples, ii. 40. 4.

Sein, gerund; that is to say, that is to say, pr. 25. See Seyen.

Semeth, impers. vb. it seems; me semeth, it seems to me, pr. 33.

Sen, v. to see, ii. 23. 27.

Senyth, sb. (1) the point of the horizon where a given azimuthal circle meets it; hence, the point of sunrise, ii. 31. 8; (2) the zenith, or visible pole of the horizon, i. 18. 4. Arabic al-samt, a point of the horizon (showing the first meaning to be the original one); whence Arabic samt al-ras, the zenith. See Azyimuth.

Septentrional, adj. northern, ii. 40. 30; pl. Septentrionals, ii. 40. 28.

Sexte, six, ii. 42. 7.

Seyen, gerund; pat is to seyen, that is to say, i. 10. 2. See Sein.

Shaltow, for shalt thou, pr. 70; i. 7. 2.

Shewth, pr. s. appears (used for the modern is shown), i. 7. 5; ii. 23. 4; 30. 6; 32. 3; Shewyth, ii. 26. 15.

Shipmen, sb. pl. sailors, ii. 31. 6.

Shrewe, sb. evil planet, planet of evil influence, ii. 4. 31.

Sin, conj. since, ii. 4. 3.

Sit, pr. s. (for Sitteth), is situate, ii. 7. 4; 37. 3. See Sitte.

Site, sb. position, situation, ii. 17. 24. Lat. situs.

Sithes, sb. pl. times, ii. 42. 6; Sythes, ii. 42. 7. A.S. sith, a path, a journey, a time.

Sitte, pr. pl. are placed, are set, i. 21. 6; pres. part. Sittinge, situate, i. 21. 8. See Sit.

Skac, sb. scale, or rather, double scale, for measuring both by umbra recta and umbra versa, i. 12. 2.

Slate, sb. a slate for writing upon, ii. 44. 3.

Slely, adv. slily, i.e. with great sleight or skill, skillfully, ii. 29. 13; Sleyly, ii. 29. 14.

Slen, v. to slay, pr. 44.

So pat, conj. provided that, ii. 29. 17.

Solsticioun, sb. the solstice, or point of the ecliptic most remote from the equator, i. 17. 5, 37. Lat. solstitium.
Sonne, sb. sun, pr. 55; used as a feminine noun, ii. 1. rub. A.S. scenne, G. sonne, Du. zou, Sw. sol, are all feminine nouns.

Sothly, adv. verily, soothly, pr. 15. A.S. sôSlice, verily; from soth, sooth, truth.

Souereyn, adj. superior, ii. 28. 23. A technical term, applied to the western signs of the zodiac, as superior to the "obedient" eastern ones. See Obedient.

Sownyth, pr. pl. sounds as, i. e. means, i. 21. 37.

Sto2th, l p. s. pt. sought, ii. 45. 10.

Sper, sb. sphere, globe, i. 17. 15; Spere, sphere, i. 17. 28.

Sпряng, sb. first beginning, dawn, ii. 6. 4.

Squyres, sb. pl. measuring-rules, i. 12. 2. Shakespeare and Spenser have squire; from O.F. esquiere, F. équerr, a square, measuring-rule, from Lat. quadratus.

Stande, pr. s. subj. may stand, happen to be, ii. 34. 2; pr. s. Stant, stands, is situate, ii. 29. 5.

Statutz, sb. pl. statutes, rules, pr. 68.

Stike, imp. s. stick, fasten by insertion, ii. 38. 5.

Stok, sb. a stump or block of wood, ii. 38. 4.

Stont, pr. s. stands, ii. 42a. 3. See Stant.

Strange, adj. not its own, ii. 19. 4. Every star has its own degrees in the equator and ecliptic, viz. the degrees in which a great circle passing through the star and through the N. and S. poles cuts these circles respectively.

Strauenge, adj. not well-known, ii. 17. rub. A strange star is one that is not represented upon the Rete of the Astrolabe.

Streitnes, sb. narrowness, smallness, i. 21. 33.

Stremes, sb. pl. rays of the sun, i. 13. 3.

Streyneith, pr. s. holds together, compresses, i. 14. 4.

Strikes, sb. pl. strokes, lines, i. 19. 2; Strykes, long marks, i. 7. 6. G. strich.

Succedent, sb. a "succeedent" house, ii. 4. 29. The succeedent houses are the second, fifth, eighth, and eleventh, as these are about to follow the most important houses, which are the first (just ascending), the fourth (just coming to the nadir), the seventh (just descending), and the tenth, just coming to the meridian.

Succedith, pr. s. succeeds, follows, ii. 12. 27.

Suffisantly, adv. sufficiently, pr. 26.

Suffisaunt, adj. sufficient, sufficiently good, pr. 7.

Suffise, 3 p. pl. imp. (let them) suffice, pr. 20.

Superflute, sb. superflity, superabundance, pr. 30.

Swich, adj. such, pr. 32.

Table, sb. one of the thin plates on which almicanters are engraved, ii. 21. 4; pl. Tables, plates, i. 14. 2; tablets, ii. 40. 18. "Tables [in the last sense] be made of leues of yucy, boxe, cyprys, & other stouffe, daubed with waxe wrytte on," Hormani Vulgaria, leaf 81.

Tak, imp. s. know, accept as a result, ii. 25. 34.

Take, pp. taken, ii. 3. 43; Taken, ii. 3. 41.

Tarienge, sb. delay, ii. 25. 20.

Tau3th, l p. s. pt. taught, ii. 44. 24; Tha3thc, ii. 44. 32.
Techyng, pres. part. teaching, shewing, pointing out, ii. 12. 13. A.S. iæcian, to shew, Gk. ἀναδεικνύω.

Thank, sb. sing. thanks, pr. 38. A.S. ānce, an acknowledgment of a favour.

Theorik, sb. theory, theoretical explanation, pr. 59.

Ther, adv. where, wherewith, ii. 29. 9.

Thikke-sterred, adj. thickly covered with stars, ii. 23. 1.

Thilke, pron. pl. those, i. 7. 5.

Thise, pron. pl. these, pr. 21.

Tho, adv. then, ii. 1. 8.

Tho, pl. those, i. 8. 4.

Thowmbe, sb. thumb, i. 1. 1.

Thridde, third, ii. 35. 3.

Tid, sb. time, hour, ii. 3. 10; Tyd, ii. 3. 12.

To, adv. too, ii. 25. 19; Too, besides, ii. 45. 14.

Too, unmodern. two, ii. 42. 16.

Tornen, v. to turn, i. 21. 3.

Tortuos, adj. lit. tortuous, i.e. oblique, applied to the six signs of the zodiac (Capricorn to Gemini), which ascend most rapidly and obliquely, ii. 28. 19.

To-pridd, two-third; to-pridd parties, two-third parts, two thirds, ii. 416. 7; Too-pridd, ib.

Towcheth, pr. s. touches, ii. 27. 3; Towchith, ii. 27. 6; Towcheth, ii. 28. 5.

Towre, sb. tower, ii. 41. 2; Tour, ii. 41. 3.

Tretis, sb. F. treatise, pr. 4; pl. Tretis, treatises, ii. 34. 9. A translation of Lat. tractatus.

Tropik, sb. the turning-point, a name for the solstitial points, i. 17. 8, 38.

Tropos, sb. a turning; but interpreted by Chaucer to mean "agaynward," i.e. backward, i. 17. 8. Gk. τρόπος, a turn.

Turet, sb. the eye in which the ring of the Astrolabe turned, i. 2. 1. Cotgrave has, "Touret, the little ring by which a Hawkes lane or leash is fastened unto the Jesses." See the note in Warton (Hist. E. P. ii. 315, ed. 1871), which seems to make the word equivalent to a spicel. Cotgrave gives "a drill" as another meaning, which clearly connects it with tour, a turn. It seems to mean both a ring which turns round, and an eye in which a ring can turn.

Twies, adv. twice, pr. 34; Twye, i. 16. 12.

Verray, adj. very, exact, true, pr. 61; Verre, exact, i. 12. 5.

Verreyli, adv. truly, exactly, ii. 3. 41.

Vmbra extensa, or recta, the lower part of the "skale." Vmbra versa, the upper part of the same, or the part perpendicular to the "cross-line," i. 12. 6. See Fig. 1.

Vnknowe, pp. unknown, pr. 13.

Vnremoved, pp. unremoved, without (its) being moved, ii. 46. 21.

Vnstrange, adj. wellknown, familiarly known, ii. 17. rub. The unstrange stars are those which are represented upon the Rete of the Astrolabe. See Deteruynat.

Vouche, v. to vouch; vouche safe, to avouch as safe, to vouchsafe, grant, pr. 72. Cf. William of Palerne, ed. Skcat, l. 4152.

Vp, prep. upon, ii. 1. 2.

Vppere, adv. more upward, ii. 12. 13.

Vsurpe, 1 p. s. pr. usurp, claim, pr. 41.

Vsward; fro vs-ward, away from us, i. 17. 9; to vsward, towards vs, i. 17. 39.
Vulgar, adj. ii. 9. 3. The day vulgar is the length of the "artificial" day, with the durations of morning and evening twilight added to it.

Waiute, imp. s. watch, look, observe, ii. 5. 11.

Waiyng on, pres. part. observing, ii. 38. 11.

Webbe, a cobweb, i. 3. 4.

Wedge, sb. a wedge, i. 14. 3. A.S. weorg.

Wenest, 2 p. s. pr. expectest, ii. 3. 44.

Were, pr. s. subj. should be; also, would be, ii. 43. 7.

Weten, v. to know, ii. 44. 30.

Wex, sb. wax, ii. 40. 21.

Wexede, I p. s. pt. waxed, coated with wax, ii. 10. 17. See Tables.

Wey, sb. (1) the sun's apparent way or path during a given day, ii. 30. 3; see I. 10; also (2) the sun's apparent path or annual course, i. 21. 30.

Weyere, sb. the "weigher," a translation of the Lat. equrator, because it weighs equally the night and day, since the days and nights at the equinoxes are equal; i. 17. 16.

Whaite, imp. s. watch, observe, ii. 25. 21. See Waite.

What—pat, i. e. which, ii. 17. 14; 18. 2.

Whereas, adv. where that, where, ii. 31. 13.

Whir, sb. wire, thin metal rod, ii. 48. 5. A.S. wir. The word should be spelt wir; the MS. spelling wer is faulty.

With-drawe, imp. s. subtract, ii. 44. 27; Wyth-drawe, ii. 45. 4; 1 p. s. pt. With-drowe, ii. 45. 7.

Wol, I p. s. pr. (1) will, pr. 28.

Wombe-side, sb. the front of the Astrolabe, i. 6. 6. See Fig. 2.

Wot, 1 p. s. pr. know, ii. 3. 50; pr. s. knows, pr. 25. 50.

Wreten, pp. written, ii. 44. 7.

Wrowhte, 1 p. s. pt. wrought, worked, ii. 3. 27; Wrothw, was working, ii. 45. 13.

Wyte, v. to know, ii. 3. 26.

Ycleped, pp. called, ii. 39. 3. See Clepen.

Yif, conj. if, pr. 72.

Yit, adv. as yet, hitherto, pr. 29.

Ylike, adv. equally, ii. 26. 12.

Ynke, sb. ink, ii. 5. 12.

Zodia, sb. pl. beasts, i. 21. 36.

Gk. pl. ζώa, from ζωoν, dimin. of ζωoν, a creature.

Zodiac, sb. zodiac, pr. 65. An imaginary belt in the heavens, of the breadth of 12°, along the middle of which runs the ecliptic. The Astrolabe only shewed the northern half of this belt; see note on p. 13. Named from the imaginary creatures formed by the constellations situate in it; from Gk. ζωaν, dimin. of ζωoν, a living creature. See a drawing in the English Cyclopaedia, Arts and Sciences, viii. 1054, which shews the figures of the animals in the zodiacs as represented on a ceiling in the great temple of Denderah in Egypt, sculptured about 716 B.C. There is a beautiful copy of this sculpture, in white marble, in the Fitzwilliam Museum at Cambridge. The twelve "beasts" there shewn are all identical with those which appear in a modern almanac.

3ere, sb. year, ii. 44. 2; pl. 3eres, ii. 42. 6.

3if, conj. if, pr. 35.