

The History of Science Society

Hereford and Arabic Science in England about 1175-1200 Author(s): Josiah C. Russell Source: Isis, Vol. 18, No. 1 (Jul., 1932), pp. 14-25 Published by: The University of Chicago Press on behalf of The History of Science Society Stable URL: http://www.jstor.org/stable/224477 Accessed: 19/10/2010 12:35

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at http://www.jstor.org/page/info/about/policies/terms.jsp. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at http://www.jstor.org/action/showPublisher?publisherCode=ucpress.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



The University of Chicago Press and The History of Science Society are collaborating with JSTOR to digitize, preserve and extend access to Isis.

Hereford and Arabic Science in England about 1175-1200

For a country located so far from the Mediterranean the share of England in the spread of Arabic science was rather astonishing. Professor HASKINS has shown the significance of that country in this movement by identifying the translations of a series of Englishmen who took part in it. (1) About most of these men little else was known. With such a small amount of personal information available it has been difficult to detect the institutional connections, if any, of these men or to place their work in the background of cathedral school or university development of the century. In the course of research primarily for biographical information about thirteenth century men of letters in England a number of items turned up about ROGER OF HEREFORD, DANIEL OF MERLAI, ALEXANDER NECKAM, and probably ALFREDUS ANGLICUS. They tend to show-I believe-that Hereford, possibly through a cathedral school, was a center of this learning in the second half of the twelfth century. (2)

"ROGER OF HEREFORD," says Professor HASKINS, " was a teacher and writer on astronomical and astrological subjects who was still a young man in 1176, and who, two years later, adapted astronomical tables of Arabic origin to the use of Hereford. (3)" Professor HASKINS also notes a number of items in contemporary

⁽¹⁾ Studies in the History of Mediaeval Science (Cambridge 1927), ch. II " Adelard of Bath," ch. VI " The Introduction of Arabic Science into England;" and to some extent chs. XV and XVIII.

⁽²⁾ My interest in these men began in the fall of 1923 in a seminar in which Professor HASKINS took up certain questions raised in the above mentioned work. My research was as a fellow of the Guggenheim Foundation in 1930-31. I am glad to acknowledge the advice and suggestions of my colleague Professor L. C. MACKINNEY.

⁽³⁾ Op. cit., p. 126.

records which might refer to him : a Master ROGER OF HEREFORD attesting a York charter of 1154-1163, a ROGER OF HEREFORD witnessing a document of GILBERT FOLIOT of 1173-74, a ROGER vice-dean of Hereford owner of certain manuscripts, and a ROGER clerk of Hereford and itinerant justice. To these may be added a Master ROGER OF HEREFORD who attested a charter of Archbishop RICHARD OF CANTERBURY (1174-1184). (4) The frequency with which the title master is given makes one hesitate to accept any identification of the astronomer with a name not so prefixed. The chief difficulty seems to come from the popularity of the name ROGER AT HEREFORD.

The Compotus of 1176 has in the Digby MS. the title, "Prefatio magistri Rogeri Infantis in compotum." The gloss on a work of ALFREDUS ANGLICUS called him Rogerus Puer. (5) Since the preface itself states that the author was still young it was possible to conjecture that Infans or Puer was an inference from the preface. This puzzle is settled by the appearance in a Hereford charter of 1195 of a Master Roger Infans as a witness. (6) The astronomer's name was probably the Anglo-Norman Lenfant or the English Child. This lead does not seem to carry one far. A WILLIAM CHILD, it is true, connected with Hereford, appears in the Pipe Roll for 21 HENRY II. (7) His son would be, of course, filius Willelmi de Hereford. In a Rawlinson cartulary there is a series of Hereford documents which mention a ROGER filius Willelmi de Hereford and several relatives including an uncle ROGER filius Mauricii de Hereford. (8) The latter is probably that canon of Hereford described by THOMAS DE MARLEBERGH as a great man whom the abbey of Evesham ejected from the position of Dean of Christianity for the churches of the Vale of Evesham about 1202. (9) The temptation to identify the astronomer as a member of this family is discouraged by the fact that the charters do not call any member of the family Infans nor master either.

⁽⁴⁾ Archeologia Cantiana, V, 201-202.

⁽⁵⁾ HASKINS, op. cit., 125.

⁽⁶⁾ Oxford, Balliol College, MS 271, fol. 6or.

⁽⁷⁾ P. 70.

⁽⁸⁾ Bodleian Library, MS Rawlinson B 329, fols. 1237-126v.

⁽⁹⁾ W. D. MACRAY, ed. Chronicon de Evesham (London, 1863, Rolls Series), 196, 264.

The attestation of Master ROGER INFANS in 1195 prolongs his career nearly a score of years beyond the date of his treatise of 1178. If we may identify him with the Master ROGER who appears frequently in Hereford charters of the period, once as early as 1172, he may be assumed to have spent much of his time there. (10) The preface of his *Compotus* mentions that he had taught several years but does not give the place of his school. If his astronomical tables were written for school use the fact that they were prepared for the meridian of Hereford may be significant. Was there a school at Hereford? If so did it conform to the pattern of studies which ROGER OF HEREFORD inserts in the preface of the *Compotus*?

Before taking up these questions let us examine a treatise which seems to disclose the concluding chapter of the life of ROGER OF HEREFORD. This book has as an acrostic of the table of chapters which the preface says gives the name of compiler and corrector, ROGERUS COMPOTISTA ET REGINALDUS DE WALSINGHAM MONACHI SANCTI EDMUNDI RE-.IS. (11) In just such an acrostic was revealed the authorship of the Compotus of ROGER OF HEREFORD. The work is entitled Expositiones Vocabulorum que sunt in Biblia and has been assigned to a ROGER COMPOTISTA of the fourteenth century. Examination shows that it was probably earlier : the manuscripts themselves may be of the thirteenth century. The work is prefixed by a very remarkable index of the words commented upon. Arranged in approximately alphabetical order with reference to book and section number this index gives the impression that its author had a precise and orderly mind. But this might be expected of any computist. The heading of the Laudian manuscript to the introduction is "Prologus Promathei." This brings to mind at once the Corrogationes Promethei of ALEXANDER NECKAM whose interests were in many ways similar to those of ROGER OF HEREFORD. The Corrogationes Promethei have been explained by PAUL MEYER as the collections of one who was idle as Prometheus bound. (12)

⁽¹⁰⁾ Balliol College, MS 271, fol. 16r, other instances on fols. 6r, 16r, 36r, 39r, 44r, 67v and 71r. He always appears after the canons of Hereford.

⁽¹¹⁾ Oxford, Bodleian Library, MS Laud Misc. 176, all 160 fols : MS Bodley 238, fols. 2002-262r; Magdalen College, MS 112.

⁽¹²⁾ Notices et extraits des MSS, XXXV, 2, 649, 651-654.

It would be as appropriate for ROGER OF HEREFORD in a monastery after a busy life as it was for NECKAM in very similar circumstances.

The date of the work may be determined to a certain extent from the citations. The library at Bury was a large one : one might expect that up to date books would be there. The authorities are several. ALEXANDER NECKAM is cited very frequently. JOHN OF SALISBURY, among modern writers, is cited several times. (13) Others were PETRUS HELIAS (14), WYDO DE CREMA (15), HILDEBERT (16), PETRUS COMESTOR (17), and the Architrenius of JOHN OF HANVILLE (18). Two editions were apparently made. The Laud MS represents the first, and does not contain items which appear in the later and fuller edition. The latter, for instance, contain references to the Physics and Nicomachean Ethics which do not appear in the other. (19) NECKAM'S De Naturis Rerum was written before the revision of ROGER's work. (20) It is difficult to determine whether the first edition was also written before this work. Of more importance is whether it was written before NECKAM's Corrogationes Promethei. In this respect however the evidence is clear. NECKAM's work preceded even ROGER's first version. (21)

Interesting as the information is that ROGER had before him the *Corrogationes* of NECKAM, a more important question is the extent of his borrowing. As samples let us take the books of Joshua and of Maccabees : both works are arranged according to the books of the Bible. In the former NECKAM comments upon about 15 words or phrases and ROGER upon 36. (22) Of these only 3 are identical. In Maccabees NECKAM comments upon 22 items and ROGER 87 : they have 23 in common, a much higher percentage. How much ROGER took from other writers

⁽¹³⁾ MS Bodley 238, fols. 216v, 229v, 233v, 248r, 250r, 251r.

⁽¹⁴⁾ Ibid., fol. 213v.

⁽¹⁵⁾ Ibid., fol. 228v.

⁽¹⁶⁾ Ibid., fols. 232v, 236r.

⁽¹⁷⁾ Ibid., fol. 240r, 225v, 234v.

⁽¹⁸⁾ Ibid., fol. 214r.

⁽¹⁹⁾ Ibid., fols. 234v and 250r

⁽²⁰⁾ *Ibid.*, fol. 248r. Magister Alexander Nequam dicit in libro suo de natura rerum.

⁽²¹⁾ Ibid., fols. 121r, 121v, 133v, 243v : MS Laud Misc. 176, fols. 61r, 67v, 126v, 142v.

⁽²²⁾ For NECKAM's work I have used MS Bodley 550.

must await further investigation, but there seems reason to believe that some is original. In one important respect ROGER differed from NECKAM : the latter used the old arrangement of the Bible while ROGER already had the new, usually attributed to STEPHEN LANGTON.

In all of this there is no book which could not have been secured in the early years of the thirteenth century. There is nothing to prevent identification of this ROGER COMPOTISTA with ROGER OF HEREFORD. If the astronomer became a monk of St. Edmund's he probably died before 1214 : his name does not appear in the very long list of monks who took part in the election of that year. (23) His coauthor, REGINALD OF WALSINGHAM does not appear either. Among the miracles attributed to St. Edmund recorded by the contemporary abbot was one to ROGER DE HASE-LEYA, canon of Hereford, and his chaplain, ROGER DE AVESTANE. (24)

Another character of greater importance in the transmission of Arabic knowledge from Spain to northern Europe was ALFREDUS ANGLICUS OF ALFRED OF 'SARECHEL'. (25) "We know from ROGER BACON and from internal evidence that he visited Spain." (26) He dedicated works to ROGER OF HEREFORD and to ALEXANDER NECKAM. Certain facts about the latter make it possible to give a conjectural date for the dedication. (27) The title of ALFRED's work reads, "Liber magistri Alvredi de Sareshel ad magistrum magnum Alexandrum Nequam de motu cordis." (28) This assumes that NECKAM was probably still a teacher and that he was not yet canon of Cirencester. In the latter capacity he appears as early as the spring of 1203. It assumes also that his interests were largely in science, although this is not so certain. NECKAM taught theology at Oxford for several years. Since theology usually was a man's ultimate interest the date of his interest in science should probably be pushed back. On the

⁽²³⁾ T. ARNOLD, ed. Memorials of St. Edmund's Abbey (London, 1896, Rolls Series, no. 90), II, 75-76.

⁽²⁴⁾ Ibid., I, 207-208.

⁽²⁵⁾ HASKINS, op. cit., 128.

⁽²⁶⁾ Ibid., p. 129.

⁽²⁷⁾ For these facts see my "Alexander Neckam in England," *English Historical Review*. X/VII (1932).

⁽²⁸⁾ C. BAEUMKER, Des Alfred von Sareshel Schrift de motu cordis (Münster, i.W 1923), 1.

other hand NECKAM was seeking a school as late as 1183 and would hardly have been called a magnum magistrum earlier. These indications point to the decade 1185-1195 as the most probable period for the dedication.

In the course of an examination of chartulary and printed documents for evidence of thirteenth century literary men I found that the name ALFRED was very uncommon. The following are the instances. A Master Aldredus appears at Hereford as a witness ca. 1153-55 and ca. 1175 according to the editor (29). A Master Aldredus was a chaplain of Dean GEOFFREY OF HERE-FORD. (30) Three Hereford books once belonged to Master ALVEREDUS : the cathedral library, MS o.z. IV : Jesus College, Oxford, MS 26, and All Souls College, MS 82. His obit was on IX kal. January. (31) A Master ALFRED was canon of St. Peter of Exeter about 1205. (32) SENATUS BRAVONIUS of Worcester who died about 1207 dedicated a book to a Master ALFRED. These items may belong to the same career-that of the translator, ALFREDUS ANGLICUS. The dedication to ROGER OF HEREFORD whose connections as well as his name were-of Hereford-makes this highly probable.

Two such distinguished Arabists at Hereford would make this a scholarly center of some importance. Was there a school there? In a poem addressed to GERALD OF WALES inviting him to come to Hereford SIMON DE FRESNE makes a rather clear statement that such existed (33):

Flos et honor cleri, nostram te transfer ad urbem,

Sunt ubi philosophi, summus habendus ibi,

Urbs Herefordensis multum tibi competit, in qua

Proprius est trivii quadriviique locus,

Floruit et floret, in hac specialiter urbe

Artis septenae praedominatur honos.

Hunc, ubi tot radiant artes, de jure teneris,

Cum sis artis honos, artis amare locum.

(29) W. W. CAPES, ed. Charters and Records of Hereford Cathedral (Hereford, 1908), 17 and 27.

(30) Balliol College, MS 271, fol. 37v

(33) J. E. MATZKE, ed. Les Œuvres de Simund de Freine (Paris, 1909), VII

⁽³¹⁾ GOUGH, The History and Antiquities of the City and Cathedral Church of Hereford, etc. (London, 1717) (31).

⁽³²⁾ J. H. ROUND, ed. Calendar of Documents preserved in France etc. 918-1206. (London, 1899), 279 : Brit. Mus. MS Cotton, Vitell. D. IX, fol. 33v.

The poem mentions the failure of GERALD OF WALES to receive high preferment. This may have occurred any time after 1176 but would be especially appropriate about 1200.

SIMON DU FRESNE, designated in the manuscripts of the poems, as canon of Hereford, was also the author of two Anglo-Norman poems, *Le Roman de Philosophie* and *La Vie de Saint Georges*. In both poems the author gives his name in an acrostic : it seems to have been a Hereford custom. He witnessed, ca. 1200 according to the editor, a convention between WILLIAM the treasurer and the chapter of Hereford. (34) He attested a charter of Bishop WILLIAM DE VERE (1189-1199) (35) and one of H, abbot of Salop. (36) By the time of THOMAS, abbot of Gloucester (1224-1228) he had died. (37) His obit was on 15 July. (38) SIMON's information about Hereford refers then to the time or slightly later than the time of ROGER and ALFRED.

Another Master SIMON at Hereford might be confused with SIMON DU FRESNE did not the two appear together in the same charter. (39) Unfortunately in a number of instances the mere citation Master SIMON does not indicate which one is meant. (40) This other Master SIMON is called Master SIMON MELUD or Melun or the Theologian. (41) Since the man's surname is known it seems probable that his other name *theologus* was given for achievement or occupation. He probably taught theology at Hereford.

Let us turn to the preface of ROGER's *compotus*. It reads as follows (42):

Cum non sit humane benevolentie rem pluribus sed quod magis est, singulis necessariam infra terminos facilitatis includere, de compoto, quamvis difficillimum sit tante rei a viris summis sepe et diligenter tractate aliquid novi addere, sed et presumptuosum videatur juvenem

(42) Bodleian Library, MS Digby 40, fol. 21r. Printed by T. WRIGHT, Biographia Britannica Literaria (London, 1846), II, 90-91.

⁽³⁴⁾ CAPES, op cit., 38

⁽³⁵⁾ Brit. Mus, MS Arundel 19, fol. 31r.

⁽³⁶⁾ Balliol College, MS 271, fol. 54r-v.

⁽³⁷⁾ Ibid., fol. 70v.

⁽³⁸⁾ GOUGH, op. cit. (17).

⁽³⁹⁾ CAPES, op. cit., 38.

⁽⁴⁰⁾ Ibid., 19, 23, 24, 25, 37.

⁽⁴¹⁾ GOUGH, op. cit. (6). Oxford, Balliol College, MS 271, fols. 52r, 61r.

tot senum scripta retractare, multorum tamen petitionibus quos ad hoc hujus scientie invitavit excellentia scribere compellor. Hoc namque, ut asserit Timeus Platonis, in beneficio oculorum seminarium totius extitit philosophie, que primo considerata mirabili motuum ac temporum variatione se erexit ad liberrimas humane nature excellentias, sermonem videlicet ac rationem exornandasi sermonem quidem recte loquendi vel scribendi ad intelligentiam (gloss, gramatica), argute vero disserendi ad fidem (gl. dialectica), ornate decorandi ad persuasionem (gl. retorica); sed et rationem ipsam, ut sicut cuncta numero (gl. arismetica), pondere (gl. musica), et mensura (gl. geometria) consistunt, ita horum trium scientiis ad rerum naturam investigandum et superiorum (gl. astronomia) et inferiorum (gl. phisica) pervexit. Necnon et ipsa theologia que est de creatoris cognitione, hanc sibi tanquam de eximia artium astronomia suam elegit portionem non solum sibi sed omni vite tam communi quam studiose maxime necessitatem. Hanc tamen tante excellentie scientiam astrologi, nature superiorum secreta motuumque tam celi quam stellarum certitudinem investigantes, compotumque ab illa certitudine multum discrepare reperientes, falsam ab omni philosophica disciplina abjiciendam arbitrantur.

The preface continues with a statement of the battles of the computists together with the author's statement that he has been kept busy for many years in the schools and by personal affairs.

The preface gives a rather interesting outline of study : the seven liberal arts, theology and the sciences, especially astronomy, astrology and physics. Of the seven liberal arts, grammar, logic, and rhetoric are regarded as only means to an end, the study of the subject matter itself, arithmetic, music, geometry, and astronomy. Even theology had much to learn from astrology and astronomy. How does this fit into what we know of Hereford ? SIMON DU FRESNE told us that the seven liberal arts flourished there. SIMON the theologian was there. ROGER OF HEREFORD and ALFREDUS ANGLICUS, if we have identified him correctly, were eminent scientists. There is a striking similarity of interests. There is, moreover, in both the preface and in our knowledge of Hereford a notable absence of references to medicine and law and that in a century in which both were popular in the schools. Since ROGER probably used the schools in which he taught as an illustration it seems very likely that we have here a picture of the interests of the school at Hereford-probably a cathedral school.

In the movement for the spread of Arabic science in England DANIEL OF MERLAI is a character of considerable interest. He gives some autobiographical information in his *Philosophia*. (43) He tried the University of Paris but was bored by the instruction and proceeded to Spain where he listened to the great translator GERARD OF CREMONA who died in 1187. His book was dedicated to JOHN, Bishop of Norwich (1175-1200). While these dates indicate the time of his activity others define it even more clearly.

In the Pipe Rolls of 1184-1187 there are references to a debt which he contracted along with three other men with a few, DEULEBENEIE. (44) How much earlier than 1184 was the date of the transaction is uncertain. He next appears in a Curia Regis Roll of 1198. (45) In the following year in the same suit he appears as parson of Flitcham, in which capacity he seems to have acted the year before. (46) For the Trinity term of 2 John (1200-1201) he appears in a Curia Regis Roll in regard to a question of land tenure at Cambridge. (47) The Rotulus Cancellarii shows him owing three marks de Gernemue also of Cambridge. (48) On 2 September, 1205 the bishop of Norwich confirmed to the church of Flitcham a small piece of land over which G. de Norfolk and the parson, Master D. de Merleia had had a suit. (49) As parson of Flitcham DANIEL OF MERLAI seems to have been succeeded by a JOHN OF MERLAI. It has been suggested that this JOHN was a son of DANIEL but of that there seems no evidence in the Holkham deeds. (50) Other items may belong

(48) P. 31.

⁽⁴³⁾ For bibliography see HASKINS, op. cit., p. 126-127.

⁽⁴⁴⁾ Pipe Rolls, 31-33 Henry II, see index : the same item is repeated for these years.

⁽⁴⁵⁾ P. 35.

⁽⁴⁶⁾ WALTER RYE, ed. A Short Calendar of the Feet of Fines for Norfolk (Norwich, 1885), p. 64

⁽⁴⁷⁾ P. 177. Cf. also WALTER RYE, Pedes Finium etc. of Cambridge (Cambridge, 1891, Cambridge Antiquarian Society), 4.

⁽⁴⁹⁾ Catalogue of Miscellaneous Deeds belonging to the Rt. Hon. the Earl of Leicester, no. 703, at Holkham Hall, Norfolk. Used by courtesy of the Earl and with the assistance of the librarian, Mr. JAMES. The Flitcham deeds seem to have been misplaced.

⁽⁵⁰⁾ Hist. MSS Commission, *Report on Various Collections*, IV, 317. JOHN's name appears in the Holkham catalogue in nos. 704, 705, 706, 708, 713, 714, 715, 716, 717, 718, 719, 720, 722, 724, 728, 730, 731, 732, 737. JOHN's brother RICHARD occurs in most of those from no. 718.

to this man or to a later man of the same name : the donor of a gift to the priory of Castleacre, (51) and a debtor of 200 marks for disseisin in 1230. (52) In any case the student interested in Arabic science lived near the end of the twelfth century.

Now let us turn to a paragraph in the treatise of DANIEL OF MERLAI'S *Philosophia* which has been the subject of much controversy.

Vocatus vero tandem ab amicis, et invitatus ut ab Hispania redirem, cum pretiosa multitudine librorum, in Angliam veni. Cumque nuntiatum esset mihi quod in partibus illis discipline liberales silentium habet, et pro Tito et Seio penitus Aristoteles et Plato oblivioni darentur, vehementer indolui. Et ne ego solus inter Romanos Grecus remanerem, ubi huiusmodi studium florere didiceram iter arripui. Et in ipso itinere obviam habui dominum meum et patrem spiritualem, Johannem Norvicensem episcopum, qui me honorifice ut eum decebat, recipiens, valde meo gratulabatur adventui.

We may suspect that the friends of DANIEL were fellow students of his pre-Spanish days. Where? This would depend upon the subjects which DANIEL had studied. Obviously not theology or he would not have been so bored with Paris. Since he went on to Spain it seems probable that he was already interested in Arabic science. Was this study at Hereford? It is the one place where our present evidence points to a probable school. The reference to Roman law probably indicates Oxford. "In illis partibus" is broad enough to include Hereford if one is in Norfolk. Indeed, the use of the plural requires explanation if only Oxford was meant by DANIEL. One may conjecture that DANIEL had studied at Hereford before his departure for Spain sometime previous to 1187 and on his return before 1198 he found a great decline in interest in ARISTOTLE and others coming in by way of translations from the Arabic.

What were the antecedents of the interest in Arabic learning at Hereford? Professor HASKINS has pointed out a group of Lorrainers eminent in science who came to England in the second half of the eleventh century and the first half of the twelfth.

⁽⁵¹⁾ Brit. Mus. MS Harley 2110, fol. 38v: FRANCIS BLOMEFIELD, An Essay towards a Topographical History of the County of Norfolk, VIII, 390, 465. (52) P. 340.

Among the greatest were ROBERT DE LOSINGA, bishop of Hereford (53), and WALCHER, prior of Malvern, not so far from Hereford. It is perhaps significant that the two other great names of the scientific movement, ADELARD OF BATH and ROBERT OF CHESTER, indicate the rather sparsely settled western part of England. For the period even farther back Professor THOMPSON has written of "The introduction of Arabic science into Lorraine in the tenth century." (54)

As to the successor or successors of the school of Hereford we may well look to the Franciscan school at Oxford, whose interests have been so well described by Dr. LITTLE. (55) After mentioning the great stress upon study of the Bible and the languages, he quotes ROGER BACON for its interest in mathematics and physical science as follows :

"There have been found some famous men, such as Robert Bishop of Lincoln, and friar Adam Marsh and some others, who have known how by the power of mathematics to unfold the causes of all things and to give a sufficient explanation of human and divine phenomena; and the assurance of this fact is to be found in the writings of these great men, as, for instance, in their works on the impression (of the elements), on the rainbow and the comets, on the sphere, and on other questions appertaining both to theology and to natural philosophy."

All very much like the remark of Master ROGER INFANS. This Bishop ROBERT was a chaplain or one of the clerks of Bishop WILLIAM DE VERE of Hereford (1189-1199). His name occurs several times in the Balliol cartulary previously mentioned. (56) This confirms the statement of GERALD OF WALES to the effect that ROBERT GROSSETESTE was a member of the household of Bishop WILLIAM. GROSSETESTE was the first master of the Franciscan school at Oxford and set the stamp of his personality upon it.

If the school declined or interest in Arabic science lessened it was not because the pioneers in this science were subjected to ecclesiastical censure or restriction. NECKAM died abbot of

⁽⁵³⁾ HASKINS, op. cit. 333-335.

⁽⁵⁴⁾ Isis XII, 184-193 (1929).

⁽⁵⁵⁾ Archivum Franciscanum Historicum XIX, 810 (1926).

⁽⁵⁶⁾ MS 271, fols. 6v, 56v, 79v, 88v.

Cirencester. DANIEL OF MERLAI became a parson. ROGER OF HEREFORD probably ended his days as a monk of Bury St. Edmund. ALFREDUS ANGLICUS may have become canon of Exeter. All died in the good graces of the church. After all, it was Aristotelian metaphysics and its Arabic commentators rather than the other work of the Greeks which brought down the ecclesiastical prohibitions of 1210 and 1215. These pioneers do not seem much interested in theological discussion based on the new material.

Along several lines some advance in knowledge is made. The lives of ROGER OF HEREFORD and DANIEL OF MERLAI have been more precisely defined. ALFREDUS ANGLICUS has been identified with some probability as the Master ALFRED whose activity is evident about Hereford in the second half of the twelfth century. The presence of these men together with other evidence points to a cathedral school at Hereford at which the liberal arts, theology, and Arabic science were taught. Some surmises as to the antecedents and subsequent influence of the group are easy but conjectural. On the side of research the study suggests the possibility of supplementing by examination of unprinted records the careful study of translations and other treatises by such scholars as professor HASKINS.

University of North Carolina

JOSIAH C. RUSSELL.