

PROFESSOR RAMSAY ON THE INCIDENCE OF  
PASSOVER AND THE USE OF GERMAN  
AUTHORITIES.

It is doubtless deplorable, if true, that any English-speaking scholar, investigating the history of the Jewish calendar, were he no abler or more experienced (*pace* Prof. Ramsay's generous compliments) than myself, should cherish an unnatural prejudice against the treatises of his mother tongue, and yield to a morbid craving for the labyrinthine mazes of Germans and other foreigners. The neglect, if real, demands apology,—still more if there has been misrepresentation.

But for the interests of science it is more deplorable, if true, that a scholar so much abler and so much more experienced than myself as is Prof. Ramsay, should lend the weight of his great authority to the perpetuation and aggravation of "a very serious error in determining the incidence of Passover" committed by several of his fellow-countrymen in succession, through dependence on a single German authority (Wieseler), without recourse to the real sources in the Talmud and pseudepigraphic literature, or adequate consideration for the other and weightier modern authorities opposed to him.

As the latter appears to be the real state of the case, the interests of New Testament science demand of me a reply to Prof. Ramsay's courteous exceptions to my article in the *Expositor* for November, 1899 (Fifth Series, No. lix.), in which I shall aim to defend the substance of all my former positions against Prof. Ramsay's chivalrous, but, I

am convinced, mistaken attempt to vindicate his friends. If I am compelled to declare on documentary evidence that the "affirmation"—which "plain reason makes certain" to Prof. Ramsay, viz., that by A.D. 58 or earlier "the first of Nisan was already fixed long before [the ceremonial 'sanctification of the new moon' of Nisan] and known to all Jews in the empire" is positively erroneous, I trust I shall not in the manner of saying show less of courtesy and generosity than my distinguished critic.

Prof. Ramsay is quite right in saying that the chronological principle involved is "important," and that it has been much discussed—though not by English writers—and for the most part only since 1865, the year of publication of Mr. Lewin's *Fasti Sacri*. The question, then, should be clearly understood. It is not whether Jewish rabbis previous to 70 A.D. possessed a certain knowledge of astronomy, including an approximate estimate of the mean lunation, nor even whether, in addition to the purely empirical rules of the Mishna governing the intercalary month, they also possessed and employed a knowledge of the Metonic and other cycles.<sup>1</sup> It has long seemed to me to be highly probable, and, so far as I know, is not denied by any one, that even at this early time the decision of the Sanhedrin as to which years should be lengthened by the addition of the intercalary month, was influenced, though not determined, by astronomical calculation. The first of Tishri (= September–October), the beginning of the civil year, and Purim (14th Adar=February–March) appear to have been the limits within which the decision was made;

<sup>1</sup> The *oktaeteris* or eight-year period (99 lunations=8 solar years) was certainly known. In addition that of Meto, almost certainly; but according to a tradition cited by Lewisohn (*Gesch. u. System d. jüd. Kalenderversens*, 1856), and Jost (*Gesch. d. Juden*, II. p. 142), the cycle in vogue previous to 70 A.D. was one of 84 (12×7) years. This tradition is corroborated by Epiphanius, but the cycle is defective (it simply adds an *oktaeteris* to the cycle of Calippus of 76 years) and would need frequent checking by observation.

but the testimony of Talmud and Christian fathers alike is explicit that the Sanhedrin reserved the right for centuries after Christ to decide it, and considered other things besides astronomical data in their decision. Still, if the proposition is advanced on *a priori* grounds that Jews throughout the empire "must have been able to" tell, independently of this official decision, which year was to be intercalary, it need not now be disproved, though I think disproof would be easy.<sup>1</sup> It affects the discussion only in a minor way. It is the fixation of the new moon of Nisan, "the Head of the (religious) year," which now concerns us.

Of this too it is obvious that any one who had seen the preceding full moon hanging on the eastern horizon at sunset, and had even a child's knowledge of the duration of the month (*i.e.* lunation) could not fail to know within twenty-four hours or so when the next "new moon" would appear. To this extent, therefore, precalculation was open to everybody. But the question is, whether before 70 A.D. calculation of the phasis had ceased to be such a natural aid to, or check upon, observation, and reduced it to an empty form;<sup>2</sup> so that Jews throughout the empire knew months in advance the very day and hour on which the new religious year, with its cycle of feasts and sacred

<sup>1</sup> Certain general rules existed whose age is hard to fix, *e.g.*, that two consecutive years should not be intercalary, nor the year after a Sabbatical year. But the ultimate grounds for the decision were among the most jealously guarded mysteries (סוד) of the great rabbis, and the decision itself among the most important and cherished prerogatives of a special committee of the Sanhedrin, presided over by the נשיא. Doubtless the convenience of Jews at a distance was consulted by making the decision as to this point as early as possible, but that the Sanhedrin before 70 A.D. had actually abdicated this supreme prerogative in favour of precalculated calendars in general circulation is a bare assertion without better foundation than Wieseler's ill-grounded theories. How it could seriously inconvenience distant Jews not to know until their arrival in Palestine whether the first or second of two alternative days had been officially declared the head of the (religious) year is not apparent.

<sup>2</sup> On the irrationality of inferring that because there was more or less knowledge of the mean lunation, observation had ceased to be the *determinant* factor, see especially Gumpach, *Ueber den altjudischen Kalender, zunächst in seiner Beziehung zur neutestamentlichen Geschichte*, 1848, pp. 117 ff., 137 ff.

seasons, would begin. Is it true that at this period, as Prof. Ramsay puts it, the ceremony of "sanctifying the new moon" of Nisan, "if still preserved, had no practical weight"? Or was the official designation of the Head of the year reserved until actual observation had made the matter certain? If the latter be true, Mr. Lewin's calculations of first Nisan from the fifteenth (*i.e.* the astronomic full moon after the vernal equinox), with a uniform allowance of eighteen hours from conjunction to phasis, will lead us astray, unless guarded after the manner of the tables submitted in my article, and his error is by no means "a mere matter of expression."

Unless all the researches I have been able to make on this subject, both before and after Prof. Ramsay's reply, are worthless, the historical evidence is overwhelming that the decree of "sanctification" waited for actual observation, *calculation* being subsidiary, and not *vice versâ*.<sup>1</sup> In fact, my statement of the case in the words of Prof. Schürer rather than my own, in the first place, was for the very reason that this standard work seemed to state the general verdict of scholars, with the exception of Wieseler and an English follower or two who gave no independent discussion. Whether in adopting the idea of a fixed calendar Mr. Lewin was primarily influenced by the mere *a priori* generalities and irrelevancies adduced in support of this view, or whether his disregard of the Talmudic and pseudepigraphic sources in general, to say nothing of such acknowledged masters as Ideler and Wurm, was intentional and deliberate, did not then seem to me a matter of much importance, nor does it now. A careful revision of his

<sup>1</sup> A single, second-century testimony which has never, to my knowledge, been adduced before, but which I cannot but regard as in itself almost conclusive, may be adduced even here. The *Κήρυγμα Πέτρου*, as cited by Clement of Alexandria (*Strom.* vi. 5), says of the Jews: *Καὶ ἐὰν μὴ σελήνη φανῆ σάββατον οὐκ ἔγουνσι τὸ λεγόμενον πρῶτον, οὐδὲ νεομηνίαν ἀγοισιν, οὔτε ἄζυμα, οὔτε ἑορτήν, οὔτε μεγάλην ἡμέραν.*

argument in the light of Prof. Ramsay's article leaves me indeed no longer room to doubt; Mr. Lewin's supposed originality on the question of the history of the Jewish calendar disappears entirely. In its place I find only an uncritical dependence on a single somewhat erratic and fanciful German authority,<sup>1</sup> "as usual with many British,<sup>2</sup> and some American, writers," with entire disregard of all ancient Jewish authorities, bare mention of the great specialists in the field, Ideler, Anger, Caspari, and Wurm, and absolute silence as to Gumpach,<sup>3</sup> Lewisohn,<sup>4</sup> and historians such as Jost and Grätz, all of whom had shown the untenableness of Wieseler's position on this point. I appear, then, to have been mistaken as to the sources of Mr. Lewin's misinformation; but I am unable to see that this materially improves the situation for him.

The full consideration which Prof. Ramsay assures us was given by Mr. Lewin to this question has left no signs that I am able to discover. Wieseler, whose arguments he transcribes, published indeed four years after the appearance of Lewin's *Fasti Sacri* an attempt to justify his former extraordinary repudiation of all the evidence of the Talmud and conclusions of Jewish historians and critics.<sup>5</sup> In this essay the attempt is made to prove "dass der 1 Nisan um die Zeit Jesu auf *Berechnung*, nicht auf *Beobachtung* des sichtbaren Neumonds, welche nur die Rechnung regelmässig *bestätigend* hinzukam, beruht hat"; in other words, that the Sanhedrin, even previous to

<sup>1</sup> Wieseler, *Chronological Synopsis*, 1843, translated by Venables, 1857.

<sup>2</sup> Prof. Ramsay is too generous to American writers (who are simply conspicuous by their absence) as compared with British. Nevertheless of the latter the remark is true in this field. Browne's *Ordo Sæclorum* (1844) sets the example of precipitate assumption or dependence on Wieseler followed by Lewin. Of Mr. Turner, who goes the same road even further, we shall speak presently.

<sup>3</sup> *Op. cit.*    <sup>4</sup> *Geschichte und System des jüd. Kalenderwesens*, 1856.

<sup>5</sup> *Beiträge zur richtigen Würdigung der Evangelien*, 1869: Abt. xi., *Ueber die Form des jüdischen Jahres*.

70 A.D., were accustomed *first* to make official and public announcement of their results, and *afterwards* take their observations; a method which, however popular in modern times and in other branches than astronomy, cannot justly be imputed to this shrewd and conservative council. But I cannot find that Lewin has given any consideration whatever to the Jewish sources. How completely inadequate was Wieseler's proof may be imagined from the appeal made to the currency of calculated calendars among the Hellenists of Alexandria, the heretical sect of the Dostân,<sup>1</sup> and among the Samaritans (!), together with an attempt to show that "Enoch" advocates a year of 365½ days,<sup>2</sup> with a calendar of his own, "Jubilees" another, and that *therefore* the Sanhedrin (to whom all these writings were accurst) must have also relied upon a fixed precalculated calendar!<sup>3</sup>

This is one of the points in which Prof. Ramsay finds me guilty of "assumption" where Lewin and other English writers had decided "after full consideration."

But besides my having regarded the quotation from Schürer (with a comprehensive reference to "the whole excursus,"<sup>4</sup> including the authorities cited) as "the only support necessary to bring forward" on this point, Prof.

<sup>1</sup> See Petermann, art. "Samaria" in Herzog's *Realencycl.*, 1st. ed., p. 387.

<sup>2</sup> See, however, R. H. Charles, *The Book of Enoch*, 1893, p. 191.

<sup>3</sup> For the matter of intercalating the supplementary month it would be, *but for the records*, supposable enough that the Sanhedrin depended exclusively on some current and publicly known cycle, *e.g.*, that of eighty-four years. But to affirm their fixation of the *new moons* by precalculation is simply astounding. The variations in length of the lunation at different seasons are so complex as to baffle even expert astronomers. And the Sanhedrin had not only a special sacrifice to institute for each new moon, which must coincide with its actual appearance (Κήρυγμα Πέτρον, *ibid.*), but if Purim and Passover had failed to fall upon the observed full moon, their humiliation would have been irretrievable. To suppose that they employed a calendar like that of "Enoch" or "Jubilees" with a fixed month, assumes that they had wholly abandoned the idea of making the feasts agree with the phases of the moon.

<sup>4</sup> Schürer, *History of the Jewish People in the Time of Jesus Christ*, I, ii.: Appendix III., "The Jewish and Macedonian Months Compared with the Julian Calendar."

Ramsay suggests that I may be misinterpreting even Schürer. "The German professor speaks only of 'the time of Jesus Christ'; Prof. Bacon applies the assertion to a year that he fixes as probably A.D. 58."

It need not be supposed that Prof. Ramsay has any prejudice against German authorities in general, or Schürer in particular; but for some reason he writes without acquainting himself with the contents of this important excursus. Otherwise he would have seen that to Schürer the question whether the Jews at the time in debate "possessed a fixed calendar" (*for their religious year*), or "arranged their months according to purely empirical observation, beginning a new month only when a new moon had been actually observed and reported by eye-witnesses to the Sanhedrin,"<sup>1</sup> is not a question of a year or two, nor of a decade or two in A.D. 20-70. It is a question of centuries. The very next paragraph begins: "Even in the age of the Mishna, *in the second Christian century*, this (a fixed duration for the months) cannot have been the case; for the whole legislation of the Mishna rests on the presupposition that the new month, without previous reckoning, was begun each time upon the new moon becoming visible. So soon as the appearance of the new moon was proved by credible witnesses before the competent court at Jerusalem, *and later at Jamnia*, the new moon was solemnized, and, after all the rites had been observed, messengers were sent in order to notify the opening of the

<sup>1</sup> This statement of what Prof. Ramsay designated "the assumption made by Prof. Bacon" requires some modification in order to fairly present the case. Thus the word "purely" is unwarranted. I have not maintained, nor do I, that "the witnesses of the moon" did not assist the naked eye by astronomical means. On the contrary, these dishonourable practices were expressly guarded against by Gamaliel II., *ca.* 100 A.D., by cross-examination of the witnesses, to make sure that there had been actual observation. As to the supposed possibility that the beginning of the month might be indefinitely postponed on account of non-appearance of the witnesses," see Prof. Ramsay's admission on p. 437.

new month. So, at least, was it done during the six months in which it was of importance on account of the existence of any festival : in Nisan on account of the Passover . . ." etc.

The next paragraph begins : " The system of intercalation [of the supplementary month] was not fixed even in the second century after Christ," and the proposition is demonstrated at length from the Mishna. Further on we have : " The very complicated later Jewish calendar, calculated upon the nineteen years' (Metonic) cycle, is said to have been introduced by the patriarch Hillel *in the fourth century after Christ*. Although this is not witnessed to with absolute certainty, it is not improbable."

The reader will pardon, under the circumstances, citations at length which I had supposed to be made needless by the comprehensive reference in the article criticised. It will not be seriously maintained in view of the above that I was not justified in giving to Schürer's words " in the time of Jesus Christ " a sense which would include A.D. 50-60. Surely it is not now necessary to prove that this is not " the only support " I have to offer for my contention, by quoting at equal length from Ideler, Wurm, Dillmann, Zuckermann, Hamburger, Mahler, and others referred to by Schürer. Should Prof. Ramsay care to be assured that my convictions on the question of the Jewish calendar in the first century were not formed according to the borrowing method which he rightly deprecates, I can refer him to two articles of mine entitled respectively " Chronology of the Account of the Flood in P: a Contribution to the History of the Jewish Calendar "; and " The Calendar System of Enoch and Jubilees," in *Hebraica*, volume viii., October, 1891-July, 1892, pages 79-88 and 124-130, which are indeed crude enough, but will serve to show an acquaintance with the real authorities. I do not, however, regard it as commendable that I was ignorant at the time, not



only of Schürer's excursus, then very recent, but of the fact that both Saalschütz and Wieseler had already called attention to the phenomena which had struck me.<sup>1</sup> The knowledge evinced of the actual history of the Jewish calendar is slight indeed, yet perhaps, for the question now in hand, as important as the much more valuable and extensive researches of Prof. Ramsay into the contemporary Græco-Roman calendars, which the Jewish conservative regarded as sacrilegious. It was at least sufficient to show me at a later time that Schürer's statement of the facts is in all essential particulars unassailable, and that the idea of the Sanhedrin "getting the calculations made beforehand, and fixing the first of Nisan for each year, so that it should be known in time throughout the whole Jewish race over all the Roman world," though something little less absurd was once advocated by the brilliant Wieseler, really deserves in our day no more than the general reference given to "the whole excursus of Schürer," no matter how many truly able English scholars may successively have followed a blind German guide into the ditch. But Prof. Ramsay is greatly taken with the style of reasoning on this point in Mr. Turner's article "Chronology," in the *Hastings Bible Dictionary*. "Mr. Turner holds that they [the Jews] had adopted some pre-arranged system before A.D. 58. So does Mr. Lewin. We believe that they are right in this respect, and that Prof. Bacon has gone wrong. Prof. Bacon assumes," etc. We have indeed in Prof. Turner's otherwise admirable article a very copious and confident use of the *a priori* argument so strong in the eyes of Prof. Ramsay :

<sup>1</sup> The attempt is made to trace a relationship between the calendar system of the Priestly Document of the Hexateuch on the one hand, and the fixed luni-solar calendar systems, having a uniform month of thirty days or alternating months of thirty and twenty-nine days, advocated on the basis of *Genesis* by these Palestinian writers of B.C. 90–A.D. 70, in fierce opposition to the empirical lunar system of the Sanhedrin on the other. Cf. Saalschütz, *Mosaïches Recht*, 2nd ed., 1853, pp. 396 ff., and Wieseler, *Beiträge*, p. 296, v. 2.

“the Jews must before this have modified the method of simple observation by something in the nature of a calendar or cycle.” But when the question becomes one of actual fact, Mr. Turner supplies us indeed under the head of “Literature” with a general reference to Ideler’s *Handbuch* “for all the preliminary chronological matter which underlies subjects such as that of this article,” with subsidiary reference to Wieseler (*Chronol. Synops. der Evang.*), but he appears blissfully unaware that his chief authorities are flatly against his argument. He inquires (as even Wieseler would not), “But what was to happen when observation (of the new moon) was impossible? Was the new month to be put off as long as every night happened to be cloudy?” Just as if in the times of the Mishna such a contingency had never arisen or been provided for!<sup>1</sup> Precisely the same *a priori* argument, largely reproduced by Prof. Ramsay from the supposedly unforeseen inconveniences of an empiric calendar, is employed to show that, “as with the month, so also for the commencement of each year, a systematic calendar must soon have replaced simple observation, for strangers from the Dispersion could not visit Jerusalem for the Passover unless they knew beforehand whether a thirteenth month were to be intercalated or not.” But the actual rules by which the method of intercalation *was* governed, with only subsidiary employment of astronomical calculation, and the very case supposed of Jews at a distance from Jerusalem *was* met, are treated as if they did not exist!<sup>2</sup>

Just one scrap of historical evidence is adduced, borrowed,

<sup>1</sup> But see Prof. Ramsay’s own extract from my article on p. 437.

<sup>2</sup> There is not so much as the mention of one Jewish source on the whole subject of the calendar. We should not know from Mr. Turner’s article that there was such a thing as the Mishna, nor that the calendar discussions which occupied so large a place in Jewish history during the first three centuries of our era had ever been treated by modern scholars. Neither Schürer, nor any of the host of authorities cited by him on this subject, is mentioned.

it would seem, from Lewin, who, in turn, has borrowed it from Wieseler; <sup>1</sup> but for this one we have peculiar occasion to be grateful, inasmuch as its true bearing is precisely in the opposite direction from that in which Prof. Turner endeavours to employ it. Anatolius of Laodicea (A.D. 277, ap. Eus. *H.E.* vii. 32) urging determination of the Passover (*i.e.* Easter) by an astronomical system, denounces certain ones who, "disregarding the equinoctial limit, erroneously took for the paschal month what was really not the first month of one year, but the last of the preceding (*i.e.*, failed to intercalate Veadar where *astronomically* required), and that against the testimony of the old Jewish authorities, Philo, Josephus, Musæus, and, still earlier, the two Agathobuli and Aristobulus." As Mr. Turner rightly says, "The evidence of various fourth-century writers makes it all but certain that they were the Jews of his day. . . . Chrysostom (A.D. 387) appeals from the contemporary Jews, and their neglect of the equinox, to their wise men of antiquity—Philo, Josephus, Musæus, and others." Had Mr. Turner familiarized himself with the history of the long struggle of the Hellenizers of various types to introduce various calendars, based on *calculation of the equinox* against the determined (and really wise) conservatism of the Sanhedrin, with its ancient observational system, he would have been no less ready to believe that in Alexandria even a century before Christ there were those who urged dependence on the equinox for the intercalation of Veadar. Why not, since the author of *Enoch* lxxii.—lxxxii. (50 B.C.?) attempts to introduce his peculiar calendar based on a complete astronomic system (equinoxes, solstices, cycles), with a year of 364 days (52 weeks), and intercalations in the third, fifth, and eighth years? <sup>2</sup> But he would not have inferred

<sup>1</sup> *Chron. Synopsis*, pp. 401–436; compare *Fasti Sacri*, pp. xxxvi.—xliv.

<sup>2</sup> We may accept Wieseler's argument for a year of 365½ days as the basis of this calendar (*Beiträge*, pp. 293 ff.) without adopting the illogical inference as to the use of a fixed calendar by the Sanhedrin.

from it that the Sanhedrin, "before A.D. 29," had already abandoned their safe and carefully guarded observational system in favour of such crude attempts, at once destroying one of the most cherished of their own prerogatives<sup>1</sup> and producing overwhelming confusion with the sacred seasons. Doubtless there were Hellenistic Jewish philosophers at Alexandria, even before Philo's day, with calendars of their own, as there certainly were in Samaria and in Judæa. It may very well have been for just this reason that in the Mishna special exception is made of Alexandria as a city whither the messengers of the new year are not to be sent. But the Sanhedrin would not only have been wildly Hellenistic and radical to the point of iconoclasm if it had adopted any of their calendars, but guilty of suicidal folly.

There came indeed a time when calculation could fairly boast of being more trustworthy than empiric observation, and that is the time of Anatolius and Chrysostom, when Christians could taunt the conservative Jews with still clinging to their antiquated empiric system and "neglecting the equinoxes," in spite of their own Alexandrian sages, with the result that they were liable to celebrate the Passover "twice in one year" (by failure to intercalate Veadar). But these very taunts are an added proof *from Christian sources* that the Mishna is right in its representation that the empiric system was still clung to by orthodox Judaism down to *ca.* 400 A.D.

It is indeed unfortunate, in more than one sense, that I cannot refer Prof. Ramsay to English writers for a knowledge of this history. I hope this is not due to my ignorance. There is Selden, *Diss. de anno civili Judæorum*; Caspari (*Chronol. and Geogr. Introd.*, p. 10 f.) Schürer (*op. cit.*); and Von Soden (article "Chronology" in Cheyne's

<sup>1</sup> No one knows better than Prof. Ramsay the struggles required in Rome to displace the prerogative of the pontiffs by the introduction of the Julian calendar.

*Encycl. Bibl.*, § 55). But all of these but one are Germans, and *all* are opposed to the view into which Browne, Lewin, and Turner seem successively to have been misled by Wieseler. But that we may not run the risk of citing "pre-Mommsenian" authorities, reference is best made to the complete and learned discussion of the whole subject in the recent (1896) edition of Hamburger's *Real-encyclopädie des Judenthums*, Abt. 2, *Talmud und Midrash*, article "Kalender," pp. 608-628.

But Prof. Ramsay finds me guilty of two further injustices, first to Mr. Turner by my remarkable silence as to his article. This I trust may be somewhat atoned for by the present somewhat detailed discussion of what seems to me the great blemish on an otherwise able and scholarly article, which gave me great pleasure when it appeared by the closeness of its approximation to my own results. The explanation is simple. I could not make use of the article, for the reason that my own articles had already been in the hands of the editor of the EXPOSITOR for many months and in corrected proof for a considerable time, when Prof. Turner's article appeared. They remained in the same limbo for eighteen months longer, awaiting, as the editor kindly explained to me, an opportunity when the pressure on the columns of the EXPOSITOR from Prof. Ramsay's pen should be intermitted.

As to Mr. Lewin, Prof. Ramsay objects that I have treated it as a fault "that he has generally placed the first day of Nisan twenty-four hours too early." In reply Prof. Ramsay says, "Prof. Bacon assumes the point" and urges that Mr. Turner holds "that possibly, or even probably, Mr. Lewin places first Nisan too late." As Mr. Turner represents a still further stage of divergence from the real authorities, it is not surprising that he outdoes Mr. Lewin as much as Mr. Lewin outdoes Wieseler.<sup>1</sup> But Prof.

<sup>1</sup> Mr. Lewin's reduction by one-half of Wurm's estimate (adopted by Wieseler)

Ramsay is hardly fair in the statement that "Prof. Bacon takes it as obvious that Wurm must be right in requiring an average of at least thirty-six hours between the strict astronomical new moon and the sanctification, for which Lewin allows but eighteen," where express reference is made to the "mass of testimony, ancient and modern, accumulated by Wurm" on this point. It may be well to add that Prof. Bacon took the pains to inquire of the professor of astronomy at Yale as to the trustworthiness of Wurm's conclusion, and learned that the rabbinic twenty-seven and a half hours allowed between conjunction and phasis was decidedly an underestimate. It is for this reason that I hold that Mr. Lewin was *not* justified in disregarding both Wurm and the rabbis, and reducing the time to "an average of eighteen hours between the strict astronomical new moon and the 'sanctification,'" and that it is not on this side of the case that "assumption" is chargeable.

In conclusion I desire to express again my appreciation of the great courtesy of Prof. Ramsay, and no less sincerely my respect for the learning and services both of himself and of the able English scholars whom he defends. I have felt compelled to point out in this particular field an apparent lack of acquaintance on their part with the history of the Jewish calendar, whose sources are mostly hidden in the recesses of the Talmud. It should not be inferred that I do not admire their work as a whole, and, so far as concerns Prof. Ramsay's dislike of those who depend on a single German writer, or depend on others who do, a practice unfortunately even more common with American than with British writers, I judge that he will see from my reply how heartily I agree with him.

B. W. BACON.

of thirty-six hours, appears to be on the basis of Browne's *Ordo Seclorum*, p. 469, § 417, but Browne gives no other reason than the favourable climate of Palestine.