Professor Bessey says truly that Dr. Beal "came of Quaker stock and preserved to the end the sterling honesty of action and speech instilled in him by his parents." Therefore, he would certainly wish that the errors Professor Bessey made in the article published by you on May 29, 1925, should be corrected.

CHARLES W. ELIOT

CAMBRIDGE, MASS.,
JUNE 2, 1925

THE METHOD OF SCIENCE

As a counterblast to numerous shocked and grieved allegations of the fundamentalists, various committees and groups of scientists have been issuing apologetic pronouncements, more or less measured in tone, but all alike striving to show that science is innocent of iconoclasm in things religious. And, in line with this, emphasis is laid more and more upon that part of scientific text books which disavows any effect of scientific teaching "to discredit the Bible." The careful report of the committee of California presidents, published in your issue of April 3, 1925, demonstrates this tendency with great clearness. The report itself, incidentally, refers to the "respect and consideration" due to "fundamental principles of religion, as presented in the Bible." Of course, the pressure even of a popular minority is an important factor in democratic control of educational policies: and yet, methinks, they do protest too much.

Am I incorrect in understanding that science is, fundamentally, a matter of method—a process that gains its sanction solely from its ascertainment of positive data and its treatment of these according to a recognized method of rational generalization? If I am not, is it a too reckless thing for scientists to come out openly and stand by their guns, not to defend conclusions but to assert their unqualified faithfulness to the method whereby they derive the only justification for their order in the intellectual life?

The scientist who gives preliminary pledges that his conclusions shall interfere with neither this nor that religion is no whit more reliable than the one who would similarly assure that his conclusions would never upset the complacency of the Nordics, the Vegetarians, the Geocentrists or any other body who have established themselves upon a conclusion which they are bound to maintain, willy nilly, to the bitter end.

Yet if they are not to do this, should they not abandon all this loose talk of religion and gods and Bibles, and frankly admit that, as scientists, they have nothing whatever to do with the matter, since it offers neither the datum nor the concept which is susceptible of treatment or entitled to recognition upon the scientific plane?

And ought not scientists, in committees or in groups as in individual cases, to stand openly forth before all apostles of reaction, whether called fundamentalists or voodoo magicians, and tell them in unmistakable English that the day has passed when truths should be sugar-coated to appease the prejudiced palates of the W. J. Bryans of the day?

For a century plain speaking has been a rarity in the churches. Heaven help us if it depart also from the halls of science.

EDWARD H. DAVIS

WATERBURY, CONNECTICUT

WEATHER CONDITIONS AT SUMATRA

A REPORT secured by Mr. Charles L. Hoover, American Consul at Batavia, Java, from the Royal Magnetic and Meteorological Observatory at Batavia, relating to weather conditions of Sumatra, for the information of expeditions wishing to study the eclipse of the sun in 1926, reads as follows:

The duration of sunshine has been estimated for every hour half from 8 A. M.–4 P. M. in a scale of 0–10, 0 being = entirely overcast, 10 = full record during the half hour.

The mean values express in percentages, are as follows:

Duration of sunshine, from 8 A. M.–4 P. M., in percentages.

	December 1924	January 1925	February 1925
Benkoelen	76	62	61
Palembang ...	48	56	51

In each of the 3 months the percentages of Benkoelen are the higher ones.

For the separate half hours, mean values of the 3 points, the following percentages are obtained:

Duration of sunshine in percentages, December, 1924–February, 1925

8 — 8:30	8:30 — 9	9 — 9:30	9:30 — 10	10 — 10:30	10:30 — 11	11 — 11:30	11:30 — 12	12 — 12:30	12:30 — 1	1 — 1:30	1:30 — 2	2 — 2:30	2:30 — 3	3 — 3:30	3:30 — 4
Benkoelen:															
62	63	65	67	71	72	70	72	70	68	72	70	68	65	57	49
Palembang:															
46	51	56	59	59	59	55	55	49	55	52	56	51	47	41	38
Difference:															
16	12	9	8	12	13	15	17	21	13	20	14	17	18	16	11

During the whole day the average percentage appears to have been 15 per cent. higher at Benkoelen than at Palembang.

These are readings from the records of Jordan's sunshine recorder with sensitive paper, furnished by Negretti & Zambra, London. Of course the probability of a clear sky, as needed for the observation of the eclipse, is smaller than is suggested by the above-mentioned figures, as the sensitive paper yields a record also when there are thin clouds. The data therefore have chiefly a relative value with a view to a comparison between the two places in question.

(Signed) C. BRAAK,
Director
C. G. ABBOT,
SMITHSONIAN INSTITUTION *Assistant Secretary*

CALENDAR REFORM

I SHOULD like to suggest an amendment to Mr. A. L. Candy's revised calendar. I would have in the new calendar the months of January, April, July and October begin with Sunday, in place of Monday.

It is desirable to have the same number of working days in each calendar month. In order to do this it is necessary to start the 31 day months on a Friday, Saturday or Sunday, so that the 31 day months may include five Sundays each, and give 26 week days for every month in the year.

While it would be possible to begin the first day of each quarter with any one of the three days mentioned, it would seem to me desirable to begin them with either Saturday or Sunday, preferably Sunday. By doing so we should have the sequence of Saturday, December 30, New Year's Day, and Sunday, January 1, which would naturally form a three day holiday for almost everyone. In the case of leap years, there would be a similar three day stretch, formed by Saturday, June 30, mid-summer holiday, and Sunday, July 1, This would be a welcome respite for many people who find it hard to get three days together.

In general it is desirable to have holidays come upon Saturday, Sunday or Monday, so they do not break up the working week, and afford the maximum relaxation with minimum interference with business. Where the first day of each quarter begins on Monday, as suggested by A. L. C., only Lincoln's Birthday and Armistice Day come at the week-end, both falling on Monday. But if we start the quarter with Sunday, then we have the above holidays coming on Sunday, which is just as good as Monday because they will be celebrated on Monday, and in addition we have December 25 falling upon Monday instead of Tuesday, which is a manifest addition.

ALVAN L. DAVIS

THE GILBOA FOSSIL FOREST

DR. JOHN M. CLARKE, of the New York State Museum, in an article on "The oldest of the forests" (*The Scientific Monthly*, January, 1921) has vividly described the fossil Devonian Forest (Psarronius) found near Gilboa, New York.

The operations of the Board of Water Supply of the City of New York have uncovered a number of these fossil stumps, and it has occurred to the writer that some, at least, of the museums in the country which have not already secured specimens would like to add to their collections. The work at Gilboa is drawing to a close, and the opportunity of securing specimens will never again be as good as during the present summer season. The number of stumps available is of course, limited. Inquiries may be addressed to the undersigned.

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SCIENTIFIC BOOKS

The Life of Sir William Osler. By HARVEY CUSHING. 2 vols. 1442 pp. 8°. Oxford University Press, New York. Price $12.50.

HARVEY CUSHING, one of the most virile and straightforward of living American writers, has very rightly conceived his Osler biography as *mémoires pour servir*. Leaving ultimate appraisal of this great physician's merits to posterity, he has, with secure good taste, taken eulogy (an obituary and lapidary function) for granted, and wisely shunned "the foolish face of praise." Here, indeed, the man Osler speaks for himself, through his clinical achievement, his letters and writings, his thousandfold acts of charity and good-will, his humorous pranks, his unique sense of honor. Hence, where necessary, Cushing has not hesitated to cope with those errors in judgment which Osler himself defined as "mistakes of the head, but never of the heart." The material to be handled was enormous, not so much in the way of letters, for Osler was a poor and telegraphic, if multifarious letter writer, but in the adjustment of the countless minor details of his very busy life to its actual course and tenor. Here all is ordered, documented, controlled as to fact, place and date by accurate footnote references, well indexed, with analytical table of contents and a rubric at the top of each page telling its actual content. In consequence, it is very easy to find one's way about in these volumes. The narrative moves steadily and surely forward, from point to point and period to period. Each sentence states a fact, and we can follow Osler's career understandingly, from the boyhood days in unsettled upper Canada, through the prankish student period