

made under several heads, as, *e. g.*, professors, associate professors, assistant professors, resident lecturers (librarians and medical directors might be counted here), instructors, and student assistants.

But counting a person a full teacher merely because he teaches the average number of hours, gives no proper estimate of the strength of the school. The salaries paid, if taken in connection with the number of teachers, may well furnish such an index. Thus if six grades of instructors are tabulated as suggested above, and in addition, the sum-total of salaries paid for *instruction* is given, that should suffice to give an equitable rating, as well as to convey explicitly the information desired.

CHARLES HART HANDSCHIN

QUOTATIONS

THE PROPOSED REFORM OF THE CALENDAR

IN the issue of *Nature* for April 27 a concise account was given of the various proposals which have recently been put forward for the reform of the calendar. There is no reason to think that the subject has gained any serious general attention in England, if the fixing of Easter and the dependent festivals be regarded as a distinct question. But it has received a certain recognition in the discussions of some public bodies of an international character, such as the Congress of Chambers of Commerce; and the Swiss government has invited a conference for its formal consideration. In order to bring a definite scheme before the public a Calendar Reform Bill was presented to Parliament by Mr. Robert Pearce. The main features of the bill were briefly described in the article quoted. The first day of the year is called New Year Day, and is placed outside the reckoning of the week and the month. In leap years a day called Leap Day is intercalated between the end of June and the beginning of July, and is equally excluded from the week and the month. By this device there are left 364 days in every year, which are divided into four equal quarters of 91 days. Each quarter is subdivided into three months containing respectively 30, 30 and 31 days.

Since 364 is exactly divisible by seven, the first of January always falls on the same day of the week, and the result of making this day Monday is to give 26 weekdays in every month, the four longer months containing five Sundays. Every calendar date corresponds to a particular day of the week (*e. g.*, Christmas Day always falls on a Monday), and the calendar is fixed, no longer changing as at present from year to year.

No doubt such a system possesses slight advantages from the point of view of simplicity over our present calendar. Apart from the objections which must be urged against any disturbance of conventions to which we have grown accustomed on anything less than adequate grounds, the great disadvantage attaches to the scheme that it interrupts the continuity of the weeks. The practical effect of this is seen where two or more calendars are in use side by side. Thus inconvenience must arise even now from the Jewish Sabbath falling on our Saturday. Under the provisions of the Calendar Reform Bill the case would be worse, for it would no longer hold a fixed place in the Christian week.

A second bill has now been presented to Parliament, this time by Sir Henry Dalziel. While differing from Mr. Pearce's bill, the new proposals contain nothing of importance which will be novel to readers of our previous article. For the bill merely embodies the suggestions made by Mr. John C. Robertson at the fourth International Congress of Chambers of Commerce held in London in June, 1910. The differences arise in the treatment of the four quarters of 91 days. These are divided into three months containing respectively 28, 28 and 35 days. Thus each month contains an exact number of weeks, and is made to begin with a Sunday. Incidentally, it is necessary to move Easter Sunday from April 14, as before proposed, to April 15. Also Christmas Day will fall automatically on a Wednesday instead of on a Monday. The advantage of the whole scheme is to obtain commensurability between the month and the week, but it is an advantage dearly bought at the sacrifice of even approximate equality between the

months. This necessitates special legal provision for payments in the case of monthly contracts to be made proportional to the length of the month concerned. Moreover, it requires legal definition for the duration of a "month" from any given date. Thus we understand that a month beginning on any day of the last week of a long month (containing 35 days) will close on the last day of the following month. At least, this is the interpretation which, after careful thought, we have placed upon the following interesting example of parliamentary draughtsmanship:

"8. In calculating monthly periods the following rule shall apply: In any period beginning in a long month and ending in a short month, the last day of the short month shall be held to be the corresponding day to any of the days in the last week of the long month."

If this interpretation be correct, a month may mean any period from 28 to 35 days in length. Surely the clause comes perilously near to a *reductio ad absurdum* to the whole scheme. We can imagine the following simple problem: "A domestic servant is engaged on March 32 at £22 a year. What is the amount of the first monthly payment, and when will it fall due?" We are utterly at a loss to solve the question, and suggest it for the consideration of the framers of the Fixed Calendar Bill.

The fundamental feature common to both the bills alluded to is the use of the *dies non*. Mr. Alexander Philip, who was responsible for reviving the idea of this fiction and advocating its practical convenience, appears to have become impressed with the extent of the opposition likely to be encountered before it can be adopted. Accordingly, in a paper before the section of Economic Science and Statistics, read at the recent meeting of the British Association, and in a pamphlet with which we have been favored, he seems to have abandoned those who are seeking to give legislative form to his ideas, and to advance a totally different suggestion. This requires that February shall gain two days, that July and October shall each lose one day, and that the extra day in leap year shall be placed at the end of June. Then in each quarter (now containing three

calendar months) a period of twelve weeks (always beginning on a Sunday) can be found, two such successive periods being separated by a week. The idea is that public engagements can be more conveniently fixed by reference to the proposed twelve-week period, while the correspondence between this reckoning and the ordinary calendar can be very simply exhibited by a "perpetual adjustable" arrangement. But this practically means that we should have two calendars side by side, and no further criticism seems to be necessary.

It is fairly evident that the group of people who are bent on introducing a change in our present calendar are not agreed as to the precise form which that change should take. In the meantime it is probable that public opinion in this country is not ripe for any reform. It would welcome a fixed Easter, but it is more than likely that any radical alteration of the calendar would be resented. Since the reformers adhere to the yearly divisions of the Gregorian system, no scientific question is involved at any point, and the public convenience and public feeling are alone concerned with the issue.—H. C. P. in *Nature*.

SCIENTIFIC BOOKS

Methode der Ethnologie. By F. GRAEBNER. Kulturgeschichtliche Bibliothek, Herausgegeben von W. Foy. Serie I., Ethnologische Bibliothek, Vol. I., Heidelberg, Carl Winter, 1911.

Mr. Graebner is one of the serious and broad-minded students who are not satisfied with an accumulation of facts, but who are carrying through their own investigations according to a well-considered plan, and who try to contribute to science in a certain well-defined line of research and look for results that have a definite bearing upon the whole field of their inquiries. In the present book Mr. Graebner gives us a statement of the method that he is following and which will interest all ethnologists. If, however, Mr. Graebner calls his method *the* method of ethnology, we can not agree with him. He must not expect that all ethnologists will limit the field of their researches in the way set forth