of the dioxide⁸ there is little left in this restricted field as water vapor covers the whole range of terrestrial radiation very effectively. Abbot and Fowle, after very elaborate studies and observations and a review of the available data on the subject, sum up as follows:

It therefore does not appear possible that the presence or absence, or increase or decrease, of the carbonic acid contents of the air are likely to appreciably influence the temperature of the earth's surface.⁹

There is no evidence showing that the temperatures of the depths of the Atlantic ocean are affected by the salter waters of the Mediterranean Sea. The temperatures of the depths of the Mediterranean Sea are controlled by that of the Atlantic at the depth of the sill of the Straits of Gibraltar, over which there is an inflow into the Mediterranean to replace evaporation and surface outflow less about 30 inches of precipitation. The temperatures of the depths of the Atlantic are controlled by those of polar waters.¹⁰

The area of the Mediterranean and tributary seas is about 1,149,000 square miles; of polar oceans down to the parallels of 60 degrees about 187,890,000 square miles. The relative influence of Mediterranean outflow upon abysmal depths of the Atlantic, according to the conclusions of Professors Chamberlin and Salisbury, is probably negligible.

Marsden Manson

SAN FRANCISCO, CALIF., March 18, 1918

TRANSLATIONS MADE ACCESSIBLE

I READ with much interest in the last number of your paper a communication from Mr. Burling regarding translations of foreign literature. If anything is contemplated in the way of a central bureau we would submit for your information that the Technical Section of the Canadian Pulp and Paper Association and the

⁸ Chamberlain and Salisbury, "Geology," Vol. II., p. 672.

⁹ Ann. Astrophysical Obs. Smithsonian Institution, Vol. II., pp. 172-73.

¹⁰ Chamberlin and Salisbury, "Geology," Vol. II., 658-60.

Technical Association of the Pulp and Paper Industry (U. S.) through their committees on Abstracts are publishing each week in *Paper*, New York, and the *Pulp and Paper Magazine* of Canada, Montreal, abstracts of the literature relating to this industry.

These abstracts include reviews of articles appearing in American, Canadian, British and Scandinavian Journals relating to pulp and paper-making, lumber and forestry and will in time embrace those in other languages when such periodicals are again available. The committees are ready to loan original copies of the periodicals reviewed and to supply translations where they are desired.

You are probably aware that *Industrial* Management of New York has a similar department relating to engineering and similar topics and that their organization is also prepared to supply translations of such articles.

> J. N. STEPHENSON, Chairman Committee on Abstracts, Technical Section, C. P. & P. A.

A NEW CALENDAR

ON April 16 Hon. J. M. C. Smith, of Michigan, introduced into Congress, at the request of Mr. C. W. Bennett of Coldwater, Michigan, a bill providing:

That beginning with the year nineteen hundred and twenty each year shall have thirteen months of four weeks, or twenty-eight days each, the added month to be called Sol (from solstice) and to follow June.

Sec. 2. That Monday shall be the first day of the week and the first, eighth, fifteenth and twentysecond days of every month; the other days of the week to follow in rotation by number, making Sunday the seventh day of the week and the seventh, fourteenth, twenty-first and twenty-eighth days of every month.

Sec. 3. That the day following the last day of December, nineteen hundred and nineteen, and the last day of December in each subsequent year shall be called New Year Day. It shall be legal holiday, the first day of the new or following year, but not a part of January.

Sec. 4. That in the year nineteen hundred and twenty and every fourth year thereafter shall be an extra day called Leap Day, to be placed between June and Sol, but not to be a part of either month: *Provided*, That there shall be no Leap Day in the last year of any century that is not divisible by four.

A condensed statement of the facts relating to this calendar is as follows: The year consists of New Year's Day, which is the first day of the year, and is not a part of any week or month; and thirteen months of twentyeight days each, as follows: January, February, March, April, May, June, Sol, July, August, September, October, November and December.

In centennial years divisible by 400 and in other years divisible by 4, an extra day, called Leap Day, is inserted between the months of June and Sol. Leap Day is not a part of any week or month. The first quarter of the year ends with the first week of April, the second quarter with the second week of Sol, the third with the third week of September, and the fourth with the fourth week of December. New Year's Day and Leap Day are holidays, and are omitted in counting interest and rent.

It might be an improvement in this calendar to have the week begin with Sunday, as has always been the case. The suggestion has also been made to give the extra month the name of Midyear, though these are matters of detail.

It appears to the writer that this calendar is more desirable than the one outlined by Professor Warren in the April 19 number of SCIENCE. I hope those who are interested in the matter will communicate with Congressman Smith and encourage him to push his laudable efforts in the matter.

W. J. SPILLMAN

DRAWINGS ON LANTERN SLIDES

To THE EDITOR OF SCIENCE: In connection with the letter from Professor Gunthorp in your issue of April 12 in regard to drawings on lantern slides, I may mention that I have obtained satisfactory results with the use of ordinary India ink such as is used by draftsmen. This takes hold quite well on ordinary clean glass surface, I suppose through the action of the gum arabic contained in the ink. The slide can be attached to a drawing board by thumb tacks whose heads project over the glass, provided bits of rubber are placed between the glass and the heads of the tacks. For drawing circles with a compass a small bit of paper was gummed to the glass at the center, to enable the foot of the compass to take hold without slipping (the paper being afterward scraped off).

J. R. BENTON

SCIENTIFIC BOOKS

Culture and Ethnology. By ROBERT H. LOWIE, Ph.D., Associate Curator of Anthropology, American Museum of Natural History. New York, Douglas C. McMurtie. 1917.

Anthropologists in America need to issue more volumes for laymen than they have so far done. Dr. Lowie's present volume, and Dr. Wissler's larger volume on The American Indian, are especially welcome studies in this sparsely cultivated field.

Dr. Lowie says in his preface that his book is an attempt at popularization. Its aim is to occupy an intermediate position between technical discourses addressed to scientists and the more popular lectures which are designed to furnish mainly entertainment. In the first four chapters Dr. Lowie seems to me admirably to have attained his purpose.

The book starts with Tylor's well-known and practically perfect definition of culture: "Culture... is that complex whole which includes knowledge, belief, art, morals, law, custom and any other capabilities and habits acquired by man as a member of society." The point is well made and forcibly driven home that since the science of psychology, even in its most modern and varied ramifications, "does not grapple with *acquired* mental traits nor with the influence of *society* on individual thought, feeling and will, there is need of a science which deals with all *acquired* capabilities and habits of man as a member of society." That science, as Dr. Lowie names it, is Ethnology.

In the discussion of "Culture and Race" the author grants that "at first blush" it appears very plausible that within the human species "differences in organization should be correlated with the observed cultural manifestations of varying degree and complexity." And he concludes that though we "assume that racial