

the end that all chemical names shall be understood, because they indicate exact composition?
J. H. RANSOM

PURDUE UNIVERSITY,
LAFAYETTE, IND.

COASTAL SUBSIDENCE IN MASSACHUSETTS

TO THE EDITOR OF SCIENCE: While Professor D. W. Johnson has clearly shown in the November 18 issue of SCIENCE that there are certain factors which produce fictitious appearances of coastal subsidence, chief of which is the irregular height of the tidal wave due to the varying character of the shore, there are a number of marks of subsidence on the Massachusetts coast which it is not probable can be so explained. For example, near Misery Island, Beverly, stumps of forest trees appear in place at a depth of twelve to fourteen feet below low tide.

The striking example given by Professor Johnson of the fictitious appearance of coastal subsidence at Scituate proves also, it seems to me, that subsidence has really been going on. The very fact that the level of the inside marsh was several feet below the outside level of high tide showed how much the land had sunk since the mouth of the North River had been nearly closed. A very similar state of affairs exists in the region of the Norfolk Broads in the eastern part of England. Here, in the same way, the land is slowly sinking, but, owing to the silting up of the mouths of the Yare and the Bure rivers, aided by dyking, the tides have been largely excluded, the marsh has become fresh and has so long ceased to build up that it is below the level of high water outside, and there is danger of the sea breaking through the sand dunes and, as at Scituate, drowning out the region.

CHARLES W. TOWNSEND

BOSTON,
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CALENDAR REFORM

TO THE EDITOR OF SCIENCE: I read with interest Professor Chamberlin's suggestions for the reform of the calendar, in the current number of SCIENCE, November 25. It happens

that I had thought of a scheme the same as that of Professor Chamberlin in all essential features, but was led to abandon it before publication because I considered that its disadvantages outweighed the advantages.

The advantages of the seasonal division are very slight. The scheme would suit conditions here as well as the present arrangement. In Great Britain, however, the winter begins in November, spring in February, etc. Hence Professor Chamberlin's arrangement with winter beginning in January would not suit conditions and would not be accepted. The earth receives the smallest amount of heat and light at the winter solstice, and neglecting lag this should be midwinter. To call it the beginning of winter as astronomers do, is to allow 45 days lag. To call January 1 the beginning seems to be allowing 55 days lag, not 10 as stated by Professor Chamberlin. This lag varies so much in length with latitude and local conditions that it does not appear that any division of the months into seasons will be universally satisfactory.

The desirability of a year divisible into quarters is unquestioned. But let us see the disadvantages of the scheme. A man who pays rent, for instance, would find his rent due in the first quarter on the first of the month, say. It would be due the Monday of Easter week, on the twenty-second of the month in the second quarter, fifteenth in the third and the eighth in the fourth. Likewise with monthly salaries and, in fact, all business done by the month. A promissory note dated February 15 due in two months would be due April 8, but if due in one month, March 15, or if due in nine months it would be due October 22. If due in eight months, on the first day of Gregorian week. Likewise, in finding the interval in days between two days we should always need to be on guard against omitting or including wrongly one of these weeks. This problem is a very common one in business. Since the suggestion has been made, there will be no difficulty in multiplying these illustrations indefinitely. When we compare this complexity with the simplicity of the same problems in the regular 13 months of 28