Edmondson has initiated experimental work at Florence, Newport and Tillamook for the purpose of determining the rapidity of growth, the age, the spawning season and the conditions under which certain of the edible clams best thrive. These experiments will be carried on throughout the year or until satisfactory results are obtained.

A QUESTIONNAIRE was recently circulated among the members of the Chartered Institute of Secretaries of Great Britain for the purpose of obtaining opinions in regard to the adoption of a decimal system of coinage in the United Kingdom, and the substitution of the metric system for the existing United Kingdom weights and measures. Of the replies received 85 per cent. considered that a change to a decimal system of coinage would be favorable to the business in which they were engaged, and 66 per cent. favored a £1 basis of coinage in preference to the "Imperial Crown" or dollar basis. In regard to weights and measures, 86 per cent. favored a change to the metric system, 53 per cent. of whom already used that system in their business. One member expressed the opinion that a strong commission of able men should be asked to decide whether the continental system, which was forced upon countries at a time when violence, rather than reason, prevailed, had been really satisfactory.

UNIVERSITY AND EDUCATIONAL NEWS

In honor to Andrew S. Hallidie, inventor of the use of the cable railway for passenger traffic in cities, who was a regent of the University of California from 1878 to 1900, the regents of the university have given the name "Hallidie Building" to a building which they are now erecting in San Francisco as an investment of University endowment funds.

W. J. SPILLMAN, chief of the office of farm management, U. S. Department of Agriculture, has accepted the deanship of the newly created college of agriculture at the State College of Washington. He will take up his new duties April 1, 1918, after he has completed a survey of the farm labor situation in the United States, upon which he is engaged as an emergency war measure.

A DEPARTMENT of plant pathology has been created by the regents of the State College of Washington, Dr. F. D. Heald, formerly professor of plant pathology, has been made head.

Professor F. L. Washburn of the University of Minnesota has been relieved of his present position in the Agricultural College and station and as state entomologist, and has been given the title of professor of economic vertebrate zoology, to take effect on February 5.

Dr. A. L. Tatum, professor of pharmacology in the University of South Dakota, has been appointed assistant professor of pharmalology and physiology in the University of Chicago.

Mr. ROY RICHARD DENSLOW, assistant tutor in the department of chemistry, College of the City of New York, has been appointed instructor in Smith College.

DISCUSSION AND CORRESPONDENCE THE PITTSBURGH MEETING OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

[The following letter was delayed in the mails and reached Science just too late for publication in the last number.]

To the Members of the American Association for the Advancement of Science:

WHEN the American Association for the Advancement of Science and all similar societies planned their winter meetings, the present situation could not have been foreseen. We had not even entered the war, and did not dream of a congestion of transportation such as now exists. When the present situation had developed, it was (in the opinion of a majority of the committee having power) too late to postpone our meeting.

Transportation is now so greatly overtaxed that necessaries of life can barely be carried; the railways should be spared every extra burden. Great simultaneous pilgrimages on important trunk lines are especially to be avoided, since they demand extra trains, need-

ing extra locomotives and coal, and causing much confusion. Therefore, in my opinion it behooves every patriotic and unselfish member to consider very seriously whether he can really serve his country by attending the meeting, or whether he can not better serve in this fateful time by staying at home, especially during a period of highly congested travel, when many of our soldiers may wish to take leave of their families before departing for the front. I believe that only those persons bringing really important contributions to the problems of the war should attend such meetings now. All others, in my opinion, should conserve their money for Liberty bonds and for those in distress, and should save their strength for action in this time of extraordinary crisis. For these reasons, with great regret, I have decided not to attend the meeting at Pittsburgh.

So far as I have been able to ascertain, all the responsible authorities at Washington concerned with transportation agree with me as to the importance of avoiding unnecessary journeys in such a crisis.

The very great usefulness of the American Association for the Advancement of Science is not dependent upon the unbroken continuity of its social meetings.

Science is incalculably important, indeed indispensable, in this world-wide cataclysm. The excellent work of the association in the past is now bearing fruit; but this moment demands action rather than general discussion. We must devote all our energies to winning the war. Let us all make every endeavor to apply our knowledge and strength in our country's noble cause.

THEODORE W. RICHARDS

Cambridge, Mass., December 15, 1917

THE BEARING OF THE FACTS REVEALED BY ANTARCTIC RESEARCH UPON THE PROB-LEMS OF THE ICE AGE¹

RECENT Antarctic explorations and researches have yielded significant evidence re-

¹ This term as used by the writer refers to the Great Ice Age of Pleistocene Time. He holds that the occurrences of ice as a geologic agent of mag-

garding the problems of the Ice Age, and, of the similarity of the succession of geological climates in polar with those in other latitudes.²

These researches have been prosecuted to the ultimate limit of courage, devotion to duty and endurance—the noble sacrifice of life—as in the cases of Captain Scott, R.N., and his devoted companions and members of the expedition of Sir Ernest Shackleton.

The data secured by these expeditions are alone sufficient to establish the following premises:

- 1. That Antarctic ice, although covering areas several times larger than all other ice covered areas, is slowly decreasing in extent and depth.
- 2. That the same succession of geological climates have prevailed in Antarctic as in other latitudes.³

So vital are these evidences of the retreat of Antarctic ice that it may be well to briefly quote or refer to the most prominent instances:

All these evidences and many others which space will not allow me to mention lead up to one great fact—namely, that the glaciation of the Antarctic regions is receding.4

The ice is everywhere retreating.5

The high level morains decrease in height above the present surface of the ice, the débris being two thousand feet up near the coast and only two hundred feet above near the plateau.

(Scott's lecture on the great ice barrier.6)

nitude during eras preceding the Pleistocene were not "world wide" nor as "phenomenal," nor were they preceded, accompanied nor followed by conditions as significant as corresponding phenomena of the Ice Age. (Compte Rendú du XI ième Congrès Géologique International, p. 1105. Stockholm, 1910.)

- ² "Scott's Last Expedition," Vol. II., p. 206.
- ³ This part of the evidence is not considered in this paper except inferentially as bearing upon the general subject.
- ⁴ Scott, "The Voyage of the *Discovery*," Vol. II., page 416. See also pp. 423-24-25, and sketch map of ice distribution, p. 448.
- ⁵ Scott, "National Antarctic Expedition, 1900-1904," Vol. I., p. 94.
 - 6" Scott's Last Expedition," Vol. II., p. 294.