$15^h\ 15^m$, Pac. St. time, on the night of September 1, 1909, and after the first observation the relative humidity was found not to exceed 4 per cent., the vapor tension not to exceed 0.15 millimeter at any of these readings.

My statement quoted in Lowell Observatory Supplement refers to the weather in general during our stay on Mt. Whitney, but referring to the weather on September 1 and 2, Professor Campbell states: "No clouds were visible in any part of the sky on either night. There had been a few clouds in the afternoons, but these cleared away completely at sunset. There were no clouds in the forenoon of September 3. We can not doubt the evidence of the clouds and the instruments that considerable moisture existed in the afternoons and early evenings, and that later in the evenings the vapor contents of the air were reduced to a remarkably low quantity."

I was present, and saw all the spectra, and can confirm Professor Campbell's description of them, and also his statement of the apparent condition of the sky during his observations. I also verified the excellence of definition of his spectroscope. If, as stated in the Lowell Observatory Supplement above referred to, "The excessive moisture must have pervaded the air generally to the masking of moisture on Mars," it could not, in my judgment, have failed to have produced a little *a* band of more noticeable strength both for Mars and the moon in spectrograms No. 1 and No. 2.

As of course you would not wish me to be placed by a bulletin of the Lowell Observatory in what I regard as a false light, I venture to hope you will do me the great favor to publish this letter completely.

By authority of the secretary:

Very respectfully yours,

C. G. Abbot,

Director, Astrophysical Observatory

Director Percival Lowell,
Lowell Observatory,
Flagstaff, Arizona.

53 State Street, Boston,
16 May, 1910.

Dear Sir: On my return from Europe to-day I find your note of March the twenty-fourth.

I am very sorry that you should feel hurt by a quotation of your own words, nor does it seem to me that your letter changes them in the least, and as to publishing the letters it receives, this is never done by the observatory.

Believe me to be,

Yours truly,

Percival Lowell,
Director

Professor C. G. Abbot,
Director, Astrophysical Observatory,
Washington, D. C.

BACTERIA IN THE TROPICS

To the Editor of Science: Allow me to correct a statement made on page 618 in no. 799 of Science. It reads: "As a matter of fact, the ordinary bacteria of northern latitudes do not flourish in the tropics."

During the summers of 1907 and 1909 I had ample occasion, as physiologist of the U. S. Experiment Station in Mayaguez, Porto Rico, to examine soils in this tropical island. I found that the most common soil microbes of the north occur also there. *Bacillus mycoides* takes here as there the most prominent position, then follows *Bacillus subtilis* and *Bacillus butyricus* (*Clostridium*) and then *B. fluorescens liquefaciens*. *Azotobacter* is found everywhere on the surface in great abundance. A superabundance of microbes in these tropical soils is checked by a very rich infusorial life. Infusoria, Flagellata and Amœbæ devour continuously great numbers of microbes. The nitrogen content of the superficial soil-layers is doubtless due to a considerable extent to the dead and living bodies of these low animals.

Oscar Loew

QUOTATIONS

THE SALARIES OF PROFESSORS

While the universities of the land are receiving the most munificent gifts, while millions are devoted to the construction of marble halls and ivory towers, the wives of the college professors are trying to make both ends meet on their husbands' average salary of $2,500 a year. The size of some professors' families fails to support the theory of race suicide, but their stipends for training the youth of this great and wealthy country afford a pretty clear demonstration of the be-

ginnings of race homicide among the more cultivated members of the race. College professors must be presentable socially and as befits their learned station. They have not the means to rear their families.

If the plight of the professors is evil, that of the assistant professors is worse. Consultation of Bradstreet's tables shows that the cost of living has increased 50 per cent. during the period in which the assistant professor must serve before being promoted. The young men who choose a career in a university must, of course, and gladly do, abandon expectation of riches. But they should be permitted to live, not merely to exist, on a wage that is exceeded by the bricklayer's. After a general and specific investigation Professor Guido H. Marx, of Stanford University, recently reported in SCIENCE that assistant professors have found their salaries inadequate to support them comfortably as celibates, and many are seriously debating whether to resign their positions.

There is something unsound in university administration when the faculties are so ill-paid. Possibly competition with the state universities, which are steadily voting percentage increases of salary to their faculties, will stir the majority of privately endowed institutions to action. But their trustees have been too long asleep.—N. Y. *Times*.

SCIENTIFIC BOOKS

National Antarctic Expedition, 1901–1904. Natural History, Vol. V. London, British Museum, 1910. Seal Embryos, by Dr. H. W. MARRETT-TIMS. 21 pp., 2 pl. Tunicata, by Professor W. A. HERDMAN. 26 pp., 7 pl. Isopoda, by T. V. HODSON. 77 pp., 10 pl. Nemertinea, by Professor L. JOUBIN. 15 pp., 1 pl. Medusæ, by E. T. BROWNE. 62 pp., 7 pl. Lichenes, by Dr. O. V. DARBISHIRE. 11 pp., 1 pl., 4to.

The fifth volume of the reports on the Natural History of Captain Scott's expedition to the Antarctic edited by Mr. Jeffrey Bell has now appeared and the preface states that another volume will probably conclude this series of reports which has contained so much of value and so many additions to our knowledge of the Antarctic region.

The seal embryos all belonged to Weddell's seal and from the data accompanying them it seems that the period of gestation is about nine months, the young being born in October or November. They are covered at birth with a coating of hair which is shed during the first month. After the second coat appears the young seal may take to the water, though it is not weaned until some time later. The vibrissæ precede the body hair in appearance and were distinctly visible in an embryo four inches long. In a very early embryo what is regarded as a trace of an external ear was detected. The examination of the muscular system seemed to lend some additional support to Mivart's suggestion of a Lutrine origin for the Phocidæ.

The collection of Tunicata contained twenty-two species; excluding the pelagic forms there are thirty-three specimens belonging to fourteen species.

The Antarctic tunicate fauna is characterized by the abundance and large size of the individuals of a comparatively few species. Our knowledge of the fauna is still too limited to allow of a critical comparison with that of the Arctic, but a certain similarity of families and genera is noticeable. The strictly Antarctic region, south of latitude 60° S. has already furnished some fifty species of Tunicata, of which Professor Herdman gives a list. Ten new species are described, of which one is probably the largest *Styela* known.

No less than twenty-five species of isopods were captured. Remarkable sexual variation was noted among the Arcturidæ. An interesting feature, first pointed out by Miss Richardson, is the presence of long peduncles supporting the eyes; these have now been observed in seven Antarctic species. Mr. Hodson gives a list of the known isopods of the Antarctic region of which twenty-nine out of one hundred and eleven are strictly Antarctic, seven are also found in the Arctic regions, and the remainder belong to the subantarctic region.