

field are engaged in an investigation of the geyser waters of the Yellowstone park; Mr. R. B. Riggs is making a series of analyses of the lepidolites of Maine, and is also analyzing an undescribed meteoric iron from the collection in the national museum; Mr. Hillebrand is engaged on minerals and rocks from Colorado; and Mr. Chatard is at work upon the associates of corundum from North Carolina, and upon the water of Mono Lake, California.

—A change has been made in the time of issuing the Smithsonian and national museum reports. Heretofore these reports covered the calendar year; but the board of regents of the Smithsonian institution have recently directed that the reports shall hereafter correspond to the fiscal year extending from July to the end of the following June inclusive. The reports from Jan. 1, 1885, to June 30, 1885, are now about ready for the printer; the report of the secretary of the Smithsonian institution to the board of regents, for the first half of 1885, being already published in pamphlet form.

—Bulletin No. 28 of the national museum, recently issued, is W. G. Binney's 'Manual of American land-shells,' which is an enlarged and revised edition of the 'Land and fresh-water shells of North America,' part i., published in 1869, to which subsequently described species are added.

—The *Botanical gazette* for January contains a heliotype engraving of Professor Gray, with a sketch of his life by Prof. C. R. Barnes. Other articles of interest in this number are by Professor Coulter, on the 'Pollen-spore of Tradescantia'; J. C. Arthur, upon a new fungus infesting the clover-leaf beetle, *Phytonomus punctatus*; a new species of *Anemone*, by Professor Gray, etc.

—The first number of the monthly *Journal of the Trenton natural history society* contains a number of short, readable articles, mostly on animal and plant habits.

—The joint commission appointed by the last congress to consider the propriety of consolidating the scientific bureaus of the government have concluded the examination of witnesses, and will shortly submit their report. While their recommendations are not definitely known, it is probable some sort of re-organization will be advised with regard to the signal service, and it may be entirely separated from the army. General Sheridan is authority for the statement that the army does not need this wing of its service, and that there is no objection to placing it under civil control.

—In *Science*, vii. p. 75, in the letter entitled 'An early prediction of the decay of the obelisk,' second line, 'St. Petersburg' should read 'Freiberg.'

—In *Science*, vii. p. 75, in the letter entitled 'Sea-level and ocean-currents,' seventh line, 'Bourdaione' should read 'Bourdaloue'; thirty-third line, 'diversity' should read 'density'; p. 76, second column, thirteenth line, '25 feel' should read '2.5 feet.'

#### LETTERS TO THE EDITOR.

\*\*. Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.

##### The festoon cloud.

IN *Science*, vii. p. 57, Prof. W. M. Davis, after giving a description of a form of cloud designated 'festoon' cloud, asks if the cloud is commonly seen in this country. I have seen the form of cloud described at least as often as a dozen times within the last six years; but, on account of not having my records at hand, I cannot give the dates.

I have seen the cloud once or twice associated with thunder-storms, but most frequently with the stratus-cloud accompanying 'areas of low pressure,' or cyclones.

The appearance presented to me is that of a cloud-stratum with an irregular base, in contrast with the level base usually seen.

The cloud then presents an appearance as if festoons were hung from it, which are sometimes somewhat circular and rounded, at other times irregular.

The explanation given that they are due to the slow descent of cloud-matter, due to the failure of an ascending current, is, no doubt, the correct one.

H. HELM CLAYTON.

Cambridge, Mass., Jan. 24.

##### Text-books on methods in microscopic anatomy.

The review of Dr. Whitman's 'Methods in microscopical anatomy,' in *Science* (No. 154, p. 64), seems to me not quite just, in that it implies that the author has been negligent in the performance of his task, particularly in regard to that part of it which most gives value to his work; namely, the chapter on embryological methods. In this the author has given a careful summary, the outcome of much laborious and painstaking search; so that we have for the first time a compact presentation of a large number of special methods for the handling of embryological material. It is true that it is not exhaustive, — I am grateful that it is not, — but it contains most of the best results of experience in the difficult art of preparing eggs and embryos of many kinds for microscopical examination. And since it is just in this direction of microscopical embryology that the most earnest and capable zoological energies are now turned, I feel that Dr. Whitman has done science good service by the valuable critical compilation made in the chapter referred to. Now, I wish to find fault with your reviewer because he says that "the arrangement [of this chapter] leaves the impression that it is the result of fortuitous reading rather than a methodical search for the most valuable things