INTELLIGENCE FROM AMERICAN SCIENTIFIC STATIONS.

GOVERNMENT ORGANIZATIONS.

U. S. geological survey.

Mineral statistics of the United States. — Mr. Albert Williams, jun., is arranging for the issue of a second volume on the mining industries and mineral resources of the United States, and is now engaged in the preliminary work necessary to facilitate its preparation. This report will cover statistically the calendar years of 1883 and 1884; preserving, however, the record for former years, already published in his first report. The general form and scope of the work will be similar to that previously followed. Repetition of text matter will be avoided, and the chief aim will be to treat in greater detail such topics as could not well be enlarged upon in the first report without extending it beyond the proper limits.

The second volume, while complete in itself from a statistical point of view, will complement the first in the matter of description of localities, metallurgical processes, etc. A change which will add to the interest of the work will be the introduction of a series of graphic statistical charts, showing at a glance the progress in the several industries. A fair start has already been made, and the work will be pushed energetically with a view to secure the promptness in publication which is so necessary in reports of this class. The value of such statistics to the industries whose progress they record is the quickness with which they are given to the public. There is a somewhat prevalent idea that such work cannot be published within a reasonable time after the expiration of the time to which it refers. This is refuted by Mr. Williams's first report, which was issued early in the fall of 1883; and the results of the work, in a condensed form, were given to the public within a few weeks after the manuscript was given to the printer, which was on the 30th of June, to which date the production statistics were carried.

Glacial striae. — Prof. T. C. Chamberlin is collecting and compiling all observations on glacial striation within the limits of the United States. The results of his work will be embodied in a bulletin to be published by the survey. He would be glad to incorporate any unpublished notes which observers may be kind enough to communicate. As full details as practicable are desired, relating to the character of the striations, locality, kind of rock, inclination of striated surface, altitude, and other topographical relations, etc. Professor Chamberlin would also esteem it a favor to have his attention directed to observations recorded in unusual publications, or in those not readily accessible, or for any other reasons liable to be overlooked.

Topographic notes. — The work of compiling topographic material for the map of the District of Columbia and adjoining territory has been completed; and the party under Mr. S. H. Bodfish's supervision was, during March and April, engaged in field-work for the purpose of obtaining data, with the object of finishing the survey of the area left untouched by the coast and geodetic survey. —— Field-work for the completion of the map of the Denver basin will soon be undertaken. Mr. Anton Karl, who has charge of the topographic work in the Rocky Mountain district, has left the Washington office, and is on his way to Denver to begin this work, which was temporarily suspended last summer. He expects to finish it in about six weeks. All that remains to be done is to carry the triangulation over the area, and to complete the filling-in of the contours. The map will include about a thousand square miles, on a scale of one mile to one inch. —— In the division of the Pacific, work during March was much interfered with by rainy weather. Mr. Hoffmann, after completing his map of the New Idria district, proceeded to Sulphur Bank, where he was making good progress, correcting and adding to his former work there. —— Office-work is progressing satisfactorily. Some of the maps are fast approaching completion, and preparations will soon be made for putting the various parties in the field for the coming season.

RECENT PROCEEDINGS OF SCIENTIFIC SOCIETIES.

Torrey botanical club, New York.

May 13. — Mr. Bicknell read a paper upon Carex Pennsylvanica and Carex varia, referring particularly to the difference of habit of the subterranean parts of the plants. C. Pennsylvanica throws out runners early in the year, which soon root, and become underground stems. These extend in all directions from the parent plant, each fostering a succession of shoots, some of which themselves become centres of a secondary series of runners. I have unearthed these runners, bearing, at intervals of a few inches, four or more generations of living shoots, together with the remains of several older generations. It thus appears that the new shoots do not always become established as separate plants, but that often a series of tufts remain permanently attached by underground connection for many years. The *separate* tufts do not appear to live more than about two years. Where this sedge grows in abundance its runners may be found crossing and re-crossing beneath the surface of the ground; and careful excavation will show that many apparently distinct plantlets belong to the same system of underground stem. The runners are at first clothed with closely imbricated scales, arising from nodes all along the stem. These ultimately decay, and become frayed into a coarse fringe, which remains apressed to the stem in whorls from every node. In C. varia the habit of growth is entirely different. This species shows no

disposition to spread laterally, but grows in close tufts. These spring from a dense, knotty mass of small, closely aggregated root-stocks, which bear a profusion of long, fibrous roots. Year after year these rooty masses produce an abundance of new shoots, which rise from the surface amid the old. Each ultimate root-stock becomes the site for a closely clustered colony of compound shoots; and these secondary tufts, compacted into a single mass, make up the plant. A slight lateral prolongation of a shoot is sometimes necessitated by an obstruction in the most direct way to the surface, but this is the nearest approach to subterranean spreading. In no other of our species of Carex, of the section Montanae, do we find the counterpart of the underground stems of C. Pennsylvanica. The closest approach towards them is shown by C. umbellata. From its dense underground tufts, this plant sometimes produces short underground stems; these are, however, more like suckers, and do not stray far from the parent plant, merely assisting to increase its dimensions. C. pubescens is of less tufted habit than either of the other species of this section; the shoots being irregularly produced by a progressive underground stem, or root-stock, which, however, bears no resemblance to the underground runners of C. Pennsylvanica.

The Brookville society of natural history, Indiana.

May 6. — A. W. Butler described the extent of the Niagara formation in Franklin county, and gave a section showing the stratification near the town of Laurel. He described the varying thickness of the strata, the economic uses of the stone, the southwestward dip of the strata, and the quantities of chert which are found in locations on top of the best building-stone. —— D. R. Moore gave an account of some peculiar mounds in Butler county, O., and Franklin county, Ind., confining his time mostly to the 'Glidewell mound,' four miles northeast of Brookville. This mound is situated nearly three hundred feet above the east fork of the White Water River, on the point of a ridge jutting out into the river. The mound is sixty feet in diameter, and at present is twelve feet high. It is built of earth which has been brought from some other locality, as no such earth has been found within about half a mile of its location. The mound has been covered with large, flat stones, overlapping each other after the manner of shingles on the roof of a house; and these stones are now covered with vegetable mould, in some places to a depth of almost two feet.

Academy of natural sciences, Philadelphia.

April 29. — Mr. Joseph Willcox called attention to a fine collection of upwards of eighty specimens of fifty species of marine sponges made by him during the winter in Florida, and presented to the academy. Continuing his remarks on the geology and natural history of Florida, Mr. Willcox stated that the rocks which line the west coast extend out for many miles into the Gulf of Mexico, making the waters very shoal. The channels of the streams from the mainland continue out through these rocky shoals in the same direction, and with the same tortuous course as before reaching the shore. The limestone of the peninsula is soft, and eroded into a vast number of caverns and sink-holes. Where exposed at an elevation, the rock becomes hard and firm, in some localities resembling marble. Referring to Agassiz's suggestion that the sea-urchins of the coast which cover themselves with seaweed do so for protection, the speaker remarked that such an explanation was open to doubt, as allied forms which have the habit of covering themselves with little mounds of white shells are rendered thereby much more conspicuous. The common conch of the coast, Busycon pyrum had been found spawning under the sand, the egg-cases always being attached to a shell at least eight inches below the surface. He had been interested in the numerous saw-fishes which swim about in shallow water. When approached, they settle quietly in the sand until partially covered, when, feeling secure, they will allow themselves to be almost touched before darting away. In this condition, they are readily held down with a spear, when they elevate the head, turn up the saw, and pull it repeatedly, and with sufficient force to make a deep notch in the wooden handle. —— Referring to the collection of sponges, Mr. Edward Potts remarked that they were all siliceous, with the exception of one interesting calcareous species. He had received several fine fresh-water sponges from the St. John's River, in the neighborhood of Palatka, collected by Mr. Mills of Buffalo. He believed one of the forms to be an undescribed species of the genus Meyenia, for which he proposed the name subdivisa. He was informed by Mr. Willcox that the comparative scarcity of fresh-water sponges in that region was, doubtless, owing to the superabundance of confervoid growths, which not only covered submerged logs, etc., but also flourished on the backs of the alligators.

NOTES AND NEWS.

THE *American* of Philadelphia announces the *personnel* of the new biological department of the University of Pennsylvania as follows: "At the head, as director, and professor of anatomy and zoölogy, was placed, of course, Dr. Joseph Leidy, whose selection guarantees to the scientific world the value of the new department. With him are to be associated Dr. J. T. Rothrock, professor of botany; Dr. A. J. Parker, professor of comparative anatomy; Dr. Harrison Allen, professor of physiology; Dr. Horace Jayne, professor of vertebrate morphology; and Dr. Benjamin Sharpe, professor of invertebrate morphology. That there will be enthusiastic, earnest, and thorough work done, is insured by all of these names."

— *Nature* states that tickets have been applied for as follows for the Montreal meeting of the British association: members elected prior to October, 1882, 379; members elected since October, 1882, 181; associates (relations of members), 120: total, 680.

— Mr. W. T. Lynn, late of the Royal observatory, Greenwich, writing to the *Observatory*, on the eclipses