Grand Gulf strata near Vernal, Miss., another series of fossils which I was able to determine as of late Chesapeake or early Pliocene age, and which were then eliminated from the socalled Grand Gulf and placed by Professor Smith at the top of the Miocene with the name of the Pascagoula formation (*op. cit.*, p. 94).

In 1894 Professor Smith expressed himself in regard to the 'Grand Gulf' in the following language: 'The barren Grand Gulf sands pass towards the east into the marine deposits of the Chattahoochee (Oligocene) which are their time equivalent' (op. cit., p. 17) and 'The underlying division of the Grand Gulf \* \* \* its position is identical with that of the Chattahoochee limestone of Mr. Langdon, and there is no room for any reasonable doubt about their identity in age' (op. cit., p. 106).

Since that time Professor Harris and his party of students have traced typical 'Grand Gulf' sandstones beneath the Oak Grove Oligocene sands near Oak Grove, Santa Rosa County, Florida, as already mentioned.

I have no prejudice as to the application of the name Grand Gulf to any particular series to which it can be shown to belong, but I am not convinced that Professor Smith and Mr. Aldrich, in restricting the name in the manner and to the stratum now proposed, have shown proof of its identity with the original formation described by Wailes. Ι feel certain that the Pleistocene age of Wailes' I believe it to be formation is unproved. unlikely, and, in view of the record as above summarized, I feel justified in referring it, as heretofore, to the upper Oligocene, pending more exact and ample information.

WM. H. DALL. SMITHSONIAN INSTITUTION, July 6, 1903.

ANSWER TO PROFESSOR COCKERELL, REGARDING HIGHER EDUCATIONAL INSTITUTIONS OF NEW MEXICO.

TO THE EDITOR OF SCIENCE: Professor T. D. A. Cockerell has made some statements in his article on the condition of affairs at the New Mexico Normal University which

appeared in your columns May 8, which seem to me can hardly be passed without notice. I do not care to discuss the matter which Professor Cockerell presents concerning the conditions at the College of Agriculture and Mechanic Arts or at the Normal School at Las Vegas. It is always unfortunate when there is a lack of harmonious relations between a board of regents and the president or faculty of any institution, and still more unfortunate when such relations are the result of political influences. There is no doubt but at times great injustice results to individuals and great harm to the institution and the broader cause of education. Few institutions of any considerable age have not had some differences arise between their managing boards and their faculties at some time in their history, and no institution can boast that its organization is such that it is entirely safeguarded against any such unfortunate condition in the future. It must be recognized, however, that such breaches in the harmonious administration of the affairs of an institution are usually very short-lived. The organization of our public institutions may be such that they are more susceptible to such outbreaks than others, but it is to be doubted. In the public institution it is usually politics which interferes; in private institutions it is personal prejudice: in denominational schools it is denominational creed or religious difference. The character of the factor may vary, but the result is nearly the In all such cases it can usually be same. shown that some one has abused the powers and privileges of a position of authority. In public institutions all parties, from the governor, who usually holds the appointing power to membership on the board of regents, down to the student in the class-room, are servants of the people, and all are working under a regularly established system of laws. These laws determine the authoritative ranking of each. Each party has a duty to the subordinate elements of the organization, and an obligation of obedience to the superior in rank. In most institutions these duties and obligations are usually well defined by law.

In passing judgment upon any particular case these broad relations should be kept in mind, and in what I have to say I do not wish to be understood as expressing any opinion concerning the conditions which have existed at the Agricultural College in the past, or at the Normal School at the present time. There are, however, two points in Professor Cockerell's communication to which I desire to call especial attention. Not that the professor has intentionally misrepresented the matter, but because of the inference which might easily be drawn. The conditions in two of the several public institutions of the territory are made the basis of several broad and general inferences. I am assured by President Light of the Normal School of Silver City that the relations of the board of regents of that institution and the faculty have been uniformly harmonious, and that the institution is wholly free from political influences in its administration. Professor Cockerell states in his article that the Normal School at Las Vegas 'has had until now a most fortunate immunity from political interference.' And I wish to state that it has never been my pleasure to know of a public institution so free from political influences as the University of New Mexico, over which I have the honor to preside.

Again, Professor Cockerell says: 'It can not be overlooked that the governors of New Mexico, who appoint the regents of the higher institutions, are responsible for the general unsatisfactory character of these bodies.' I wish to object to the professor's use of the term 'general' and 'these bodies,' and to state that, at least in the case of the University of New Mexico, a more estimable body of men could not be selected from any community either in this territory or any of the eastern states of the Union.

Hon. Ex-Governor E. S. Stover has always been a staunch friend of education. Hon. F. W. Clancy is one of the old and leading attorneys of the city of Albuquerque. Dr. James H. Wroth is one of the leading physicians of the city and surgeon for the Santa Fe Railroad. Hon. Henry L. Waldo, of Las Vegas, is general solicitor for the Santa Fe Railroad and ex-chief justice; and Hon. E. V. Chavez is another of the leading attorneys of Albuquerque. There are three Democrats and two Republicans. These men are all appointees of governors of New Mexico, and three of them originally by Governor Otero, and all have been reappointed by him at the expiration of their terms.

As to the other institutions of the territory, I can only say that their boards, as far as I know, are made up of men who are leading and influential citizens.

In closing, permit me to say that, in my judgment, the higher institutions of learning of the territory of New Mexico are in general fully as free from political influences as are those of any other state of our Union, and it is hardly right to take the exceptional unfortunate cases of disorder as indicative of the general condition.

W. G. TIGHT.

## UNIVERSITY OF NEW MEXICO, Albuquerque, N. M.

## THE PROPOSED BIOLOGICAL STATIONS AT THE TORTUGAS.

TO THE EDITOR OF SCIENCE: Referring to the correspondence from zoologists as to the need for one or more stations for biological research work in southern waters, I notice the preponderance in favor of Tortugas. Aside from its suitability for deep-sea fauna there seem to be other items to commend it, such as: The flag which floats over it, available buildings, subsistence, accessibility and, not the least in importance, communication. It may not be known to the committee or to your readers that the United States government departments are planning a chain of wireless telegraphic communication along the coast and to the Antilles. Among those now installed are stations of the De Forest Company at Hatteras and Porto Rico; others are proposed at Miami, Key West, Havana, etc. These will be in demand for commercial marine as well as naval and military purposes.

A glance at the map will show that Tortugas can easily be hitched on to this system  $vi\hat{a}$  Key West (and equally a station at Cul-