

There is, however, an obverse to the shield. Such grants inhibit individual initiative and local support; they are likely to produce a certain subserviency to the powers that deal out money, and may lead to jealousy and intrigues.

It is perhaps scarcely fair to object to a board of trustees consisting chiefly of prominent politicians, lawyers and business men, who meet once a year, and can not be expected to give much attention to the affairs of a scientific institution, nor to have much knowledge of its scope and possibilities. Such boards are an established American institution, controlling universities, banks, etc. Their principal duty is to select efficient officers of administration. But the Carnegie Institution has been unfortunate in its first officers. Three men were largely instrumental in persuading Mr. Carnegie to make the original gift, and they have assumed control of its administration. This triumvirate has been at the same time autocratic and feeble, and has by no means worked in harmony. Antony may be supposed to say to Octavius:

And though we lay these honors on this man,  
To ease ourselves of divers sland'rous loads,  
He shall but bear them as the ass bears gold,  
To groan and sweat under the business,  
Either led or driven, as we point the way;  
And having brought our treasure where we will,  
Then take we down his load, and turn him off.  
Like to the empty ass, to shake his ears,  
And graze in commons.

Whether after the ensuing war Antony, Octavius or another will or should become Cæsar need not here be considered; but in the meanwhile and perhaps thereafter science will suffer. The fundamental difficulty is that no method has been found for consulting the consensus of opinion of scientific men. An American university has an absentee board in nominal control and a president as benevolent despot; but there is a faculty, which after all is the real university. The Carnegie Institution has no similar body; and until it is formed, it will drift along without compass or rudder.—*The Popular Science Monthly*.

#### THE RHODES SCHOLARS.

MR. W. S. MACGOWAN, Principal of St. Andrew's College, Grahamstown, Cape Colony, writes to the *London Times*:

In the *Times* weekly edition of September 25 you print a letter from 'South Africa' dealing with Dr. Parkin's proposal to select the Rhodes scholars from students who shall have pursued a two years' course at some American or colonial university.

When Dr. Parkin was in Grahamstown a short time ago, he explained his views at some length, but he was careful to tell his audience that they were only partially formed and necessarily incomplete, inasmuch as his colonial tour was not yet finished, although he had completed his investigations in the United States. I think that, when Dr. Parkin comes to present his report to the Rhodes Trustees, it will be found that it is America rather than the Colonies which will be found making this demand. To quote Dr. Parkin's own words to me: "The American professors deprecate any denationalization of their young men." This is, of course, quite right and perfectly natural, but surely in a British colony such a consideration as this is somewhat lacking in weight. I have not yet seen Mr. Hawksley's letter, and only know from Reuter that he has written one on this subject; but, apart from the legal aspect of the question, with which he is so amply qualified to deal, there are several reasons against tinkering with the plan that Mr. Rhodes evolved with a view to securing that his scholars should be *bona fide* undergraduates. The first of these is a financial one.

If the suggestion now being canvassed were universally adopted, viz., that every candidate for a scholarship should take a preliminary two years' course at his home university before proceeding to Oxford, there would instantly be swept from the field all boys whose parents could not afford for them more than an ordinary secondary education. There are many in this colony who could never go to Oxford at all if they were compelled to spend two years at the Cape University first.

Again, if the trustees agree to extend the usual university age in the case of Rhodes scholars, they will be running counter to Mr.

Rhodes's vigorously expressed desire that these young men should have the benefits of the influences of Oxford University at 'the most critical period of their lives.' If their characters are already formed, they are far more likely to alter the tone of Oxford than Oxford is likely to develop them.

Now, as to the desirability of this I offer no comment, I am only concerned with Mr. Rhodes's intention. He desired that poverty, religion, race—nay, even the lack of 'scholarship' itself—should not bar a boy of strong physique and moral character from obtaining one of these splendid prizes. Yet here is a scheme apparently gaining ground where poverty and the lack of scholarship will practically disqualify a candidate, and the application of the character test as outlined by the testator is rendered nugatory.

But it may be said that Mr. Rhodes only defined his ideas in respect of the South African scholarships. That is quite true, but he gave his intimates to understand that his motive was the same in all cases, viz., 'uniting of the Anglo-Saxon race.' That unity will be postponed if educational experts, in their very natural desire to secure the benefit of these great endowments to produce scholars, arrange the regulations in such a way as to eliminate possible leaders of men such as Rhodes was himself. He wanted picked potentialities, but, if I understand his mind aright, they were to be men of action rather than scholars.

#### RECENT ZOOPALEONTOLOGY.

##### VERTEBRATE PALEONTOLOGY IN THE UNITED STATES GEOLOGICAL SURVEY.

THE following abstract is published with the permission of the Geological Survey and covers the progress which has been made during the year 1903 on the work which was substantially begun July 1, 1882, by the appointment of Professor Othniel Charles Marsh, of Yale University, as paleontologist on the survey. As is well known, Professor Marsh devoted years to the collection and preparation of materials for a series of elaborate monographs. The work on these was most unfortunately interrupted by his death, but at that time

lithographic plates of the three monographs, namely, the Brontotheriidae (60 plates), the Sauropoda (90 plates) and the Stegosauria (54 plates), were completely prepared and printed, together with hundreds of text illustrations. The drawings for the fourth monograph, the Ceratopsia, are on stone but not as yet printed. Practically none of the manuscript for these volumes was ready.

In appointing Professor Henry F. Osborn as Professor Marsh's successor, it was understood that the latter should receive full credit for the years of labor which he devoted to these monographs. The appointment of Professor Osborn was originally as paleontologist, June 30, 1900; in January, 1901, the appointment was changed to geologist and paleontologist.

The unfinished work was begun at once, and has been carried on in two lines: First, the preparation and supervision of the four paleontological monographs; second, the planning of geological field work connected therewith, the latter being of great importance, in order that the vertebrate paleontology of the survey may render service in connection with the stratigraphic history of the continent.

Professor Osborn undertook the preparation of the Titanotheres and Sauropoda monographs himself; Mr. J. B. Hatcher, now of the Carnegie Museum, was entrusted with the preparation of the monograph on the Ceratopsia; and Mr. F. A. Lucas, now of the United States National Museum, was entrusted with the preparation of the Stegosauria monograph.

More in detail, the actual work on hand and accomplished is as follows:

1. *Titanotheres Monograph*.—This monograph, begun January 2, 1901, has required more time than was anticipated, partly due to Professor Osborn's interruptions by other duties, partly to the unexpected expansion of the subject by the discovery, both in the Oligocene and Eocene, that the titanotheres embraced at least four entirely distinct and independent phyla. To learn the origin, history, succession and extinction of these animals it has become necessary to trace the materials scattered through many museums, at home and abroad. Yale, Princeton, Harvard, Ot-