institution. Professor Cattell recently said in an address at Harvard that "The first step of a really great president would be to refuse to accept a larger salary than is paid to the professors."[1] In the University of Pittsburgh, however, there is an increasing difference between the salaries for teaching and for administration.

There seems to be a diversity of opinion on the matter of presidents' salaries. In Bulletin No. 2 of the Carnegie Foundation, May, 1908, it is stated that "the salaries [of presidents] are not much above the upper range of what a professor may receive" (p. 25). From the figures just given it will be seen that this statement holds approximately true for the two state universities referred to, but is very wide of the mark for the University of Pittsburgh. And there is every reason to believe that many more small colleges and universities show a similar disproportion. In view of these and other considerations, it seems to me that the Carnegie Foundation should make a complete and thorough investigation of the matter, especially of those institutions now on the accepted list. The foundation has already done great service by publishing the average and the maximum salaries for professors in many institutions, but this has been as much in the interests of institutions as of the faculties. A very great service could be rendered to the professors themselves by publishing also the minimum professor's salary and the president's salary. Inasmuch as the prime purpose of the foundation is to advance the profession of teaching, and not institutions as such, a thorough investigation should be made, and at the earliest possible moment.

A. W. Crawford
University of Manitoba,
June 30, 1910

On the Origin of Flint-like Slate near Chapel Hill, N. C.

To the Editor of Science: In a recent bulletin of the North Carolina Geological and Economic Survey Dr. F. B. Laney[1] has occasion to refer to an article by me[2] on the flint-like slate near Chapel Hill, and concludes from the partial chemical analysis and petrographic description there given that I am unwarranted in ascribing to the rock a sedimentary origin. In the quotations from my article no reference is made to the field data upon which the classification of the rock as a sediment was based.

The rock in question lies in distinct beds in a sedimentary series which includes sandstones and conglomerates, and in places it grades off into a fine sandstone. It coincides in dip with the other members of the series and can be traced for miles along the strike, and does not pinch out as would be the case with a lava flow. At several localities along Morgan's Creek, the one nearest Chapel Hill being at King's Mill, two miles distant, the slate lies unconformably upon sheared felsite or rhyolite, the marked difference between the two rocks being apparent at a glance.

The partial chemical analysis of the rock was given to show specifically its close resemblance to the local sheared felsites from which it was supposedly derived by mechanical wear. Dr. Laney does not seem to realize that the material of a felsite or rhyolite, broken down and reconsolidated, may show the same essential characteristics as the original rock. It is evident that he has not seen the flint-like slate in place in this neighborhood.

H. N. Eaton
University of North Carolina

The Oscillations of Swinging Bodies

To the Editor of Science: May I be allowed to say that farther investigation shows that the forms of two of the curves in a

[1] "The Case of Harvard College," *Popular Science Monthly*, p. 613, Vol. LXXVI., No. 6, June, 1910.

[1] North Carolina Geological and Economic Survey, Bull. 21, 1910, "The Gold Hill Mining District of North Carolina," by F. B. Laney, p. 18.

[2] Elisha Mitchell Scientific Society, *Journal*, Vol. 24, No. 1, April, 1908, "Micro-structure and Probable Origin of Flint-like Slate near Chapel Hill, North Carolina," by H. N. Eaton.