

lem or problems which have engaged their attention" and reiterated in different words by Gage, Jordan, Holland, Cockerell, Ganong, Titchener, Clayton, Coulter and others is undoubtedly the one that has impressed the majority of scientific men as the important element in the Carnegie plan. Stain manufacturers, mechanics, publishers, bibliographers, etc., are but servants of the investigator and deserve but secondary consideration. The extent to which buildings are to be erected has been decided by Carnegie himself.

What are we, the exceptional men, able to do without the Carnegie Institution, and what will his endowment enable us to do that we cannot do without it or can do only with great difficulty? What, in other words, are our greatest needs?

If we are connected with a university we can by hook or crook manage to get some time for research—if we cannot, we are perhaps not worth considering by the Carnegie Institution. All of us can get room without any great difficulty—in fact, the universities are running to marble palaces with such luxuriant enthusiasm that in many cases there is little left to maintain their permanent inhabitants. There is as vulgar pride in elaborate university buildings as there is discreet silence as to the salaries of the professors filling them. We in the universities can also get apparatus and books, though as we approach these less conspicuous parts of the equipment there is greater hesitancy in adequately supplying the needs. When it comes to supplying the means of keeping animals for experimental work or to make expeditions for securing needed material for a definite research, we either meet with increasing difficulty in the university or we must look entirely to outside help. Such outside help can be secured in a limited way from a few research institutions, as the Elizabeth Thomson Science Fund, the American Association for the Advancement of Science, the American Botanical Society, etc. Beyond this, existing institutions do not help us. We are not able to begin a life-long research demanding much time or money or both with the assurance that, as long as our results are

commensurate with the outlay, our work will not have to be abandoned at a critical time. Here, it seems to me, the Carnegie Institution can step in to good advantage. It can do this: (1) By buying part of the time of an 'exceptional man' from his institution by paying part of his salary if time is the prime requisite of his work; (2) by providing the means of carrying on an expensive research (traveling expenses, assistants, providing and maintaining aquaria, etc.), in many cases doubtless on condition that his university grant him the time needed for his research; (3) by appointing him a Carnegie professor without routine duties or stipulated place of residence. It ought to make no difference whether a paleontological Carnegie professor has his residence on the plains of Wyoming or Patagonia, an American or at times some European museum. If no mistake is made in selecting the right man there need be no fear as to the results to be obtained. The exceptional man with his problems may be selected in the way already adopted by the institution, *i. e.*, by committees of specialists.

The salary of the Carnegie professorships need not be larger than the average university salaries and they may still be looked upon as the highest and most desirable positions to be obtained by American men of science.

With such a plan the entire income of the Carnegie Institution can be profitably employed without interfering with existing institutions and without devising cumbersome administrative machinery or buildings. When we consider the needs and possibilities along this line, so far from being overwhelmed by the magnitude of the endowment, we may even be permitted to regret that the institution was not started with at least twice its present income.

C. H. EIGENMANN.

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF
SCIENCE. SECTION D, ANTHROPOLOGY.

THE fifty-second meeting of the American Association for the Advancement of Science will be held at Washington, D. C., during Convocation Week, December 29, 1902-January 3, 1903. This meeting is the first of the general Society to be held at this time. Dr.

George A. Dorsey, of the Field Columbian Museum, will preside over Section H, Anthropology.

You are cordially invited to be present at this meeting, and to contribute papers on topics connected with your field of research. It is to be hoped that at this first meeting of the Association under the new rules Section H may make an effort to set even a higher standard of excellence and secure a greater wealth of material of interest from its members than at any of its previous winter meetings. Field work has been carried on with almost unprecedented vigor during the last year, and it is hoped that the results may be freely offered to the Section.

It is desirable that a preliminary program be distributed in advance of the meeting, and in order to render this possible, titles of papers should be sent to the secretary as early as possible. Abstracts of papers, or the papers themselves, may be sent later at the author's convenience, whose attention is called to the fact that no title will appear in the final program until the paper, either in full or in abstract, has been passed upon by the sectional committee.

ROLAND B. DIXON,
Secretary Section H.

HARVARD UNIVERSITY, CAMBRIDGE, MASS.

November 1, 1902.

SHORTER ARTICLES.

EXCEPTIONS TO MENDEL'S LAW.

IN a former paper on 'Quantitative Studies on the Transmission of Parental Characters to Hybrid Offspring,'* I presented data in support of the provisionally stated law that, 'in the second generation of hybrids of similar breeding (with close fertilization) the same types tend to occur, and in definite proportions; two of these types are like the parents, the others include all possible intermediate forms.'† At the time that paper was prepared the writer was not aware that others had published anything on the same subject. We now know that Mendel, De Vries, Correns and Bateson have shown that the same

* Bul. 115, Off. Ex. Sta., U. S. Dept. Agric., pp. 88-98.

† L. c., p. 93.

law applies to the third and later generations. With this extension, and with a slight alteration of the second clause to be noticed below, the above statement accords with Mendel's original statement of the law he discovered. It happened that in all my hybrids certain characters obeyed a law different from Mendel's, hence the form in which the second clause of the law is stated above. The data in my original paper were arranged to illustrate the law as stated. That certain characters did obey Mendel's law may be easily shown by rearranging the data with reference to that law. In five out of fourteen crosses between varieties of wheat, one parent was bearded, the other smooth. In all these cases beards were recessive. Mendel's law would, therefore, call for 25 per cent. of bearded plants in the second generation of the hybrid. The actual results obtained were as follows:

Male.	Female.	Plat No.	Per cent.
Valley.	Little Club.		Bearded Plants.
"	"	C 16	14.0
"	"	C 18	27.2
"	"	C 21	35.9
Average,			25.7
Little Club.	Emporium.	F 26	23.2
"	"	F 30	30.0
"	"	F 31	22.7
"	"	F 32	28.0
"	"	G 1	19.2
"	"	G 2	24.0
Average,			24.6
Lehigh.	Red Chaff.	F 13	21.5
"	"	F 15	30.3
"	"	F 17	26.0
Average,			25.9
Little Club.	Valley.	J 6	23.9
"	"	J 7	24.1
"	"	I 19	17.6
"	"	J 3	26.2
"	"	J 4	25.3
"	"	J 8	26.4
"	"	J 9	23.4
"	"	J 10	24.9
"	"	J 12	41.6
"	"	J 13	19.6
"	"	J 14	24.3
Average,			25.2

This last cross is the reciprocal of the first.