

THE TERM PROTEIN

THE article on "The Revolt of the Biochemists" by me published July 10th in *SCIENCE* contained the following statement:

In 1860 the term "protein" was introduced by Mulder. . . .

It should read:

In 1839. . . .

The author overlooked the error and is indebted to Professor Lafayette B. Mendel for having called his attention to it.

P. A. LEVENE

SPECIAL CORRESPONDENCE

TWENTY-SEVENTH ANNUAL NEW ENGLAND INTERCOLLEGIATE GEOLOGICAL EXCURSION

THE twenty-seventh annual New England Intercollegiate Geological Excursion was held at Montreal from October 10 to 12. Approximately fifty members attended and the following institutions were represented: Colby, Columbia, Dartmouth, Harvard, Massachusetts Institute of Technology, Massachusetts State College, Massachusetts State Normal School, McGill, Mt. Holyoke, New Hampshire, Tufts, Syracuse, Union, Vermont, Quebec Bureau of Mines, and the Geological Survey of Canada.

On Saturday morning Professor J. J. O'Neil led the party on a trip to the agglomerate on St. Helen's Island. The agglomerate is intrusive into the Utica shale, outcrops of which may be seen on the south end of the island. The fragments in the breccia are sub-angular and consist of Pre-Cambrian gneiss, Potsdam sandstone, Utica shale, and various limestones. The blocks average three inches in diameter, but many are much larger and a few measure scores of feet across. Perhaps the most interesting inclusions are the large blocks of limestone exposed on the northeast end of the island, for they contain Lower Devonian fossils. The ground mass of the agglomerate is highly altered, but contains apatite, perovskite, pyrite, hydronephelite, epidote, abundant carbonates, and doubtful melilite. It is probably alnoite or camptonite.

The afternoon excursion, a trip over Mount Royal on foot, was led by J. J. O'Neil, J. E. Gill and F. F. Osborne. The party climbed up the east slope of the mountain, which rises directly west of McGill University. The first outcrops studied were Trenton limestone cut by a variety of dikes and sills. Higher up on the mountain is a small belt of Utica shale, altered to a compact hornfels. The next stop was at the coarse Essexite just below The Lookout. From The Lookout one may make an excellent survey of the St. Lawrence Lowland, which lies about one hundred feet above sea-level. Extending east from Montreal are the Monteregian Hills, the elevations of which vary from 715 feet to 1,755 feet. They are

intrusions of alkaline rocks similar to Mount Royal. Still further to the east and southeast are the Green Mountains. Slightly east of south is the Champlain Lowland and somewhat west of south are the Adirondacks.

From The Lookout the party proceeded to the raised beaches on the south side of Mount Royal. These beaches indicate the upper marine limit of the Champlain sea at the close of the Pleistocene; the highest stands at about 575 feet. The last stop was in a large quarry on the west slope of the mountain, where marmorized and squeezed Trenton limestone is intruded by nepheline syenite and basic dikes and sills. It is clear that considerable flowage of the marble has occurred since the intrusion of the dikes and sills, for the latter are crumpled and sheared.

In the evening the group gathered at the McGill Union for brief talks on the trips to be held on Sunday and Monday. Refreshments were then served and the meeting broke up into small groups for informal discussions.

On Sunday Professors J. J. O'Neil, F. F. Osborne and R. P. D. Graham led the main party on an auto trip of one hundred and fifty miles to the Morin anorthosite area in the Laurentian Mountains. Unfortunately it rained most of the day. Nevertheless the party saw a variety of Pre-Cambrian rocks, including Laurentian gneiss, Grenville limestone and Morin anorthosite. At the Ivry mine there is an interesting area of ilmenite and anorthosite. Dr. Osborne considers the ilmenite to be an intrusion into the anorthosite.

On the same day Dr. H. W. McGerrigle guided a small party studying the stratigraphy of the Lower Paleozoic rocks around Montreal. The Island of Montreal and the St. Lawrence Lowland are underlain by Upper Cambrian and Ordovician strata dipping very gently to the southeast and resting upon a Pre-Cambrian basement, which is found in wells 2,500 feet below Montreal. The Potsdam sandstone, Beauharnois dolomite, Lowville limestone, Black River limestone, Chazy limestone, Utica shale and Lorraine shale were all studied.

On Monday the entire party, guided by Dr. H. W. McGerrigle, studied the structure and stratigraphy of

the overthrust sheets of Lower Paleozoic limestones in the vicinity of Philipsburg, P. Q. One stop was along the shore of Mississquoi Bay, where the Champlain thrust may be seen. The Rock River dolomite, of Lower Ozarkian age and belonging to the Philipsburg thrust block, rests on the Utica shale, of Upper Ordovician age and belonging to the foreland. Another stop was at the quarry of the Philipsburg Marble Company, where the Strites Pond and Wallace Creek formations, both of Upper Ozarkian age, may be seen.

Considerable time was spent on the Naylor Ledge and Luke Hill formations, the relations of which have been a subject of controversy¹ between Dr. Mc-

Gerrigle and Dr. Ulrich. The party agreed with Dr. McGerrigle that the physical evidence disproved Dr. Ulrich's cave hypothesis.

Some of the most interesting exposures were those seen one and a half miles north of St. Armand, for they show the tremendous brecciation at the base of the St. Armand thrust sheet.

The party deeply regretted that illness prevented the attendance of two of its members, Dr. T. H. Clark, of McGill, who had organized the excursion, and Dr. W. G. Foye, faithful secretary of the excursion for many years.

MARLAND BILLINGS

HARVARD UNIVERSITY

REPORTS

DOCTORATES CONFERRED IN THE SCIENCES BY AMERICAN UNIVERSITIES,

1930-31

THE Research Information Service of the National Research Council, with the cooperation of the registrars of the various American universities, is again able to present information regarding the doctorates in science.

The following data for the academic year 1930-31 supplement the data in SCIENCE 72: 357-358 (1930),

where a survey is given of the data for the period 1898-1930.

Detailed data for the year 1930-31, with comparative statistics for the past ten years and with the names of the recipients of the degrees and the titles of the theses, will be found in Reprint and Circular Series numbers 75, 80, 86, 91 and 95. Copies of these may be obtained from the Publication Office, National Research Council, Washington, D. C.

CLARENCE J. WEST

CALLIE HULL

TABLE I
DOCTORATES CONFERRED ACCORDING TO SUBJECTS

	'22	'23	'24	'25	'26	'27	'28	'29	'30	'31
Chemistry	150	185	251	250	257	270	278	312	317	392
Zoology	39	45	42	71	55	70	89	91	102	117
Psychology	32	46	51	51	60	74	66	112	97	105
Physics	57	54	58	59	76	92	78	101	91	93
Botany	37	64	57	69	69	53	61	76	81	81
Mathematics	20	28	32	24	47	46	44	61	75	73
Physiology	18	20	17	17	43	35	28	37	46	46
Agriculture	9	10	11	16	19	19	31	27	29	45
Geology	22	34	41	25	27	42	35	45	63	39
Bacteriology	15	32	12	20	21	20	30	26	27	38
Pathology	27	21	12	5	4	16	31	27	31	26
Engineering	4	5	5	2	11	10	28	34	49	25
Public Health .....	.....	.....	.....	.....	3	4	4	15	8	20
Anatomy	5	10	5	4	11	13	12	15	12	11
Astronomy	4	6	7	3	7	9	3	8	4	11
Anthropology	0	3	3	2	5	3	5	13	6	7
Geography	3	7	3	13	11	14	7	12	17	6
Metallurgy	1	2	2	3	10	4	13	8	4	5
Paleontology	1	2	2	1	7	0	1	2	6	3
Archaeology	0	0	0	0	0	0	0	2	2	2
Med. & Surg. ....	.....	.....	.....	.....	.....	.....	.....	.....	4	2
Mineralogy	0	1	1	4	4	2	0	1	3	1
Meteorology	2	0	0	0	0	0	0	2	0	0
Totals	455	575	611	640	748	796	844	1027	1074	1148

¹ H. W. McGerrigle, "Philipsburg Series of Southern Quebec," *Bull. Geol. Soc. America*, 42, 347-348, 1931 (abstract); E. O. Ulrich, "Naylor Ledge, A Marine

Limestone of Canadian Age Filling Caverns in Upper Ozarkian Formations," (abstract). *Ibid.*, p. 348.