

there has rarely been a man who so constantly sought the cooperation of all who could and would render him assistance. The "Origin of Species" is full of acknowledgements to his friends and correspondents, without whom he would have been comparatively helpless. From a close study of Darwin's life, we arise with the conviction that it is precisely the man of genius who should be the center of a cooperating group, and that it is through such cooperation that human knowledge, at least in the biological sciences, is chiefly advanced. To-day the adequate study of even a simple species of plant, as I have found in dealing with *Helianthus tuberosus*, requires not only a general botanist, but a plant physiologist, a taxonomist, a chemist, a soil physicist, an entomologist and others. Who is so versatile that he can perform all these functions? Yet our institutions are so constituted that each department stands by itself, and cooperation is no part of the regular program. We must not permit ourselves to be dictated to by persons who can not understand our aims or the conditions under which we must work, but the state has a right to demand efficiency. Are we sure ourselves, and can we convince others, that we are not overdoing our individualism? The world needs to be made wise and honest: can we afford to refuse to work together to this end?

T. D. A. COCKERELL

UNIVERSITY OF COLORADO

A CONVENIENT DEMONSTRATION MOUNTING FOR JELLYFISHES

THE writer has found the following method of mounting jellyfishes (Scyphozoa), both convenient and satisfactory besides permitting the observation of many structures usually only clearly seen when specimens are removed from the preserving jar.

Choose from the material on hand a jellyfish whose diameter is approximately that of a Petri dish in which it then may be placed, enough 4 per cent. formalin being added to cover the specimen. After the dish has been covered, it may be forced down in a mold of fresh plaster of Paris until the space between

the upper and lower halves of it is sealed, and the top of the upper half is flush with the surface of the mold. When the mold has firmly set, any obscuring plaster of Paris may be scraped from the glass, or the mold itself suitably shaped up with a scalpel. Formalin solution condensing at any time on the upper lid may be displaced by manipulation.

Perhaps the most convenient molding frame is a paper box of a size adaptable to that of the Petri dish, although it may be of any shape. It is best to vaseline the interior of the box, in order that the hardened material may come away freely. With some care, a clean-cut looking mount may be secured. If desired, the plaster of Paris part may be given a coat of shellac, making it more durable from the laboratory standpoint. Data concerning the specimen may then be placed upon it with India ink.

It is seen that the above procedure is a modification of an old laboratory trick whereby odd bits of natural history specimens such as corals, sponges, specimens in vials, etc., may be given a convenient and useful mounting.

N. M. GRIER

HOLLINS, VA.

ORGANIZATION OF THE AMERICAN GEOPHYSICAL UNION

AT its meeting on June 24, 1919, the "American Section of the proposed International Geophysical Union" passed the following motion:

Moved: That the members of the Section who go to the Brussels meeting be constituted a committee, with power to add to its membership, to consider permanent organization of the Section—the committee, after completing a plan for such organization, to report to a meeting of the Section, to be called at the discretion of the acting chairman of the Section, for the purpose of perfecting the permanent organization. *Adopted.*

The Brussels meeting referred to is that which was held from July 18 to July 28, 1919, to organize the International Research Council, and International Unions affiliated with it.

At this conference the International Geo-

detic and Geophysical Union was formed, with six sections, as follows: (a) Geodesy, (b) Seismology, (c) Meteorology, (d) Terrestrial Magnetism and Electricity, (e) Physical Oceanography, and (f) Volcanology. Officers elected were listed in *SCIENCE*¹ of October 31, 1919.

The delegates who went on behalf of the geophysical sciences from the United States to these meetings at Brussels, were Messrs. William Bowie, Chairman, L. A. Bauer, G. W. Littlehales, and Rear-Admiral Edward Simpson. At Brussels Messrs. C. E. Mendenhall and H. S. Washington who were already abroad were added to this delegation.

At the call of the chairman of the "American Section," on October 31, 1919, an informal conference of these delegates, constituting the committee on organization authorized on June 24, with other members of the "American Section" who reside in and near Washington, was held at the offices of the National Research Council. At this meeting, after a general exchange of views, a subcommittee or organization to draft proposals for statutes, was designated by the committee of delegates—to consist of Messrs. L. A. Bauer, Chairman, William Bowie, W. J. Humphreys, G. W. Littlehales, and H. O. Wood. This subcommittee held several meetings early in November, at some of which it had the benefit of further extended conference with Messrs. Mendenhall and Washington, who were present at Brussels. As an outcome, a draft of "Proposals for the Permanent Organization and Statutes of the American Geophysical Union" was drawn up, approved by the committee of delegates charged with the duty of preparing for permanent organization, and since it was not considered expedient to call a meeting of the section in Washington this draft was submitted for a vote by mail ballot to all members of the "American Section." An affirmative vote was returned by a considerable majority of the members prior to the date set for the count of ballots and subse-

quent affirmative ballots delayed in transit were received from nearly all members. There were no dissenting votes.

These statutes of the American Geophysical Union, thus approved by the "American Section," were then submitted to the executive board of the National Research Council and were approved by that body on December 20, 1919, and on February 14, 1920, the American Geophysical Union was made a Committee of the Executive Board.

This action established the American Geophysical Union as a permanent organization superseding the "American Section of the proposed International Geophysical Union." As thus constituted the American Geophysical Union serves as "the American 'National Committee' of the International Geodetic and Geophysical Union, and as the Committee on Geophysics of the National Research Council." Its initial membership is the membership of the "American Section" as this stood on July 1, 1919, together with the Chairman of the Division of Physical Sciences, the Chairman of the Division of Chemistry and Chemical Technology, and the Chairman of the division of Geology and Geography of the National Research Council, and the American officers of the International Geodetic and Geophysical Union and of its sections, as members ex-officio. Its general administration is delegated to an Executive Committee made up of the chairman and secretary of the union, and the chairman of each of its sections which, initially, are the same as those in the International Union, viz: (a) geodesy, (b) seismology, (c) meteorology, (d) terrestrial magnetism and electricity, (e) physical oceanography, and (f) volcanology.

At its first, regular, annual meeting officers will be elected in accordance with the terms of the statutes. Meanwhile, by action of the "American Section" taken on June 24, 1919, the chairman and secretary of that organization continue to serve.

By action of the provisional executive committee of the "American Section" an election of acting chairmen for each of the newly constituted sections was held in January, 1920,

¹ Bauer, L. A., "Geophysics at the Brussels Meeting," July 18-28, 1919, *SCIENCE*, October 31, 1919, 1296, pp. 399-403.

by mail ballot counted on February 2, in order to constitute an acting executive committee conforming in organization with the statutes, to prepare the way for the first annual meeting. As a result of that election the following acting chairmen were elected:

Section (a) William Bowie, Section (b) Harry Fielding Reid, Section (c) C. F. Marvin, Section (d) L. A. Bauer, Section (e) G. W. Littlehales, and Section (f) H. S. Washington.

HARRY O. WOOD,

Secretary, American Geophysical Union

SPECIAL ARTICLES

IS UNPALATABLE FOOD PROPERLY DIGESTED?¹

It is well known that different psychic stimuli promote or retard the secretion of digestive juices. The following experiment was conducted to determine whether the ultimate return to the body from unpalatable food was different from that of the same food palatably served.

dirty dishes. A little indol was sprinkled about under the table. The subjects were kept in ignorance of the constituents of the unpalatable mixture. The food was so unpalatable that one subject vomited his first meal shortly after he had eaten it.

The table shows the finding, on the other subject.

The differences in utilization of the palatable and unpalatable foods were quite small as were the variations in nitrogen retention. This short test indicates that flavor is not the outstanding dietetic asset that some people would have us believe. If the stomach and intestine can only be cajoled into making the proper effort, the unsavory concoction can be digested just about as satisfactorily as can the food mixture which makes a stronger appeal. If the things we eat have proper food value, we need not worry unduly as to their digestion, absorption, and utilization by the normal body. This ought to be good news to millions of people who eat unpalatable food in untidy surroundings, in spite of the fact

Period	No. of Days	Nitrogen							Percentage Utilization
		Ingested		Excreted			Balance		
		Daily, Grams	Period, Grams	Urine, Grams	Feces, Grams	Total, Grams	Period, Grams	Daily, Grams	
Palatable	7	10.75	75.25	62.95	10.06	73.01	+ 2.24	+ 0.32	86.7
Unpalatable	2	10.75	21.50	17.03	3.09	20.12	+ 1.38	+ 0.63	85.7

The experimental procedure was simple. A 7-day period during which the subjects were on a uniform diet, served palatably and amid pleasant surroundings, was followed by a 2-day period during which the same diet was fed in an unpalatable condition and in dirty and unpleasant surroundings. The food was rendered unpalatable and unappetizing by the following treatment. All the food ordinarily used for each meal (meat, biscuits, jelly, cornstarch, pudding, oleomargarine, etc.) was stirred together in a large, flat porcelain dish. The dish itself was smeared with animal charcoal, as was the beaker used as a drinking glass. The table was dirty and strewn with

that one of our leading physiologists says "What man likes best he digests best." This experiment simply shows how insulting we can be to the normal stomach and get away with it but does not necessarily prove this to be the wisest policy.

RALPH C. HOLDER,
CLARENCE A. SMITH,
PHILIP B. HAWK

JEFFERSON MEDICAL COLLEGE,
PHILADELPHIA

THE WESTERN SOCIETY OF NATURALISTS

THE Northwestern Division of the Western Society of Naturalists held its holiday meeting on January 2, in Portland, Oregon.

¹ From the Laboratory of Physiological Chemistry, Jefferson Medical College, Philadelphia, Pa.