

action and bacterial fermentation is fast outstripping our knowledge of the chemistry involved. While in the past, great chemical discoveries have been personal achievements, to-day they are the carefully plotted results of directed, organized staff research. Formerly, gifted chemists of rare vision and patience, aided by a faithful student or two, have hunted down chemical secrets. Now, corps of chemists, in elaborate laboratories, fitted with every modern appliance and reinforced by libraries stored with the accumulated chemical experience of the past, are besieging chemical problems. These research armies are made up of specialists, each working on some particular phase or part of a general problem which he often but dimly apprehends. Need one press further the dangers of too early specialization on the part of professional students of chemistry?

These dangers are obvious even to our industrialists who lead a movement to foster work in pure science. The fountainheads of our scientific knowledge must be cleansed and revived. This requires men armed for inductive reasoning with all the chemical facts we have accumulated and all the chemical technique we have acquired. But, above all else, they must be men of courage and imagination who will throw into the chaos of the unknown the grappling irons of deductive theory.

Not only for training such scientists, but also for attracting men of the requisite bold devotion to the science, I submit that a foundation of chemical history and the philosophy of chemistry is best. Such a course, while admirably fitted to the needs of the average student, would be no sinecure. In presenting chemistry historically, from the caveman's discovery of fire, of tanning, of ore smelting to the isolation of Ilium and the perfection of the Mont Cenis process of ammonia synthesis, showing how empirical application preceded scientific knowledge and tracing out chemical theory checked by experiment, such a course in pandemic chemistry would cover all the ground of the present Chemistry I. Thus, even for the professional student, little time would be lost. Plainly he would then begin professional study with an understanding of chemistry's true and proper place and an appreciation of the nature of chemical problems that would be invaluable in coordinating his work and rationalizing his generalizations.

WILLIAMS HAYNES

NEW YORK, N. Y.

SCIENTIFIC EVENTS

THE PUTNAM BAFFIN ISLAND EXPEDITION

SAILING under the auspices of the American Geographical Society, the Museum of the American In-

dian, Heye Foundation, the American Museum of Natural History and the Buffalo Society of Natural Sciences, George Palmer Putnam, publisher and explorer, will lead this summer another expedition to the Arctic Circle.

Last summer Mr. Putnam headed the American Museum Greenland Expedition to North Greenland regions and brought back extensive zoological collections for the museum. This year's expedition will be known as the Putnam Baffin Island Expedition. Mr. Putnam expects to sail from New York in June. This trip, like the one last summer, will be made on Captain Robert A. Bartlett's two-masted schooner *Morrissey*.

The probable route of the expedition, subject to seasonal ice conditions, will be westerly through Hudson Strait and thence north into the Fox Basin district, which is less known than any other similar area on the North American continent. Some of it, so far as mapping is concerned, has remained virtually untouched since the original visit of Luke Fox in 1631. Expeditions into the interior of Baffin Island will be attempted.

Professor L. M. Gould, of the department of geology of the University of Michigan, will be in charge of the geographical work. His assistants will be Robert E. Peary, George Backeland, Wallace R. Hawkins and George Weymouth.

The expedition's anthropological activities will be carried on in behalf of the Museum of the American Indian, Heye Foundation, which will be represented by Donald A. Cadzow. The zoological collecting for the American Museum of Natural History will be done by Fred Limekiller, a member of last year's expedition. Oceanographic work will be conducted for the Buffalo Society of Natural Sciences. Specimens will be collected by plankton nets and dredging.

THE ANNUAL MEETING OF SCIENCE SERVICE

THE annual meeting of Science Service, Inc., the institution for the popularization of science, was held on April 28 and two new members of the board of trustees were elected. Dr. David White, home secretary of the National Academy of Sciences, was named by that body as one of its three representatives upon the board, and Marlen E. Pew, editor of the weekly publication, *Editor and Publisher*, was chosen a representative of the journalistic profession. Trustees who were reelected were: Dr. D. T. MacDougal, director of the Desert Laboratory, Tucson, Ariz., representing the American Association for the Advancement of Science; Dr. C. G. Abbot, acting secretary of the Smithsonian Institution, representing the National Research Council; Thomas L. Sidlo, of Cleveland, Ohio,