

ples of chemistry and physiology to the investigation and interpretation of the phenomena of life. He referred to the fact that the kingdoms of nature had been arranged in three classes: mineral, plants and animals. The microscope revealed myriads of minute living things concerning which biologists were puzzled to decide whether they were plants or animals. Such discoveries bridged the gap between the two, and it was now the ambition of biochemists to discover the connecting link between stones and plants, in order to find out how life arose from inorganic matter. He had always maintained that laboratories for investigating disease should be in close association with hospitals. The future of medicine does not lie in prescribing drugs, he declared. The day may come when, some of us believe, the biochemical laboratory may displace the dispensary. Lavoisier, the founder of biochemistry, had his head lopped off in 1794, continued Sir John, by the "apostles of Liberty, Equality and Fraternity," on the excuse that the republic had no need for scientists. Mr. Courtauld had no fear that such a fate awaited him. The wisdom shown in building the laboratory indicated his appreciation of the great part science played in practical medicine. "We may be hopeful," he concluded, "that a discovery will one day be made within the walls of this laboratory which will make the world gape with astonishment." The institute will be a five-floor building, the four upper ones having laboratories for the study of the various branches of biochemistry, all equipped with the latest appliances.

THE JOURNAL OF PALEONTOLOGY

NUMBERS one and two of a new quarterly known as the *Journal of Paleontology* appeared in July and August, respectively. Numbers three and four are expected to appear in October and December. In future years the numbers will appear at three-month intervals.

The *Journal of Paleontology* is the official publication of the Society of Economic Paleontologists and Mineralogists.

The Society of Economic Paleontologists and Mineralogists is an organization whose object, as stated in Article II of its constitution, is "to promote the science of stratigraphy through research in paleontology and sedimentary petrography, especially as they relate to petroleum geology," and whose membership is composed of members or associate members of the American Association of Petroleum Geologists engaged in such work.

The *Journal of Paleontology* will be devoted to research in paleontology and sedimentary petrography. The paleontological papers will include those pertaining to faunal distribution, stratigraphic index

species, descriptions of individual faunas, relation of zones to habitats, etc. Sedimentary petrographical papers will pertain to mineral zones, stratigraphic distribution, provinces of sedimentation, etc. Papers will also be included which pertain to technique bearing on researches in paleontology and sedimentary petrography. In fact, those papers will be included which will in any manner be helpful to those engaged in stratigraphic studies carried on either in the laboratory or in the field.

The *Journal of Paleontology* is a quarterly publication, and will be of approximately 96 pages and 15-20 plates. It is $6\frac{3}{4} \times 9\frac{1}{2}$ inches in size.

Dr. Joseph A. Cushman is editor. He is one of America's most active micro-paleontologists. He has been engaged in research for many years, and is now one of the world's foremost authorities on the foraminifera. He will have associated with him an editorial board to assist in matters not in his particular field.

MARCUS A. HANNA,
Secretary-Treasurer.

SOCIETY OF ECONOMIC PALEONTOLOGISTS
AND MINERALOGISTS,
HOUSTON, TEXAS

THE RAWSON-MACMILLAN ARCTIC EXPEDITION OF FIELD MUSEUM

WILLIAM DUNCAN STRONG, anthropologist of the expedition and a member of the staff at Field Museum of Natural History, in a report made public by the director of the museum, tells how the explorers have come upon the ruins of the house, the mining pits and the improvised shipyard of Sir Martin Frobisher, who, between 1576 and 1578, led three expeditions, two for gold, into the forbidding regions of Labrador and Baffin Land. Digging in the ruins, Dr. Strong has unearthed fragments of brick, plaster, coal and porcelain, products which he states undoubtedly were brought over from England, and are indisputable proof that the ruins are of European, and not native Eskimo, habitations.

The story of Frobisher, recalled by the museum expedition's findings, is one of the most romantic in the history of quests for riches in far parts of the earth. Frobisher, with the financial assistance of a few friends, sailed from England in July, 1576, in search of a northwest passage to Cathay and India. He had two tiny vessels, *The Gabriel* and *The Michael*, and thirty-five men. Arriving in Labrador, they proceeded up the coast to what is now Frobisher Bay in Baffin Land. Five of the men were captured by natives and never seen again. Failing to find the passage they sought, the expedition returned to England, bringing some specimens of what the sailors called

"black earth." Soon a rumor spread that this black earth was gold ore. Frobisher himself is thought to have believed it.

In the excitement that ensued, another expedition was formed. Queen Elizabeth loaned *The Aid*, a larger naval vessel, to Frobisher, and gave him £1,000 to finance the quest. Men of prominence in the court also invested in the hope of recovering large fortunes. In July, 1577, Frobisher, with *The Aid*, and the two vessels he had previously, and 120 men, sailed again. Mining equipment was carried and miners and refiners were included among the men. The following autumn the expedition returned to England with 200 tons of the "ore." While assaying, delayed in various ways, was going on, excitement mounted higher, and a third expedition was organized, with fifteen ships. Plans were made to leave 100 of the men to establish a permanent settlement in the barren land, which had solemnly been taken possession of in the queen's name. The fleet sailed May 31, 1578.

After arrival in Frobisher Bay, dissensions arose, and the idea of the settlement was abandoned. The fifteen ships, all laden to capacity with ore, returned to England in October, only to find that the assay, since completed, had determined that the ore contained nothing but "fool's gold," or iron pyrites.

Dr. Strong reports also having investigated what were believed by some explorers to be Norse ruins in Labrador and Baffin Land, but states all he has seen thus far are Eskimo in origin. Further search is to be made for evidences of a landing by the Vikings in the region.

Skeletons of three Labrador Eskimos from old stone graves, other contents of the graves, various specimens from ancient camp sites and many specimens of Eskimo handiwork in bone and stone implements have been collected for the museum.

Dr. Strong is now making preparations for a trip during the coming winter. While other members of the expedition are working at the scientific station established at Nain, Labrador, he will go, with a native interpreter and a team of dogs, into the interior to mingle with and study the primitive Naskapi Indians. These tribes, of which little is known at present, are one of the most primitive of extant peoples. They are reported to be surly and untrustworthy and disinclined to welcome white intruders.

RESEARCH IN MINING AND METALLURGY

FIFTEEN different research studies in mining and metallurgy are being carried on this year at the Carnegie Institute of Technology in cooperation with the United States Bureau of Mines and two advisory boards of mining engineers, metallurgists, steel operators and chemists, according to an announcement.

Thirteen of the problems are being investigated by college graduates appointed as research fellows, one by a research engineer and another by an analyst.

This year's work, it is announced, is a continuation of the program that has been in effect for several years. Each research fellow is making his studies under the direction of a "senior investigator" representing the Bureau of Mines and a member of the faculty of the Carnegie Institute of Technology. Four of the fellowships are financed this year by the institute. Other organizations contributing to the expenses and the fellowship funds are the American Gas Association, the New York Edison Company, the Philadelphia Storage Battery Company, the National Coal Association, the International Combustion Engineering Corporation, and twenty-six companies representing the metallurgical industries. The latter group is financing six of the investigations.

As in former years, it is announced, the results of the studies will be published in bulletin form for distribution at the close of the college year. Assignments of problems to the research fellows have been made as follows:

Equilibrium between manganese, iron and sulphur, by Hershall V. Beasley, University of Tennessee.

Synthesis, testing and application of warning agents for manufactured gas, by Harry A. Brown, Lehigh University.

Formation and identification of inclusions, by John M. Byrns, Case School of Applied Science.

Coal ash fusibility as related to clinker formation, by Clarence L. Corban, Rose Polytechnic Institute.

Methods of determining inclusions, by John F. Eckel, University of Kansas.

Distribution of iron oxide between slag and metal, by Hyman Freeman, Georgia School of Technology.

Base exchange in relation to decay and peat formation, by Raymond C. Johnson, Monmouth College.

Safety, costs and efficiency of distribution of electric power in coal mining, by Donald C. Jones, research engineer.

Physical chemistry of steel making, by Frank Morris, analyst.

Relation between composition and oxidizability of coal, by Harold M. Morris, Cornell College.

Viscosity of open-hearth slag, by Frank G. Norris, Purdue University.

Composition of oils and heavy tar from distillation of coal at low temperature, by Robert N. Pollock, University of Washington.

Determination of relative ignitibility of low temperature coke compared with coal, by Donald L. Reed, University of Washington.

Study of cause and control of abnormality in case carburized steel, by Alfred W. Sikes, University of Illinois.

Physical chemistry of steel-making (field studies), by R. W. Stewart, Massachusetts Institute of Technology.