"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.