issued by the United States Geological Survey, Department of the Interior.

The output of the essential minerals in 1913, the latest normal year, may at least be regarded as a measure of the "quick assets" possessed by each nation, and the first part of the World Atlas of Commercial Geology has therefore been planned to show the distribution of mineral production in 1913.

The practical value of this exhibit of the world's mineral assets is evident. Experience gained during the World War emphasizes the advantage of an adequate supply of raw materials close at hand, yet that there are certain economic limits to domestic independence in raw materials is clearly shown by the readjustments already made. The more facts we possess bearing upon the relative quantity and the relative availability of the mineral resources of our own and of other countries, the better able will be our captains of industry to decide whence they should derive their raw The mines of the United States material. should be looked upon primarily as tributary to the many mills, shops, and factories in which the skilled labor of the country may find its opportunity for a livelihood. The output of raw minerals measures only the first step in industry.

More than a score of geologists have cooperated in the preparation of this atlas, which was first undertaken during the World War as a part of the task of keeping American industries supplied with raw material and is to be regarded therefore as a byproduct of the war-time activities of the Geological Survey.

AWARDS OF THE LOUTREUIL FOUNDATION OF THE PARIS ACADEMY

Among the awards made this year, as we learn from the report in *Nature*, are the following:

(1) 10,000 frames to Charles Alluaud and to R. Jeannel, for the study of the zoological and botanical material collected by them in the high mountains of eastern Africa and for the publication of the results.

(2) 5,000 francs to Jules Baillaud, for the es-

tablishment of a recording microphotometer of the type suggested in 1912 by P. Koch.

(3) 3,000 francs to Henry Bourget, director of the Marseilles Observatory, for the *Journal des Observateurs*.

(4) 2,000 francs to Clément Codron, for his researches on the sawing of metals.

(5) 5,000 francs to the School of Anthropology, for the publication of the *Revue d'Anthropologie*.

(6) 4,000 francs to Justin Jolly, for the publication of a work on blood and hæmatoporesis.

(7) 7,000 francs to Louis Joubin, for the publication of the results of the French Antarctic Expedition.

(8) 3,000 francs to the late Jules Laurent, for the publication (under the direction of Gaston Bonnier) of a work on the flora and geography of the neighborhood of Rheims.

(9) 3,000 frances to Henri Brocard and Léon Lemoyne, for the publication of the second and third volumes of their work entitled "Courbes géométriques remarquables planes et gauches."

(10) 2,000 frames to A. Menegaux, for the *Revue française d'Ornithologie*.

(11) 5,000 francs to Charles Nordmann, for his researches on stellar photometry.

(12) 8,000 francs to the Zi-Ka-Wei Observatory, in China (director, R. P. Gauthier), for recording time-signals from distant centers.

(13) 2,000 francs to O. Parent, for his studies on a group of Diptera.

(14) 10,000 francs to G. Pruvot and G. Racovitza, directors of the *Archives de Zoológie expérimentale et générale*, for this publication.

(15) 6,000 frances to Alcide Railliet, for the publication of researches on the parasites of the domestic animals of Indo-China.

(16) 4,000 francs to J. J. Rey, for the publication of a botanical geography of the Central Pyrenees.

(17) 10,000 frances to Maximilien Ringelmann, for researches relating to the physical and mechanical constants of metals intended to be used in the construction of agricultural machines.

(18) 12,000 francs to the Academy of Sciences, for the establishment of a catalogue of scientific and technical periodicals in the libraries of Paris.

It was pointed out by the council in 1917, that, although the special object of this foundation was the promotion of original research, up to that time requests for assisting work to be carried out according to a well-defined scheme had been exceedingly few in number.