AMERICAN MINERAL STATISTICS.[1]

THE annual report of the production of minerals in the United States has been issued for 1910 by the United States Geological Survey in the form of two bulky volumes dealing with metallic and non-metallic products respectively. Most of the statistical information had been already published in the special pamphlets issued from time to time by the Geological Survey, so that the present volumes contain no new facts, although they add a great quantity of important and interesting details, whilst the study of the subject is, of course, greatly facilitated by the collection and juxtaposition of all the various items.

The total value of the mineral production is given as a little more than 2,000,000,000 dollars, an increase of 6·2 per cent. over that of 1909. This figure is quite comparable with the values of output of the United States for previous years, but is not comparable with those for other countries, because of a number of inexactitudes due to the method in which the returns are presented. As has more than once been pointed out, the grand total contains a number of reduplications, in spite of the statement in the report itself that "all unnecessary duplication has been excluded." The report directs attention to the fact that the value of the coke produced, practically 100,000,000 dollars, is excluded from the total, because "the quantity and value of the coal used in its manufacture are included in the statistics of coal production." It neglects the equally important fact that practically the whole of this coke is consumed in the production of metals, such as pig-iron, copper, and lead, and as the value of these metals is given, and not merely that of the ores from which they are extracted, the cost of the coke is really included in the value assigned to the metals. If the total value assigned to mineral products is to be correct, the value of all the fuel used for metallurgical purposes, and for burning clay products, lime, cement, &c., should be deducted from the grand total; this is by no means a trifling correction, for it would probably mean a diminution of the total by something like 10 per cent.

Care has been taken in this report to include only metals produced from domestic ores as far as possible; this brings out the very interesting fact that the recovery of metals from residues, by-products, waste materials, &c., is assuming very important dimensions. Thus in 1910 the production of zinc, here called "primary spelter," direct from domestic ores amounted to 252,479 tons, and that of zinc from imported—chiefly Mexican—ores to 16,705 tons, whilst the quantity of so-called "secondary zinc" recovered from waste and scrap materials of various kinds was no less than 68,723 tons, or about a quarter of the production of primary spelter. In the case of tin the figures are still more striking; the quantity of tin obtainable direct from ores is not stated, but appears to be of the order of some 40 tons, whilst the recovery of secondary tin from scrap of all kinds amounted to no less than 13,903 tons. It is calculated that the recovery of secondary tin throughout the world is only 27,000 tons, so that one-half of this production takes place in the United States. Seeing that the world's output of primary tin was about 115,920 tons in 1910, the recovery of tin from scrap is assuming very important dimensions.

Amongst the non-metallic minerals, coal is, of course, by far the most important, the output for 1910 exceeding 500 millions of tons, this being the first time that this figure has been attained. The mineral output shows steady and progressive development in practically all directions, and these volumes afford conclusive evidence of the prominent position that the mineral riches of the United States hold amongst the sources of national wealth. It should, however, in all fairness be added that these two fine volumes of mineral statistics are not unworthy of the flourishing industries, the progress of which they chronicle. Is it too much to hope that we may have some day in this country a record of mineral statistics that might worthily sustain comparison for accuracy and completeness with that issued by the United States Geological Survey? H. L.

[1] "Mineral Resources of the United States, Calendar Year, 1910." Part i., Metals. Pp. 796+plate. Part ii., Non-metals. Pp. 1005+plates. Washington: Government Printing Office, 1911.)

INCOME OF AMERICAN COLLEGES OF UNIVERSITY RANK.

THE second volume of the report of the United States Commissioner of Education for the year ended June 30, 1911, has now been received from Washington. It is chiefly devoted to statistical details concerning the development and present provision of educational facilities in institutions of all the grades included in the American system of education. Especially interesting are the facts which may be gathered respecting education of university rank.

The total receipts of the universities in the United States are given as 18,934,410*l.*, derived from a variety of sources, as shown in the following table:—

Total Receipts of Universities and Colleges for the year ended June 30, 1911.

	£
Tuition and other educational fees ...	3,698,600
Room rent	381,700
Board and other non-educational fees ...	1,218,970
Productive funds	2,658,700
State or city for increase of plant	932,430
,, ,, current expenses	2,941,450
United States Government	1,175,040
Private benefactions for increase of plant ..	1,144,700
,, ,, endowment ...	2,753,970
,, ,, current expenses ...	693,950
All other sources	1,334,900
Total receipts	18,934,410

More detailed information is provided as to the benefactions given during the year under review, which exceeded four and a half millions sterling, or 4,592,620*l.* to be precise. We notice, for example, that the total is more by 845,200*l.* than was received during 1909–1910. Fifty universities and colleges each received gifts amounting to more than 20,000*l.*, and, as the following table shows, seven universities and colleges were fortunate enough to benefit to the extent of 100,000*l.* or more.

Universities and Colleges receiving 100,000*l. or more in Benefactions during* 1910–11.

	£
Columbia University	507,010
Harvard College, Massachusetts	349,090
University of Chicago...	271,790
Yale University	226,880
New York University...	185,690
Dartmouth College, New Hampshire ...	156,890
Amherst College, Massachusetts	101,950

A separate chapter in the report deals with agricultural and mechanical colleges, but the Commissioner is careful to point out that some of them are also included under universities and colleges, so that overlapping occurs. The following table shows the total income of the agricultural and mechanical colleges for the year under consideration. Grants for experiment stations, farmers' institutes, and other means for