

PRELIMINARY ESTIMATE OF THE WORLD'S COAL PRODUCTION IN
CALENDAR YEARS 1919, 1920 AND 1921
(In metric tons of 2,204,622 lbs.)

| COUNTRY | 1919 | 1920 | 1921 |
|----------------------------|--------------------------|--------------------------|--------------------------|
| Australia | 10,736,321 | 13,176,426 | ¹ |
| Belgium | 18,342,950 | 22,388,770 | 21,807,160 |
| British India..... | 22,991,217 | 17,356,889 | ¹ |
| Canada | 12,411,328 | 15,088,175 | 13,300,000 |
| China | 23,000,000 | 19,500,000 | ¹ |
| Czechoslovakia | 26,946,813 | 31,086,479 | ¹ |
| France | 22,341,000 | 25,300,000 | 29,000,000 |
| Germany—Coal | 116,500,000 ² | 140,757,433 ² | 145,400,000 ² |
| Lignite | 93,800,000 | 111,634,000 | 120,000,000 |
| Japan | 31,461,386 | 29,245,384 | ¹ |
| Union of South Africa..... | 9,313,232 | 11,181,846 | 9,400,000 ³ |
| United Kingdom..... | 233,467,478 | 233,216,071 | 166,992,000 |
| United States | 502,534,410 | 586,000,000 | 448,600,000 |
| Other countries..... | 46,553,865 | 49,068,527 | ¹ |
| Totals | 1,170,400,000 | 1,305,000,000 | 1,100,000,000 |

¹ Estimate included in total. ² Includes Saar and Upper Silesia. ³ Estimated from 11 months' production.

Whiteside, of the Section of Foreign Mineral Reserves, presents the information received by the Geological Survey up to February 15, 1922. The tonnage of the countries not yet heard from ordinarily amounts to 12 or 15 per cent. of the total. Receipt of data for these missing countries, estimates for which are included in the total, may raise or lower the final figure by some millions of tons. The unit used is the metric ton of 2,205 pounds, the approximate equivalent of the long or gross ton. It is not, however, exactly the same, and the translation from net or gross tons to metric tons gives many of the figures an unfamiliar look. A more complete report on world production in 1921 will be issued by the Geological Survey about April 1.

THE MOUNT EVEREST EXPEDITION

WE learn from the London *Times* that the preparations for this year's Mount Everest expedition are now complete. The nine members who have left England for India are:

Brigadier-General the Honorable C. G. Bruce, C.B., chief of the expedition.

Lieutenant-Colonel E. L. Strutt, C.B.E., D.S.O., second in command.

Mr. G. L. Mallory, who led the climbing party in 1921.

Mr. George Finch, of the Imperial College of Science.

Major E. F. Norton, D.S.O., R.F.A.

Mr. T. Howard Somervell, F.R.C.S., of University College Hospital.

Dr. A. M. Wakefield, of Megantic, Quebec Province.

Dr. T. G. Longstaff, surgeon and naturalist.

Captain J. B. L. Noel, M.G.C., photographic officer.

The party will be joined in India, the *Geographical Journal* published by the Royal Geographical Society states, by Captain Geoffrey Bruce, Fifth Gurkhas, and by Captain C. J. Morris, Third Q.A.O. Gurkhas. The twelfth place was to have been filled by an artist, but to the great disappointment of the committee it was not possible to find one among those whose methods seemed appropriate, who could undertake the journey. Of the eleven members of the expedition named above six are soldiers—three of the Gurkhas, one of the Royal Scots, one Royal Field Artillery, and one Machine Gun Corps, formerly of the East Yorkshire Regiment.

Three members of the party are of Cambridge University—Mr. Mallory, of Magdalene, Mr. Somervell, of Caius, and Dr. Wakefield, of Trinity; two are of Oxford University—Colonel Strutt and Dr. Longstaff, both of Christ Church; three are surgeons; two are naturalists, several are expert photographers, one at least is a painter, and all are distinguished mountaineers. It is, in fact, a very strong party, of which much is expected.

The climbing equipment includes an oxygen apparatus specially devised for the occasion. The photographic outfit is very complete, including three cinematograph cameras, of which one is equipped with a battery of lenses up to 20-inch focal length; two panoramic cameras, of which one rotates through the complete circle; four cameras for glass plate, including one 7½-inch by 5-inch, all fitted with telephoto lenses; one stereoscopic camera, and five Kodaks, besides a variety of private cameras belonging to different members of the party. The dark-room equipment includes all that is required for developing cinematograph films in the field.

General Bruce, with his two assistants, Captain Geoffrey Bruce and Captain Morris, are at Darjeeling making preparations for the start of the expedition at the end of the month. They will be especially concerned with the two most important matters, first, the organization of the special corps of Himalayan coolies enlisted from Nepal and the borders of Sikkin and Tibet, and, secondly, with transport arrangements, which require careful and methodical planning, for the expedition is larger this year than last, and is more fully equipped.

Telegrams will be dispatched from the expedition describing its progress, and will be published in *The Times*. A book containing a full account of last year's reconnaissance, with a new map and illustrations, is now going through the press, and will be published by Edward Arnold by the end of next month or the beginning of May. The *Geographical Journal* will contain monthly notices of the progress and results of this year's attempt to reach the summit.

THE AMERICAN CHEMICAL SOCIETY

THE American Chemical Society, which will meet in Birmingham, Ala., from April 3 to 7, expects an attendance of from 700 to 1,000 chemists. It was planned to leave Washington, D. C., on March 30. March 31 will be spent at Kingsport, Tenn., where the Clinchfield Portland Cement Plant and several large extract plants and tanneries are located, together with numerous other chemical industries. April 1 will be spent at Chattanooga, Tenn.,

and April 2 will be spent at Muscle Shoals, Ala., the site of the large government cyanamid plant and the Wilson power dam. The special train will arrive in Birmingham on April 3.

The following divisions of the society will meet and discuss technical and scientific problems and developments: Agricultural and Food Chemistry, Biological Chemistry, Dye Chemistry, Industrial Engineering Chemistry, Organic Chemistry, Chemistry of Medicinal Products, Physical and Inorganic Chemistry, Rubber Chemistry, Water, Sewage and Sanitation Chemistry, Sugar Chemistry, Cellulose Chemistry, Petroleum Chemistry, Chemical Education and History of Chemistry.

Dr. Edgar F. Smith, president of the American Chemical Society, will turn over to the society dues for the Priestley Medal together with funds which have been donated for the purpose of presenting every two years a medal for the most distinguished service to the science and industry of chemistry, and will make the address of welcome.

Dr. Van H. Manning, former chief of the Bureau of Mines, will present a paper on "The pioneer's field in petroleum research." Dr. Charles L. Reese will give a paper on "Informational needs in science and technology," and Dr. W. C. Geer will speak on "Recent developments of the chemistry of rubber."

Meetings of the various divisions will occupy Wednesday April 5, and Thursday, April 6, concluded with a banquet at the Hotel Tutwiler on Thursday night. Friday, April 7, will be spent in excursions to the steel, by-product, coke and other industries in and around Birmingham. George Gordon Crawford is the honorary chairman and J. F. Carle, of the Southern Testing Laboratories, is chairman of the executive committee in Birmingham in charge of the local arrangements.

Permission to visit the nitrate plant and water power development at Muscle Shoals has been limited by the government officials to American citizens and to those who have no personal connection with or financial interest in the manufacture of cyanamid.

One of the avowed purposes of the meeting is to gather support, by writing congressmen and senators, for the passage of the reclassifi-