

**Manufacture of charcoal in Kenya.** Information was requested as to possibility of making charcoal for fuel for use in railway locomotives in Kenya Colony. A statement was drawn up relative to this subject, giving information and details as to the calorific value of charcoal.

**Electrical and other physical methods in prospecting.** The enquirer wished to obtain information as to the present position as regards prospecting by various geo-physical methods. He was shown the published literature on the subject and was introduced to various authorities in London who had special knowledge of the methods involved.

**Felspar of British origin.** Enquirer wished to know of British sources of felspar suitable for use in glass manufacture. He was given a list of British producers.

### Investigations.

During the year, 170 reports on mineral investigations have been made, incurring analyses and/or technical trials being made on 520 samples.

The laboratory staff have also undertaken the conduct of certain enquiries dealing with mineral technology.

Amongst the more interesting of the investigations, the following may be mentioned:—

**Clays from Nigeria.** An extensive series of technical trials and chemical analyses carried out for the Geological Survey of Nigeria on clays from Umu Ahia, Nigeria, showed that three of these were very suitable for making white bricks, tiles or pottery, which could be glazed if desired. Certain of the clays could also be used for the production of refractory bricks. These results are of interest as the clays occur in close proximity to lignite fuel and to the railway. Specimens of the ware produced from the material in the ceramic laboratory were sent to Nigeria.

**Bituminous oil and lignites from Nigeria.** Other work carried out for the Geological Survey of Nigeria included the analysis and report on samples of bituminous oil, lignites and clays from several new localities and an interesting sample of magnetic tinstone. The question of submitting Nigerian lignite to a process of low-temperature carbonisation in order to obtain a smokeless fuel together with a crude oil, received a considerable amount of attention at the Imperial Institute. Small-scale technical trials indicated that the Okpanam lignite would be well adapted for this purpose, the yield of oil comparing favourably with that obtained from lignites from other sources.