

to delays incident in the installation of special pieces of equipment, work on many of these subjects did not get under way until relatively late in the year.

Asbestos

D. WOLOCZOW

After several meetings with representatives of the Canadian producers, at which the technical problems of the industry were discussed, it was decided to undertake work with the object of, (a) standardizing the present method of testing asbestos grades, (b) developing new methods of testing such as will take into account all the various properties of the fibre which are of significance in manufacture, (c) developing new uses for asbestos, especially for the shorter fibred grades.

Work was started in November, 1930. The producing mills and a number of asbestos manufacturing plants were first visited and data were secured on the results of testing the various grades of fibre in the Quebec Standard Testing Machine and also on Ro-tap screens.

Work has also been done on the influence of drying, on testing, on the determination of the moisture and water-soluble content in asbestos, and on the absorption of water by asbestos. A new method of testing, based on the apparent density of the fibre, is being studied. Washing tests have been made. Asbestos of foreign origin has also been examined for comparative purposes.

Some studies have been made on the properties of asbestos of various grades bonded with Portland cement and other binders, and this work is leading to the production of some new asbestos cement and moulded compositions which, it is hoped, will prove to be of commercial value.

The activities of the Associate Committee on Asbestos are briefly described under that heading, beginning on page 54 of this report.

Plastic Magnesia

A. F. GILL, N. P. PITT, C. W. DAVIS

Laboratory work on behalf of the magnesite companies has been directed towards improvement of the properties and methods of utilization of the plastic magnesia and the development of new uses.

A study was made of the effect of the factors of time and temperature in calcination subsequent to the carbonate decomposition. It was found that the physical properties of a plastic magnesia could be modified by heat treatment to give the desired setting time, high water resistance and diminished linear change. It was possible to take advantage of these results in the commercial production of plastic magnesia in spite of the limiting temperature below which Canadian magnesian rock must be calcined to avoid production of free lime. This was accomplished by close sizing of kiln feed, careful control of the burning period and improved technique in temperature measurement and control.

Further laboratory experimentation on the expansion and contraction of plastic magnesia cements, together with observations of existing installations, had indicated that climatic conditions in eastern Canada are a major

factor in the deterioration reported as existing under the present conditions.

A large volume of developing for changes. The addition of aggregate size safety against composition factors. Its resiliency and tenacity are now in service.

An investigation satisfactory magnesia mechanical properties scale.

Other magnesia trials in the floor and wall treatments to be equal to the establishment of a template.

Efforts are being made power and fire-proof building products been obtained.

With the year 1931, some additional preliminary qualities of magnesia made of the condensation of magnesia factory way could

Weed seeds are represented in the egg head of the lake and separated at these sections and in the near thirds of these sections or no monetary value National Research

Of the various manufacture of the been developed in