

SULPHUR.

Sulphur is found in nature in combination with many other elements, and also uncombined, as *native sulphur*.

Sulphur may be produced by the decomposition of iron pyrites or other sulphur minerals, but at present, practically the world's supply is obtained from deposits of native sulphur.

PREPARATION.

The deposits of sulphur contain many impurities from which the sulphur must be extracted. This is accomplished in several ways. The "ore" may be heated to a temperature at which the sulphur will melt and drain from the gangue, or if a somewhat higher temperature is used the sulphur is volatilized and may be recovered by condensation. The former method is that usually employed. The sulphur thus prepared is called *brimstone*, or if cast into cylindrical sticks, *roll sulphur*. When the second method is employed the sulphur is obtained in a fine powder, called *flowers of sulphur*, or *sublimed sulphur*.

Another method of extracting the sulphur is to dissolve it out of the gangue by means of carbon disulphide, from which it may be recovered by distilling off the solvent.

In some cases the sulphur is won from deep deposits by melting it with high pressure steam and forcing the molten sulphur to the surface through bore holes. The sulphur thus obtained is said to be almost pure.

USES.

Sulphur is used in Canada principally in the manufacturing of sulphite pulp from wood.¹

Sulphuric acid is made by burning sulphur and converting the sulphur dioxide to sulphur trioxide, which unites with water forming the acid.²

Sulphur is used to a considerable extent in the manufacture of gunpowder, matches, pharmaceutical preparations, rubber goods, and insulated electric cables, and to a lesser extent in tanning, bleaching of cotton goods, glue making, sugar refining, and for bleaching evaporated apples.

¹ See uses of Pyrite, page 70.

² See uses of Pyrite, page 70.