SALT.

In general usage the terms *salt* and *common salt* refer to the chemical salt, *sodium chloride* (NaCl). This occurs in nature in large quantities in aqueous solution, as the brine of the ocean, salt lakes and springs, and also in the solid form, known mineralogically as *halite*. When it occurs in massive deposits it is called *rock salt*.

WINNING AND PREPARATION.

The salt of commerce is obtained both from brines and from rock salt deposits.

Rock salt. In some cases the deposits of salt lie at the surface of the ground with little or no overburden and may be excavated by ordinary open-cut methods. Where the overburden of soil and rock is too great to warrant stripping, underground methods may be used similar to those employed in coal mining, but if the overburden be very great, or if for other reasons it is advisable, the salt is won by dissolving it *in situ* and pumping the brine to the surface. The last method is the one employed in winning the salt in the Ontario salt district. A drill hole is sunk through the deposit and cased with an iron pipe down as far as the upper limit of the salt. An inner pipe of considerably smaller diameter extends from the surface to the bottom of the deposit. Fresh water is forced down, between the inner and the outer pipes, to the deposit where it comes into contact with the salt. The salt is dissolved, forming a very strong brine, which is pumped to the surface through the small inner pipe. The salt is obtained from the brine by evaporating the water.

In some cases the rock salt, mined by the first methods referred to above, contains impurities which render it unsuitable for many purposes. It must be purified to fit it for the market. This is done by dissolving it and then recrystallizing it by one of the methods given below. The brine produced in this process, as well as that resulting from the solution of rock salt *in situ*, referred to above, is called *artificial brine* in contrast to the *natural brine* of the ocean and salt springs.