## KAOLIN OR PORCELAIN CLAY.

The clays we have already considered are classed among the sedimentary deposits, having been deposited from water after being carried to a greater or less distance. Kaolin results from the disintegration of felspar in its original situation. Felspar consists of silica, alumina, and either potash or soda, or both of these alkalies. Certain kinds of this mineral appear to be acted upon by atmospheric agencies, mainly carbonic acid and water, by whose joint action the alkalies are slowly removed, and the texture of the stone finally destroyed, leaving what is called kaolin—a slightly cohering earth.

It may occur wherever we find rocks which abound in felspar, which in Maryland range through Montgomery, Howard, Carroll, Baltimore, Harford and Cecil counties; and it does occur in these counties, but to this time remains undeveloped for want of a demand.

When the felspar was largely mixed up with mica and quartz, as in some granites, the resulting kaolin is of course not pure. There are localities, however, in which the kaolin is remarkably free from these, as well as metallic oxides, so as to remain white after being fired in the kiln. It is from this kind that the finest porcelain is made. The only large body of pure kaolin that I have met with in Maryland lies about three miles north-easterly from Abingdon, in Harford county, where it was discovered some years since whilst an excavation was being made for any other purpose. Being perfectly white and free from impuritiesit will prove important whenever porcelain shall be made in our State. It was exposed by digging through fifteen feet of superincumbent earth, and was penetrated four feet without reaching the bottom.

CHAP. IX.