

ture, and quality, quantities are placed in a large boiler in which bleaching chemicals are used to remove all stains and impurities. After a thorough cleansing they pass into a large vat of water, fitted up with revolving cylinders set with knives by which the mass is triturated. Carried around for several hours in this vat, the stuff is then transferred to another and larger receptacle containing a solution of chloride of lime where the material is beaten into a soft white pulp resembling wet cotton. Sufficient water is then poured in to make the mixture thin enough to spread evenly, and it is now ready for the machines which distribute the particles smoothly over surfaces especially constructed. From this the sheet passes on to a felt blanket which carries it through rollers, submitting it to a heavy pressure, after which heated cylinders remove all the moisture. Then the sheet is pressed and hardened, until it reaches further end of the machine, where the paper is completed and delivered on the reel upon which it is rolled.

If desired an extra finish can be put on the paper by feeding it between rollers, the effect obtained is called the coating. If the paper is to be ruled, a special machine is fitted up with large needles and as the paper passes through the machine these needles touch the paper at equal distances apart thereby ruling it exactly.

The different colors of paper are produced by mixing the desired quantity of color with the pulp. To-day the paper is fed into a machine made up of as many cylinders as there are colors. Each cylinder is charged with its peculiar coloring matter, and is so arranged as to register perfectly with the feeder. After being dried and carefully dusted the sheets are cut into the desired length and are then ready for the market.

In all papers the method followed is exactly the same, with the exception of preparing the pulp. Although rags are generally used in paper making yet we find that sometime ago wood came into competition for this purpose—pine, spruce and fir are the most important. Cut into slabs about half an inch thick, the raw material is placed in a machine which cuts them up fine, and the fibres are then gathered and pressed into pulp.

Having spoken of the materials used, the different processes which takes place and the result obtained. I think it would be well