see all the other familiar equipment even to weights hanging "down stairs" under the table, attached to dryer felt stretch rolls. There are two wet felt presses, which is not uncommon, and also a stack of 6 calendar rolls before the reel.

The entire assembly is mounted on a table 18 feet long, 4½ feet wide and 3½ feet high. The table has more than ample room for a ¾ pound beater, two copper beater chests with agitators, a motor-driven stuff pump, a motor for constant speed parts, and a motor for variable speed parts. Mr. Saxton points out that on the variable speed motor there is room for the machine to run four times as fast as it usually runs during demonstrations. There is no hood over the dryer section, so visitors have an unobstructed view of the entire process.

The wire is only 11 inches wide and 68 inches long. Mr. Saxton states that he gets a wire-life of about 12 to 17 months, and wet felts last nearly the same amount of time. There are 25 table rolls carrying the wire, each one having the same diameter as a lead pencil.

Normally, this machine makes a sheet of sulphite paper at a rate of 5 feet per minute, 9½ inches wide. At this speed the operator carries a vacuum of about 2 inches on the three suction boxes, and runs the table-shake at around 62 rpm The 8 dryers are only 6 inches in diameter, and they are heated by thermostatically controlled electrical units inside. There are two dryer felts, one top and one bottom.

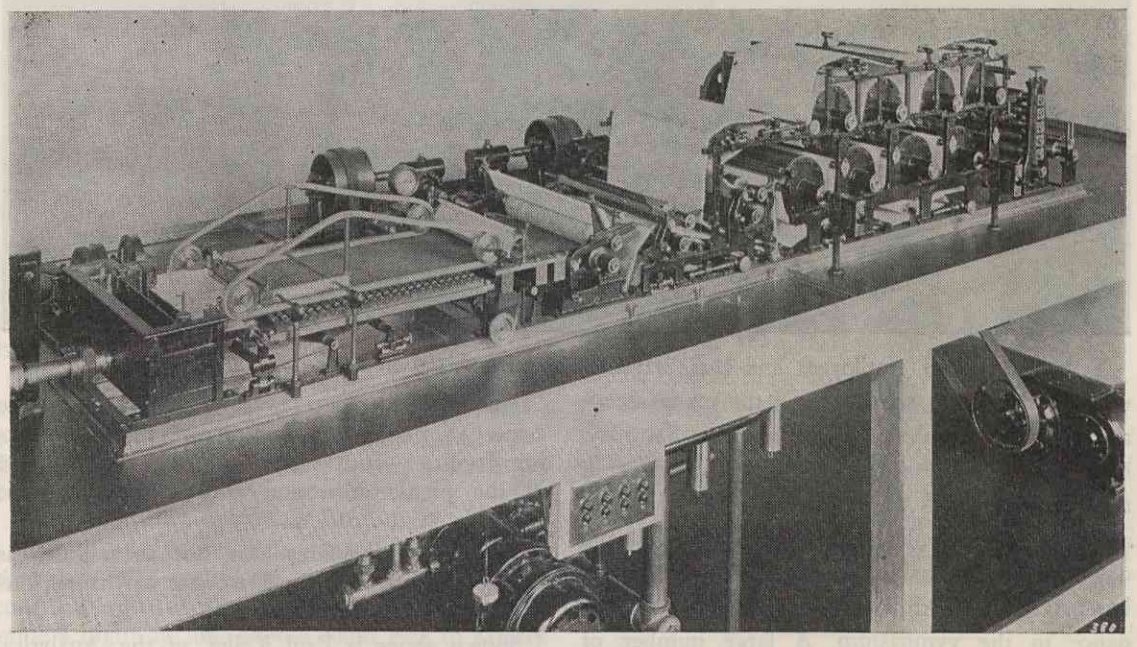
When Mr. Saxton is asked if he ever gets "in the hay", he smiles ruefully and says, "sometimes." However, at only 5 feet per minute he has no trouble in getting up the broke, which he puts back into the beater at the wet end of the table.

This machine has been used many times by different paper companies for making experimental runs with different types of stock, including wet-strength experiments for a manufacturer of paper tea bags.

The Rice Barton Corporation, which made the machine, has been in business since 1937, and their principal products are paper making machines, from the largest to the smallest: Fourdrinier, Harper, Yankee and Cylinder. When asked about blue prints for this small scale model machine, the Rice Barton people said that there were none. They made a few free-hand sketches, turned them over to their tool room, and their workmen went ahead and built the machine.

The Franklin Institute of Philadelphia, founded in 1824, is the oldest institution in the U. S. devoted to the study and promotion of the mechanic arts and applied science. In 1934 the Institute moved to Benjamin Franklin parkway and N. 20th Street. Included in the new buildings, at this location, is a planetarium; a permanent technological exhibition, including working scale models of all types of machines, from water pumps to railroads; halls for mechanical and industrial exhibits; and a scientific library, notable for a record of patents granted in the United States and other countries.

If your vacation takes you in the vicinity of Philadelphia, plan to visit the Franklin Institute. You will find it very interesting and educational.



The World's smallest scale model paper machine