

COUCHING—(where the couch-roll gets its name).

Next, he removed the deckle, which looked like a picture frame. This is the border that keeps the stuff from falling off the edges of the mould. Mr. Hunter then turned the mould upside down, and with a rocking motion he transferred the sheet of wet pulp onto a square piece of felt on the table. This completed the actual demonstration of papermaking.

What caught my attention was that when the mould was first lifted out of the vat, the stock looked lumpy and had no formation at all. But the instant it was shaken first one way and then the other, the lumps disappeared and the sheet formed smoothly the way it does as it leaves the slice on a paper machine.

At this point, Mr. Hunter mentioned that handmade paper is stronger than machine-made paper because the coucher forms his sheet in two directions whereas the machine shakes in only one direction, with the result that the sheet is stronger across the machine than lengthwise with it.

POSTING—(the work done by the original "layman".)

In Mr. Hunter's mill in Connecticut, when the coucher has built up a "post" about two feet high, the "layman", or layboy, puts the whole stack of sheets and felts into a hydraulic press and 300 tons of pressure is applied to squeeze the water out. Once the sheets are dried, the paper at this stage of manufacture is ideal for watercolor paintings, etchings, drawings and even bookbinding, where a rough texture is desired. If smoother finishes are required, successive pressings without the felts between the sheets will give an increasingly smooth surface. Mr. Hunter prefers to use felts made in Yorkshire, England; these being the best and made of the finest wool obtainable.

I had a good look at the moulds used by the Hunters and they appear to be wooden frames with wooden ribs running across like louvres in a Venetian blind. Bronze wires are strung at right angles over the ribs and bound down by very fine wires which pass through holes in the ribs. The resultant mould is nearly the same as what you would have if you took a "laid" dandy, cut off a two-foot section, then cut it open and laid it out flat.

After the lecture I asked Mr. Hunter if he used the terms "verge" and "tranchefil" when referring to the ribs and wires, but he said he did not.

The verge lines in Ecusta paper would be called "laid" lines, and tranchefil lines would be called "Chain lines" because in handmade paper they look like marks caused by a chain. This is caused by the fine wires which bind the laid wires down to the ribs across the mould.

The mould used in the demonstration was made in England and measured 16 by 23 inches, which is not a dimension arrived at by luck. It took many years of experience in both papermaking and bookbinding to learn that 16 by 23 inch sheets make a satisfactory size for folio books when the sheets are folded once. Folded twice, they make a good quarto; folded again they make a good octavo, and so forth. Any other dimension of the mould might produce a good folio, but might make a poor quarto when folded twice.

Great skill and speed is required to spill off the right amount of stuff and then shake the mould in four directions before all the water has gone through the wires. It is easy to see why the papermakers of the 15th century were able to produce such fine paper when you consider that they made hundreds of sheets a day, year after year. They became so skilled that their sheets all had about the same weight and thickness and calipered evenly around the four sides. This is important, since, in printing, the paper has to be of uniform thickness in order to receive an even impression from the presses.

Mr. Hunter is convinced that no finer paper was ever made than was used by the famous printer, Johann Gutenberg of Mainz, in about 1450. His paper was made of only fibres and water, no chemicals at all, since science and chemistry did not enter into papermaking until only a comparatively few years ago. Paper made centuries ago will still be sound and strong when most of the books printed today on wood pulp treated with chemicals will have turned to dust. "That," said Mr. Hunter, "may be Providence's way of assuring that worthwhile books, printed on fine paper centuries ago, will be assured of a permanence that will not be enjoyed by most of the books being published today."

Despite the fact that everyone knows the importance of good eyesight, there are many things that the average person does not know about care of the eyes.

Some worry about color blindness but actually those who are color blind are often gifted with the best vision.

