WOOKEY HOLE PAPERMILL

TRADITIONAL PAPERMAKING

- Today, paper is made from raw cotton imported from the USA (Texas and California). The cotton is put into the HOLLANDER BEATER with water and beaten for 10 hours to produce a pulp.
- Clear water (to give a clean paper), size (to reduce absorbancy) and starch (for crispness) are added to the pulped cotton to make 'STUFF'. This is pumped into the STUFF CHEST. From here it goes into an OPEN VAT where water is added to maintain the right consistency.
- The papermakers work in teams of two. The VATMAN dips the rectangular MOULD into the vat to cover it with an even layer of stuff. He gives it a skillful three-way shake known as the 'vatman's stroke' to achieve the correct weight and thickness of paper.
- The COUCHER (from the French meaning to lay down), rolls the sheets of paper out of the mould onto a pure wool blanket. Another blanket is placed on top. A pile of 100–130 blankets is called a 'POST'.
- The post is put into a large Victorian HYDRAULIC PRESS. This squeezes out the water and presses the cotton fibres together to make paper.
- After pressing, the blankets are separated and the sheets of paper taken out. This process is called LAYING OFF. The paper is now firm enough to be handled.
- The sheets of paper are dried in a specially heated room and then dry pressed for 24 hours to make them flat. The sheets are torn rather than cut to size to give a distinctive edge. It takes 4–5 days from beating to the finished product and about 500 sheets are made every day.
- Cotton paper lasts at least 400 years which makes it ideal for legal documents. In contrast, woodpulp paper can start to break down after 50-80 years.
- WATERMARKS The design of a watermark is made from copper wire sewn onto the surface of a mould, lying slightly proud. When the vatman dips the mould into the vat, the layer of stuff is thinner over the mark. This variation in thickness is corrected in the hydraulic press, but the density of fibres over the watermark remains weaker, allowing more light to pass through the paper at that point. Watermarks are used as signs of quality, as trade marks and also for security purposes e.g. banknotes.

KEY POINTS: PAPERMAKING

The processes of traditional papermaking
Raw materials and equipment
Papermaking team of vatman and coucher
Watermarks