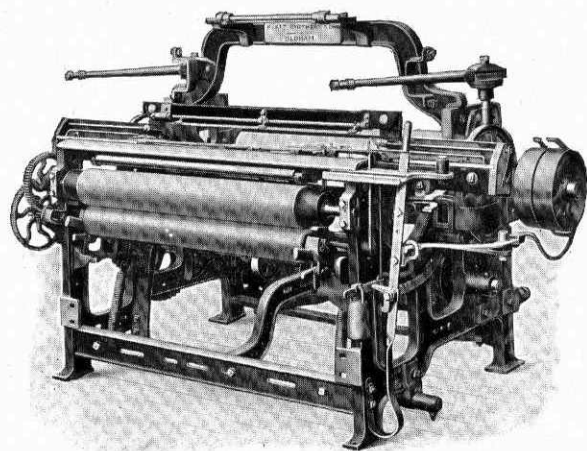


The reed or comb is an arrangement of dents—pieces of flattened and polished wire about five inches long—fixed between strips of wood by pitched band. The dents are closer or further apart as the reed is finer or coarser in counts. Two ends are generally drawn between each split or dent.

Twisting-in.—Where the healds have been used before with the same counts per inch, &c., the ends from a new beam are pieced by a loomer, or twister-in, to a corresponding end which has been left in the heald from an old beam; this process is termed twisting-in.

The Loom.—The object of the loom is to interlace the warp and weft yarns in such a manner as to form a firm texture of plain or fancy cloth according to requirements.

The beam, containing the sized warp yarn, is placed in suitable bearings at the back of the loom, from whence the yarn passes upwards and over the back rest, through the heald eyes and through the reed or comb;



CALICO LOOM—OVERPICK PATTERN

at this point the shuttle containing the weft yarn is caused to pass through the opening—termed a shed—created by the division of the warp into two portions by the lifting of some and lowering of other healds, and the weft, thus projected across the warp, is immediately beaten up by the reed held by the lathe or slay close to the previous pick or shot of weft; the cloth thus woven then passes over an iron surface roller, covered with perforated steel filleting, on to the cloth roller.

To keep the warp at a suitable tension, the yarn beam is held by means of chains and weighted levers, the chains passing round the collars of the beams at each end, the threads of yarn from the beam being separated