Warping. The hand-loom weaver's first assistant was the warper. In old times the warping was done by taking a proportion of the threads of the intended web to fix these to a projecting wall peg, and to pass to another similar peg at five ells distance, twist the threads round it, and to repeat this lapping and plaiting process till the web was finished.

The number of threads used were drawn from bobbins placed in a framework, in which they turned easily. The passage to and fro between the pegs – the warper walking or “ganging” – gave the name “gang” to the mass of threads used, and any smaller quantity wanted to finish the web was called a “half-gang.”

The introduction of the Dutch warping “mill” (1743) changed all this. Here again the threads were placed in a convenient framework or “bank,” the threads drawn forward from each, and passed through a series of eyelets and between upright dividing thorles – both of which were fixed to a horizontal bar hung to an upright post, and passing freely up or down, obedient to the revolutions of the “mill” itself.

The mill was an upright cylinder made of light spar woodwork, revolving on pivots – top and bottom – in the centre. On the side of the mill (which was about six feet high) were fixed pins corresponding to the old fashioned pegs. To these, at top or bottom, the necessary number of threads were fixed.

The mill was operated by a handle fixed crankwise on the top of a spindle, which at the bottom carried a horizontal disk having a grooved edge; an endless cord was passed round this disk and crosswise round the circumference of the mill (five ells of forty-five inches each).

By this means the mill was turned round, the threads drawn from the bobbins and wound round the mill.

Each round was five ells, and this repeated till the whole length was gained, the bar and eyelets on the post moving slowly up or down, as the process proceeded.

The web was thus “laid on” in a series of flat spirals round the mill.

When finished, the web was run off and linked up into what was called “a chain,” several of these sometimes being required to form a web.

Beaming. The “chains” for a web, when received by the weaver, were found to be made up of “pins” or portions of a few threads each, carefully divided, or “leased” from each other.

These “pins” were produced by the “thorles” of the warping mill already mentioned. If the web required – as usually was the case – several chains, the weaver counted the entire number of pins, and this decided for him the “evener” or “niffler” required to spread the web evenly, and to the proper width.

These “nifflers” were simply rough, wood-pin reeds, through which the “pins” were passed. The “nifflers” were counted by “scores” – so many “scores” of pins to each Scotch ell of thirty-seven inches.

The web “chains” being placed in “pins” in the “Niffler,” and the loom and yarn beam being ready (for the beaming, up till about 1840, was done in the loom), persons were set to hold the passing-in “chains,” while three or four others turned the yarn beam, and two held opposite end of the niffler, and formed the “head” or piling up of the web at the edge. The rolling on was then commenced, and continued to the end.

This somewhat primitive style was continued until about 1840, when Cant’s machine came into use. This machine required a room (an old loom-shop in fine) to hold it. It consisted of a framework, very much like that of a turning lathe, with pulleyed receptacles at each end to receive the “heads” of the weaver’s beam (from two to five yards in length).

Motion was got by an arrangement somewhat resembling the “chuck” of the lathe, this “chuck” being operated by a double crank shaft.

Connecting rods passed from the cranks downwards to two immensely long “treadles” or levers. These were pressed by the feet in alternative up and down motion, and so gave movement to the beam, and the web was rolled on – the holding being done by an ingenious contrivance of levered pulleys at the back. The “niffler” was held as in the old system.
These beaming machines were set up in different parts of the town – the first being started by Cant himself in the house, top of Moodie Street, and the last was seen in the house, Newrow, corner of Park Avenue.