The Schedule referred to in these Letters Patent and forming a part of the same containing a description of the improvements which Belami, as my invention on the frame, are, the taking up of the cloth on the cloth roller or beam as the process of weaving is performed, and the mode of communicating motion to the shuttle, the, take-off or button and the bradling by a revolving grooved cylinder, turned by a ratchet or otherwise. On one end of the cloth roller or beam, I place two ratchet wheels one of which is permanently attached to the roller, and which I term the taking-up wheel, the other which is near the frame, moves round the beam, being prevented however from changing its position therein until operated on by the hand or fall, by a spring, which presses upon it from a super beam or bar below. The poles or hands, which act up on these ratchet wheels are fixed near the lower end of a vertical brake, turning on pivots near the centre. They are kept down upon the wheels by weights or springs and have a rod or communication rising from one of them to the end of a balance lever above the beam and descending from the opposite end of the said balance lever to the other pole or hand, so that when one of the hands is depressed by the spring or weight into the notch of the ratchet wheel, the pole or hand shall be raised out of the notch of its wheel, one only of the poles or hands acting on its wheel at one time. The upper end of the brake which holds the pole is moved backward and forward by a horizontal fulcrum connected also with the
critical bar which forms that side of the Lathe or Batten.

The mode in which these catchet wheel and bands or pull
act is this: the catchet wheel which moves round the beam
has its periphery divided into notches so that the pull swing
of the Batten just covers the pull or hand so far back as to
remove it one notch and suffer the hand to fall therein, so
to as to keep the other pull or hand which would act upon
the taking-up wheel out of the teeth though, by means of
the crescent-shaped teeth when however so much is worn
on the wheel that the Lathe or Batten cannot have its full
swing then the pull does not enter the notch in moving
catchet wheel but will rest on its edge between the
notches, and the other pull or hand which acts upon the
taking-up wheel will fall into the notches though and
the moving backward of the Batten will propell the catchet
wheel and roller by means of the hand or pull, and as
much of the web will be wound upon the rollers as will allow
the Batten again to have its full swing and the pull on the
movable catchet wheel to have its operation.

From near the middle of the longitudinal
bar which extends across the frame in front of the beam, the
web horizontally lengthwise of the beam to another bar under
the batten a grooved cylinder which is turned by a hand
in any other manner, and communicates all the necessary
movements to the process of weaving. This cylinder may be of
any convenient diameter, and acts in the following man-
ner. For throwing the shuttle, there are two upright or
vertical levers having their lower extremities attached
by pins to an horizontal beam at the bottom of the
frame. From each of these levers, near the top, pro-
sides to an horizontal beam at the bottom of the
frame. From each of these levers, near the top, pro-
sides to an horizontal beam at the bottom of the
frame. From each of these levers, near the top, pro-
sides to an horizontal beam at the bottom of the
frame. From each of these levers, near the top, pro-
sides to an horizontal beam at the bottom of the
frame. From each of these levers, near the top, pro-
sides to an horizontal beam at the bottom of the
frame. From each of these levers, near the top, pro-

The web moves in such a manner as to be carried
forward by the motion of the vertical levers in a hori-
tonally lengthwise direction of the beam.
part of the loom, they being drawn back to their position suddenly by a weight which acts on them by a cord and pulley system, each revolution of the cylinder. There is another cord one, drawn on pulleys, extending from the back of these levers, to an upright cylinder to which they are fastened, or to arms projecting from an upright roller on the transverse bar above mentioned, so that as the levers advance towards or are by the weights drawn from, the face of the levers, they will give this cylinder or roller a motion from side to side. An arm extending from this cylinder or roller horizontally, either above or below the top of the lattice or bottom, throws the shuttle in the same manner as it is now thrown in weaving with the fly shuttle. For moving the Batten backwards, preparatory to this stich, there is a frame, moved by the cylinder, above described. This frame is a horizontal pole or bar extending from side to side of the loom, and turning on pivots in the lower side rails thereof. From this moves at each revolution, a bar which may have its upper end connected with the batten. There are two other upright bars extending from the lower bar of this frame, one on each side of the cylinder, and which have projecting rods that enter a groove therein, and are by it raised backwards so as to move the lattice. The lattice is moved forwards and makes its stich by means of weights acting on upright cylinders extending above its hanging frame, or by springs as may be deemed best in practice. The end of the cylinder nearest the centre of the loom has upon it placed a wheel with level pinion teeth, which acts on a similar wheel on the top of one or more vertical cylinders, which by grooves and pins move any number of treadsels, extending from the back part of the frame. Thus may be friction rollers substituted on.
the force which act on two grooves of the cylinders of the
machine.

The other parts of the loom are of the usual
construction, and made to suit the nature of the loom
in question, and the force employed may be either
manual or that of horses, water, wind, or steam, as
may best suit in the manufacturer's七个, when the loom is
introduced.

W. W. Crossman

W. Rogers

W. E. King

End

After