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S. & A. WIDMER.

CLOTH CONTROLLING MECHANISM FOR LOOMS.

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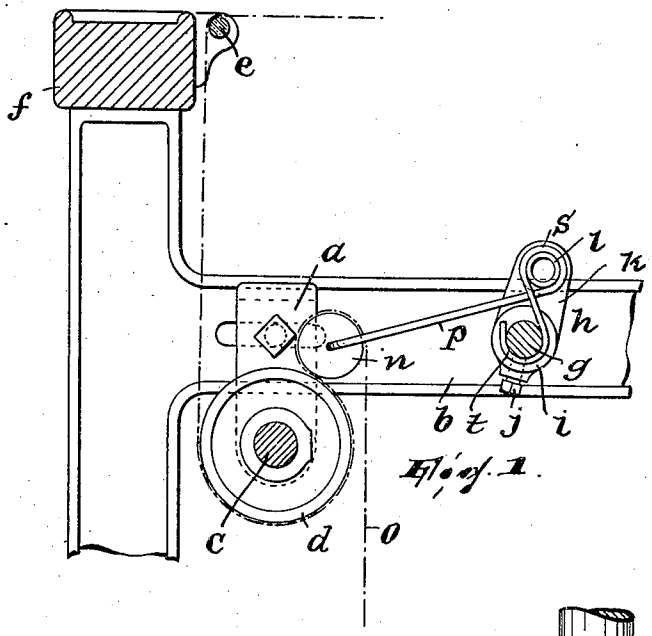


Fig. 1.

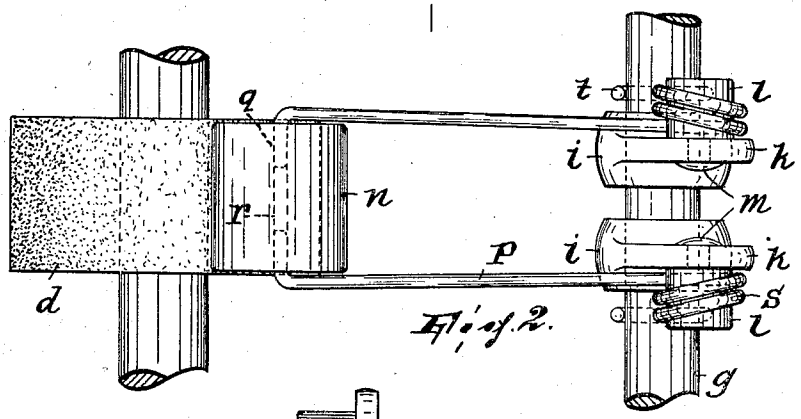


Fig. 2.

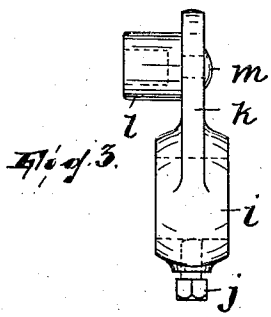


Fig. 3.

WITNESSES

Wm. A. Bell.

Chas. Kaufmann.

INVENTORS,

Adolph Widmer

and Samuel Widmer,

BY

Gartner & Howard.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

ADOLPH WIDMER AND SAMUEL WIDMER, OF PATERSON, NEW JERSEY.

CLOTH-CONTROLLING MECHANISM FOR LOOMS.

No. 894,358. Specification of Letters Patent. Patented July 28, 1908.

Application filed December 21, 1907. Serial No. 407,570.

To all whom it may concern:

Be it known that we, ADOLPH WIDMER and SAMUEL WIDMER, citizens of the United States, residing in Paterson, Passaic county, New Jersey, have invented certain new and useful Improvements in Cloth-Controlling Mechanism for Looms; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Our invention relates to looms and particularly to narrow ware looms and it has for its principal object to provide, in combination with the sand roller of the take-up mechanism of such looms a means for maintaining the proper contact or grip of the sand roller on the cloth, which means shall be simple and inexpensive in construction, readily attachable to any loom and capable of ready adjustment with reference to the sand roller.

Our invention will be found fully illustrated in the accompanying drawing, wherein,

Figure 1 is a vertical sectional view of so much of a narrow loom as is concerned in our invention; Fig. 2 is a plan view of the sand roller and our attachment, slightly enlarged; and, Fig. 3 illustrates a detail.

In the bracket *a* on the loom-side *b* is journaled the shaft *c* on which is secured in the usual manner the sand-roller *d*, around which the cloth passes on its way downwardly from the bar *e* back of the breast-beam *f* to the take-up roller, the latter not being shown in the drawing. *g* is a fixed shaft mounted in said loom-side back of the shaft *c* and in a plane somewhat above the same. On this shaft is secured a pair of brackets *h* for each sand-roller; each bracket comprises a sleeve portion *i*, which is slipped onto the shaft and secured against turning thereon by means of the set-screw *j*, and an arm *k* projecting upwardly from the sleeve portion and carrying a stud *l* (made hollow for the sake of lightness) which is formed with a rivet *m* extended through the arm and securing the stud thereto.

n is a roller adapted to bear against the cloth *o* and press it against the sand-roller, the preferable position of the roller with relation to the sand-roller being above the latter; the cloth passes down under the sand-roller and then up over the roller *n*. Roller *n* is carried by a spring-support comprising two elastic wires which may be described as follows: Each wire consists of the substantially straight portion *p* having one end turned off at right angles, as at *q*, and introduced into the bore *r* of the roller *n* and its other end bent first upwardly to form the loop *s* and then downwardly into the form of the hook *t*. The studs of the pair of brackets *h* project outwardly and receive on them the loops of the wires, the hooks of the latter being engaged around the shaft *g*.

The parts being assembled as above described and as shown in the drawings, by manipulating the set-screws *j* and setting each bracket more or less forwardly on its shaft *g* an elastic pressure of roller *n* on the sand-roller, according to necessity, may be secured, as will be obvious. If it is desired to employ a wider or narrower roller *n*, or if it is necessary to alter the position of the weaving spaces in the loom, the parts may be readily adapted to these changes by releasing the set-screws and moving the bracket on the shaft *g* as required.

Having thus fully described our invention, what we claim and desire to secure by Letters Patent is:

1. In a narrow ware loom, the combination of the frame, the sand roller and an elastic member adapted to maintain a bend in the cloth and bear against the sand roller, said member comprising two parts one of which is pivotally adjustable in the frame and the other being a spring engaging at one end with the support and also engaging between its ends with the first-named part, substantially as described.

2. In a narrow ware loom, the combination of the frame, the sand roller and an elastic member adapted to maintain a bend in the cloth and bear against the sand roller, said member comprising two parts one of which is pivotally adjustable in the frame and has a lateral projection and the other being a spring engaging at one end with the support and being bent around said projection of the first-named part, substantially as described.

3. In a narrow-ware loom, the combination of the frame, the sand-roller, another roller adapted to bear against the cloth passed over the sand-roller, an elastic support carrying said last-named roller and comprising two spring-wires affording a pivotal support at their outer ends for said last-

named roller, said frame comprising a shaft arranged parallel with the axis of the sand-roller, and brackets adjustably arranged on said shaft and having laterally projecting studs, said spring-wires having their other ends engaged with the studs of said brackets and said shaft, substantially as described.

In testimony, that we claim the foregoing, we have hereunto set our hands this 13th day of December, 1907.

ADOLPH WIDMER.
SAMUEL WIDMER

Witnesses:
JOHN W. STEWARD,
WM. D. BELL.