(No Model.)

J. B. NEWELL.

REED FOR LOOMS.

No. 457,093. Patented Aug. 4, 1891.

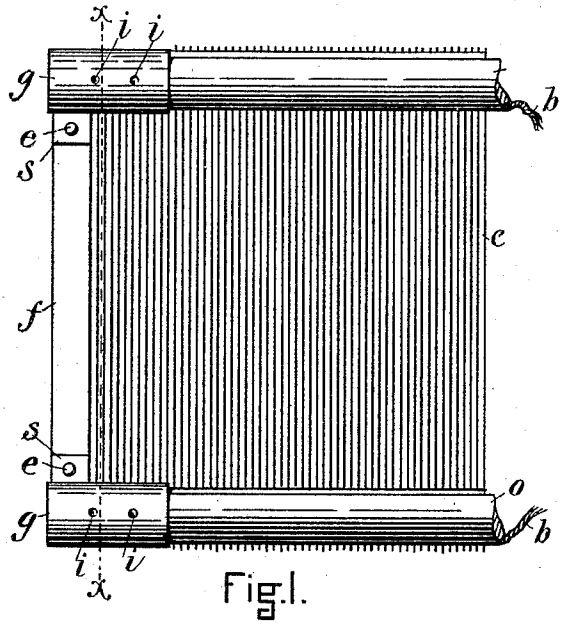


Fig. 1.

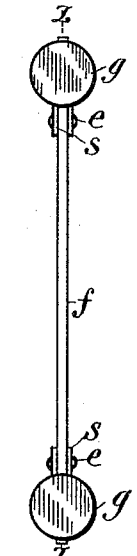


Fig. 2.

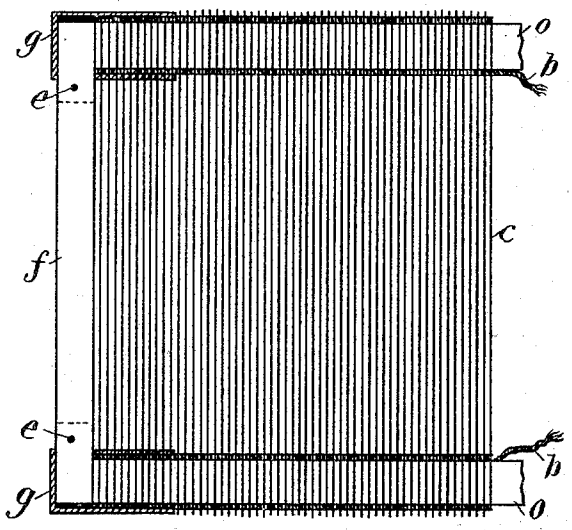


Fig. 3.

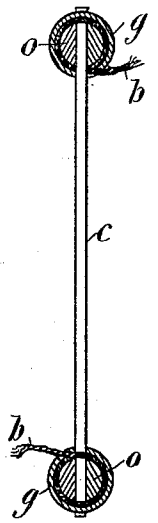


Fig. 4.

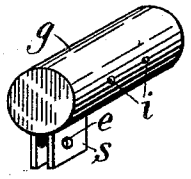


Fig. 5.

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REED FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 457,093, dated August 4, 1891.

Application filed March 7, 1891. Serial No. 384,120. (No model.)

To all whom it may concern:

Be it known that I, JOSHUA B. NEWELL, of Georgiaville, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Reeds for Looms; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to the reeds used in looms for weaving, its object being to protect the ends of the reed by placing a metallic cap over the end of the strips of wood that hold the dents in place. These strips are held together by twine wound around them and between the dents, this twine being usually the only means provided for holding the strips together. The end of this twine in finishing off the reed is passed through a hole in the end bar, which, after a little use, chafes and cuts it off, after which it becomes loose and partially unwinds, so as to leave the dents free, and thus spoil the reed.

It is fully illustrated in the accompanying drawings, the same parts in all the figures being designated by similar letters.

Figure 1 is a front elevation of a portion of a reed, showing the application of the improvement to one end of it. Fig. 2 is an end elevation of the reed shown in Fig. 1. Fig. 3 is a vertical longitudinal section of the same part of a reed shown in Fig. 1, taken on line *z z*, Fig. 2. Fig. 4 is a vertical cross-section of the part of a reed shown in Fig. 1, taken on line *x x* in that figure. Fig. 5 is a perspective view of the protecting-cap separate from the reed.

In the drawings, *o o* are the strips of wood used to hold the dents *c c* in place, and said strips are wound with twine *b* for that purpose, and also to space the dents as they should be with regard to the fineness of the cloth to be woven.

f is the end bar usually put at the end of the row of dents to protect them and help impart stiffness to the reed, the only security for keeping the bar in place being the twine *b*, with which the strips are wound.

My protecting device consists of a cap *g*, which is made in tubular form, closed at one end and open at the other, with a slot on one side extending from the open end up to the head at the other end, where two ears *s* are made, one on each side of the slot. The width of this slot and space between the two ears is the same as the width of a single dent.

In applying the cap to a reed it is driven on over the ends of the strips of wood *o*, and the dents *c* pass into the slot in the cap until the ears *s* are on each side of the bar *f*, to which they are fastened by a rivet *e*, passing through the ears and the bar, or it may be secured by soldering the parts together, if preferred. To fasten it onto the wood strips *o*, pins *i i* are driven through the sides of the cap and the strips. By this means the bar *f* and dents *c* are securely held from coming out of the ends of the reeds independently of the twine and the end of the reed is prevented from wearing away and a considerable additional expense in the cost of weaving is saved, for when the twine becomes loose from wear the continued friction of the shuttle and the beating up of the lay soon loosen the dents and it is necessary to splice the ends of the slips of twine and wind the end of the reed at an average cost of one-half that of a new reed.

Having thus described the construction and application of my improvement, I claim as my invention—

The combination of the cap *g*, having ears *s* made on one side at the end and with a slot between said ears extending through to the interior of the cap and to its other end with the bar *f*, and the rivet *e*, securing said ears to the bar, dents *c*, strips *o*, and pins *i*, by which the cap is made fast to the strips *o*, substantially as set forth.

JOSHUA B. NEWELL.

Witnesses:
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