(No Model.)

S. A. ESTES & M. R. SHOREY.

WEFT STOP MOTION FOR LOOMS.

No. 265,948. Patented Oct. 17, 1882.

Fig. 1.

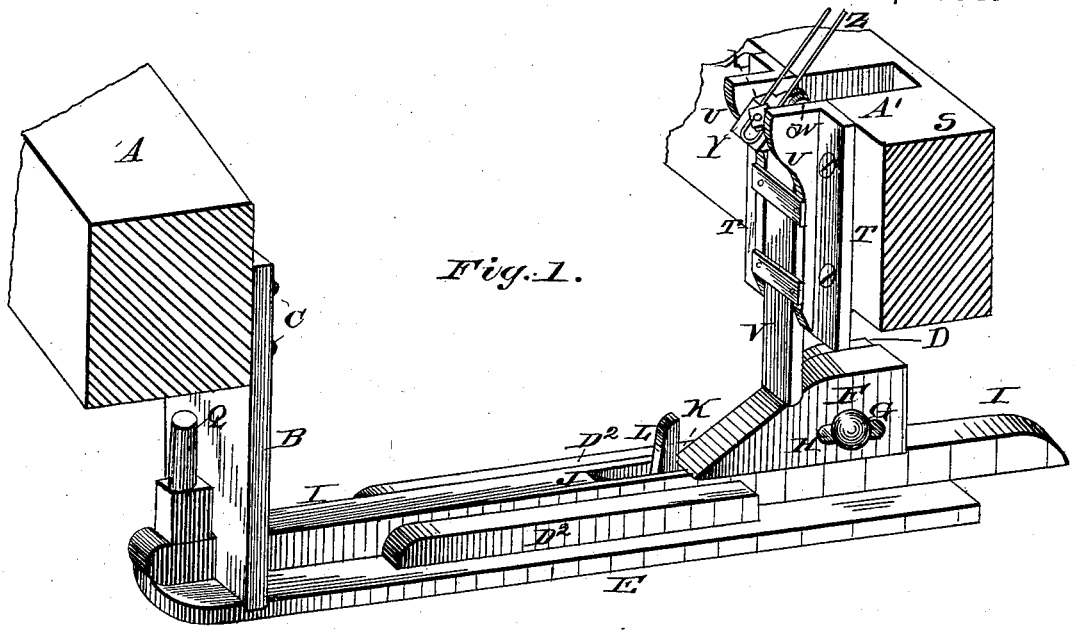
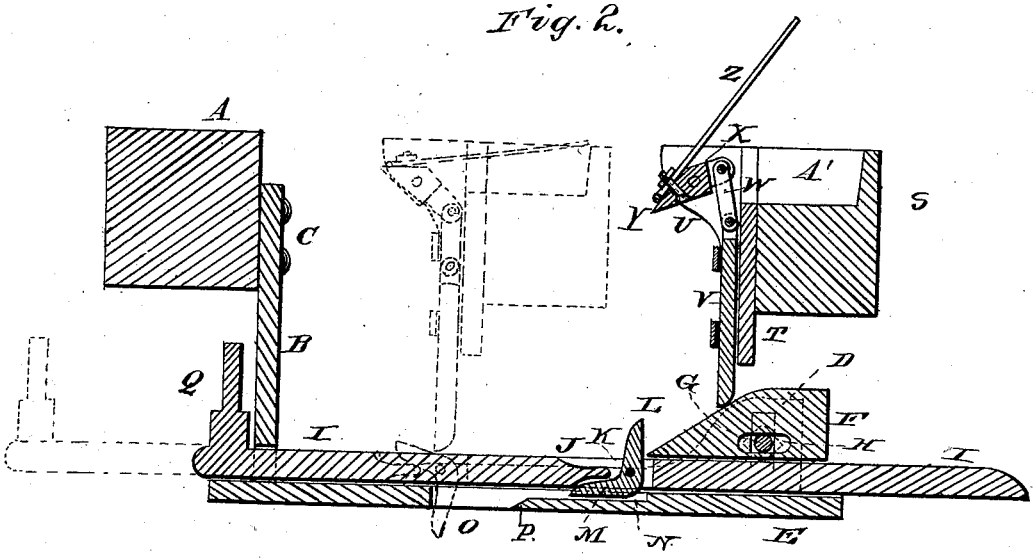


Fig. 2.



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WEFT STOP-MOTION FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 265,948, dated October 17, 1882.

Application filed March 13, 1882. (No model.)

To all whom it may concern:

Be it known that we, S. A. ESTES and MARK R. SHOREY, of North Vassalborough, in the county of Kennebec and State of Maine, have invented certain new and useful Improvements in Weft Stop-Motions for Looms; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a view showing portions of the lay and breast-beam of a loom with our invention applied thereto, and Fig. 2 is a vertical section of the parts shown in Fig. 1.

Similar letters of reference indicate corresponding parts.

This invention relates to weft stop-motions for looms; and it consists in certain improvements in the construction of the same, which will be hereinafter fully described, and particularly pointed out in the claim.

In the drawings hereto annexed, A represents the breast-beam of a loom, to which the cam-arm B is attached by means of screws C, or in some other suitable manner. The arm B is provided at the end of its horizontal portion E with a flange, D, to which the cam F is attached by means of a bolt, G, which works in slots H in the cam and flange, so that said cam may be adjusted vertically and horizontally as may be desired. The cam-arm B is provided with guide-flanges D^2 for the bar I, which is capable of sliding longitudinally upon said cam arm. The bar I is provided with a slot, J, in which is pivoted a bell-crank lever, K, the upper arm of which, L, normally occupies a vertical position, while its lower arm, M, is horizontal and partly accommodated in a groove, N, in the cam-arm B. The latter is provided with a slot, O, the rear end of which is beveled, as at P. The forward end, Q, of the bar I is to be connected with suitable mechanism, adapted to be actuated by said bar, for effecting the stoppage of the loom. Such mechanism is shown in Patent No. 251,699, of January 3, 1882, and is not herein shown or claimed.

S is the lathe-beam, to which is secured the plate T, having flanges U, which form guides or bearings for the dagger V. The upper end of the latter is connected by a rod, W, with the shaft X, which is journaled between the upper ends of the flanges U. The shaft X has the fingers or feelers Z secured to it in any suitable manner.

In the drawings hereto annexed the lathe-beam is shown in full lines in both figures back from the breast-beam, with the fingers or feelers Z raised for the passage of the shuttle across the race-beam. So long as the filling continues entire the working of the loom goes on, the thread under the feelers Z holding the dagger up, allowing it to pass over the lever K on the forward throw of the lathe. If the filling breaks, the feelers Z drop down into the slot A′, cut in the lathe, thus causing the dagger to drop down to the position shown in dotted lines, Fig. 2, so that on the forward throw of the lathe it shall engage the vertical arm L of lever K, thus throwing the bar I forward to the position shown in dotted lines, Fig. 2. The bar I, through intermediate well-known mechanism, as hereinbefore indicated, operates the break and stops the loom. The slot O permits the lever K, when the bar I is thrown forward, to drop to the position shown in dotted lines Fig. 2, where the arm M of said lever is accommodated in the slot O and the arm L in slot J, so that the dagger shall receive no injury by being suddenly checked by the lever K. When the bar I is restored to its normal position the incline P guides the arm M of lever K back to its proper position in the groove N.

Having thus described our invention, we claim and desire to secure by Letters Patent of the United States—

The combination of the cam-arm B, having slot O, cam D, bar I, and the bell-crank lever K, with the dagger V, connecting-rod W, shaft X, and feelers Z, all arranged and operating as herein described, for the purpose set forth.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

SIMEON A. ESTES.
MARK R. SHOREY.

Witnesses:
J. C. EVANS,
G. E. SOLB.