

(No Model.)

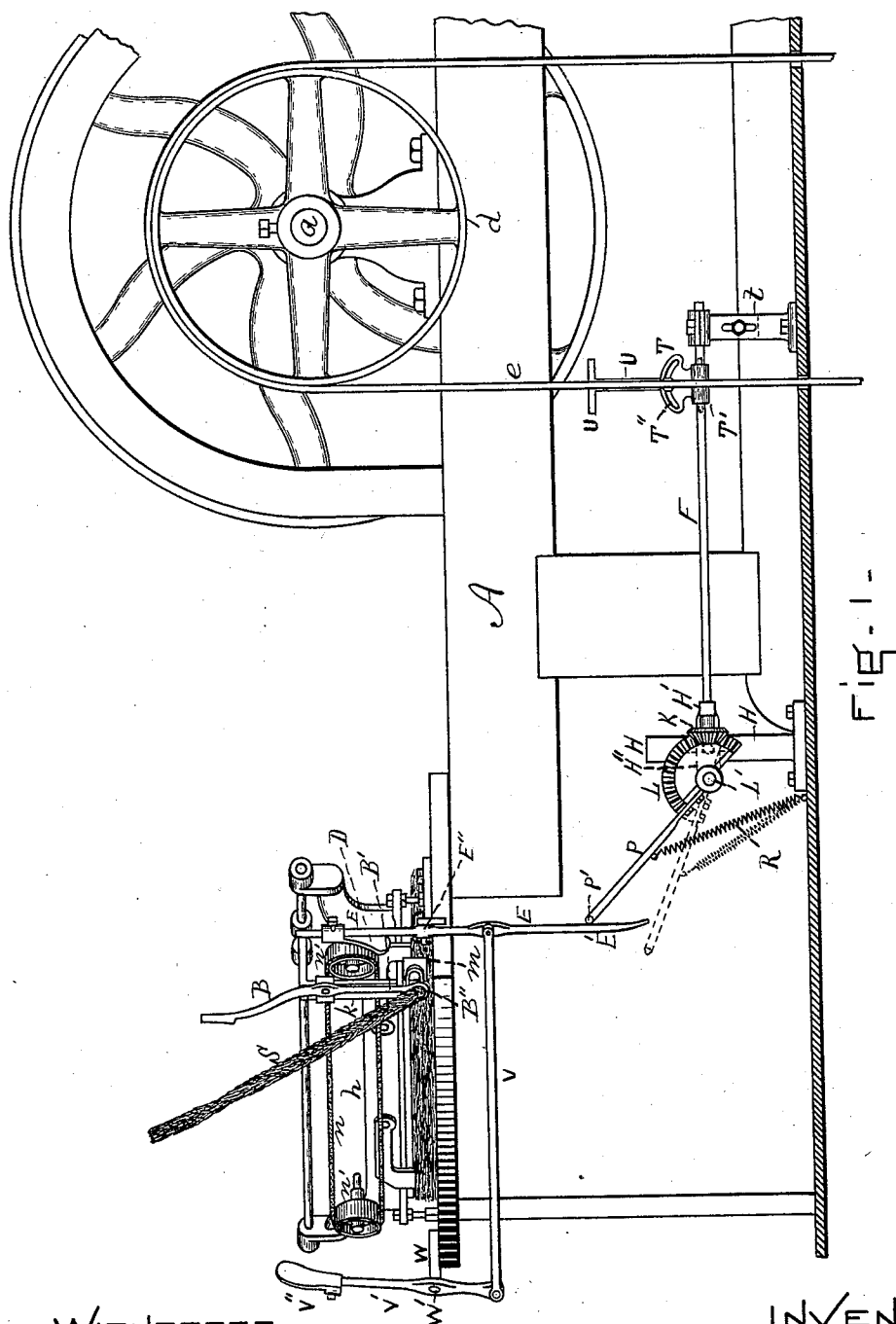
2 Sheets—Sheet 1.

P. H. WALSH.

STOP MOTION FOR WOOLEN CARDS.

No. 582,991.

Patented May 18, 1897.



WITNESSES

A. A. Bonney.
L. G. Graydon.

INVENTOR

Patrick H. Walsh,
By his Atty
Sherry W. Williams.

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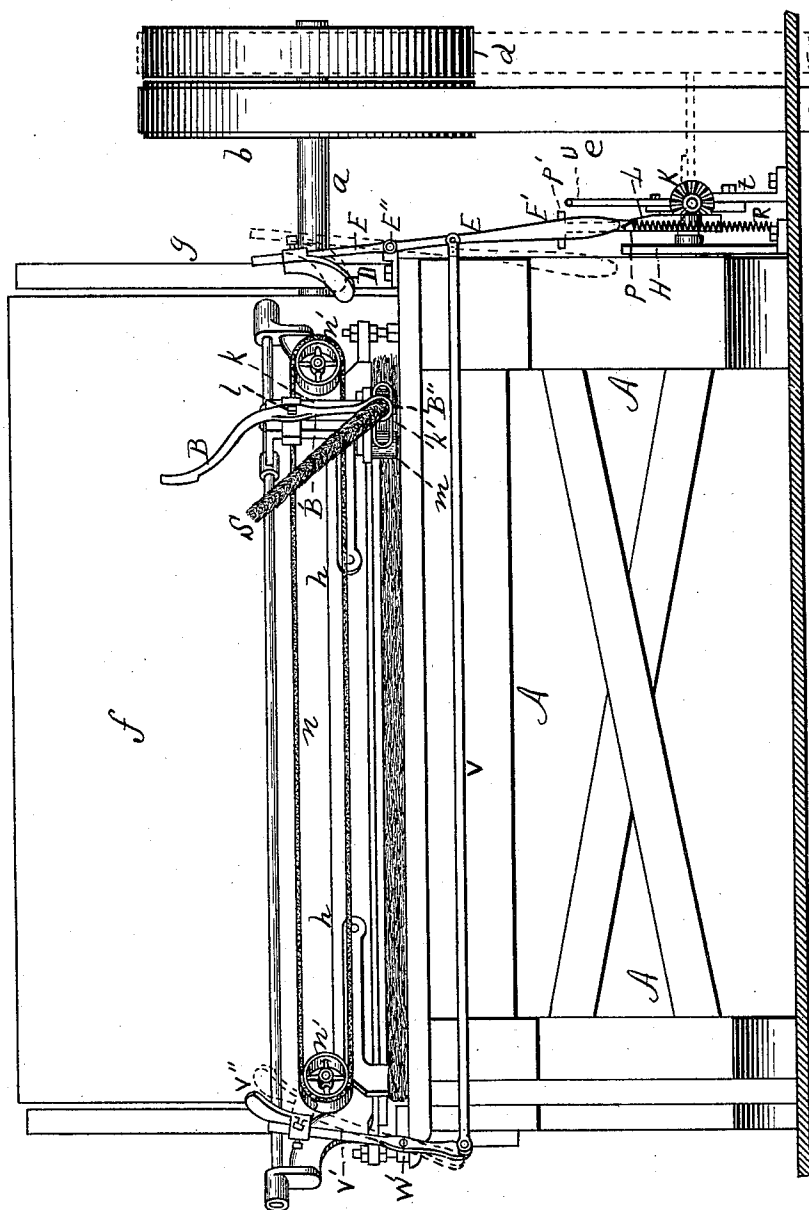


Fig. 2-

WITNESSES

A. A. Conway,
C. G. Graydon.

INVENTOR

Patrick H. Walsh,
By his Att'y.
Henry W. Williams.

UNITED STATES PATENT OFFICE.

PATRICK H. WALSH, OF SAUGUS, MASSACHUSETTS.

STOP-MOTION FOR WOOLEN CARDS.

SPECIFICATION forming part of Letters Patent No. 582,991, dated May 18, 1897.

Application filed October 2, 1896. Serial No. 607,640. (No model.)

To all whom it may concern:

Be it known that I, PATRICK H. WALSH, a citizen of the United States, residing in Saugus, in the county of Essex and State of Massachusetts, have invented a new and Improved Stop-Motion for Woollen Cards, of which the following is a specification.

This invention relates to that class of stop-motions for woollen cards to which the invention belongs, which is illustrated and described in my application for Letters Patent, filed April 3, 1896, Serial No. 586,015, and allowed May 29, 1896, to which reference is here made; and it consists in an improvement on or over the said invention, whereby the object is accomplished with greater quickness and efficiency.

The nature of the improvement is fully described in detail below and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation illustrating the improvement, enough of the machine being shown to indicate the operation of the mechanism in connection with an "Apperly" feed. Fig. 2 is a front elevation of the same.

Similar letters of reference indicate corresponding parts.

A represents the frame; *a*, the driving-shaft; *b* and *d*, the fast and loose pulleys, respectively, and *e* the belt.

f is a cylinder, and *g* the bracket-support for the strippers and workers, both shown diagrammatically or in simple outline.

h is the framework of the Apperly feed.

k is the traveler; *k'*, the guide therefor; *m*, the sliver-rolls, and *n n'* the belt and pulleys for driving the traveler.

All the above-named parts are constructed as usual and need no further description.

S represents the sliver.

A finger is pivoted at *l* to the traveler *k*, such finger consisting of the two portions B and B', the portion B being the heavier and the portion B' being formed at its end into a ring B''. This latter portion is swung down in order that the sliver S may pass through it into the guide *k'* and traveler-rolls *m*, as shown, the weight of the sliver holding the finger in the substantially vertical position illustrated.

D is a plate, preferably of the spoon shape

shown and secured to the vertical rod or bar E, which is pivotally connected with the frame at E''. The finger and plate are exactly as described in the patent application above referred to.

The swinging bar E is broadened, as shown in Fig. 2, at E' and slightly bent, as indicated in Fig. 1, at its lower end.

F is a shaft having its bearings supported at one end in the adjustable stand *t* and at the other end in the bracket H', extending horizontally from the stand H. A beveled gear K is fast on this shaft at the end last named and is engaged by the face of the segmental gear L, supported by a stud L' on a bracket (indicated by broken lines H'') extending horizontally from the stand H. Rigidly secured to and extending from the segmental gear L is the arm P, bent at its outer end, so that the bent portion P' lies normally against the swinging bar E, being held in contact therewith by the spring R, which extends from said arm to the floor. Rigidly secured to the shaft F by means of a suitable collar T' is a frame T, provided with an arc-shaped slot T''. Adjustably secured in this slot, so that it can be swung at any angle desired, is the T-shaped shipping-finger U.

When the sliver breaks, its pressure on the finger B B' B'' ceases, and said finger swings by gravity until the ring end B'' strikes the plate D and swings the upper end of the bar E from it or toward the pulleys, as in the invention described in the application above referred to. This of course causes the lower portion E' to swing away from the bent portion P' of the arm P, and hence allows said arm to drop into the position indicated by broken lines in Fig. 1. This imparts partial rotation to the segmental gear L, which, by means of the pinion K, imparts sufficient rotation to the shaft F to swing the finger U against the belt *e* and shift it from the fast pulley *b* to the loose pulley *d*, thus stopping the machine, the parts being in the position indicated by broken lines in Fig. 2.

By means of the rod or link V and arm V', provided with the plate V'' and pivoted at W' to a suitable bracket W, extending from the frame, the above-described effect may be produced from either end of the machine.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

5 In a stop-motion for woolen cards, the finger consisting of the heavier arm B and the lighter arm B' provided with the ring B''; the traveler and sliver rolls and supporting mechanism, said finger being pivoted to the traveler in such position that the sliver passes
10 through said ring to the rolls; the horizontal shaft F supported in suitable bearings and provided with the bevel-gear K; a suitably-supported gear engaging said bevel-gear; the rod or lever E pivotally secured to the frame
15 and adapted to be engaged at its upper end by the lighter end of the finger when the

drawing breaks; the arm P extending from the gear L and resting normally against the lower portion of the rod or lever E and adapted to drop when said lower portion is swung
20 away therefrom; and a shipping-finger rigidly secured to said shaft, whereby the engagement of the finger B, B', B'' with the rod or lever E causes the arm P to drop and by imparting partial rotation to the shaft swings
25 the shipping-finger against the belt, substantially as described.

PATRICK H. WALSH.

Witnesses:

HENRY W. WILLIAMS,
A. N. BONNEY.