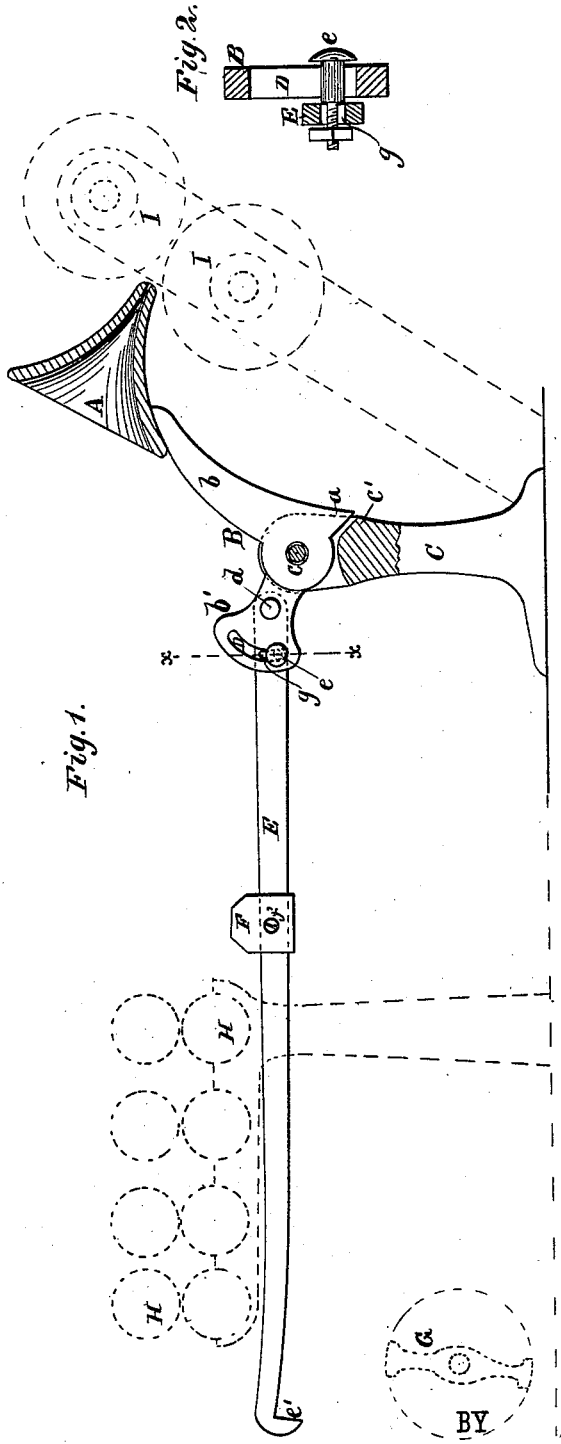
W. S. KELLEY.

Stop-Motion for Drawing Frame.

No. 205,558. Patented July 2, 1878.



WITNESSES:

Henry V. Miller

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WALTER S. KELLEY, OF NORTH WEARE, NEW HAMPSHIRE.

IMPROVEMENT IN STOP-MOTIONS FOR DRAWING-FRAMES.

Specification forming part of Letters Patent No. **205,558**, dated July 2, 1878; application filed May 11, 1878.

To all whom it may concern:

Be it known that I, WALTER STUART KELLEY, of North Weare, in the county of Hillsborough and State of New Hampshire, have invented a new and Improved Stop-Motion for Drawing-Frames, of which the following is a specification:

My invention consists in an improved mode of connecting together the catch-lever and the trumpet-guide used on a drawing-frame in cotton-mills to stop it when the end or sliver breaks or contains fine places, the object being to allow of throwing back the trumpet in a convenient position for inserting the end or sliver, and to allow of adjusting the altitude of the free end of the catch-lever to accommodate inequalities in the drawing-frame, as will be hereinafter described.

In the accompanying drawings, Figure 1 represents a side elevation, partly in section, of my improved stop-motion in position for use on a drawing-frame, the latter being shown in dotted lines. Fig. 2 is a detail section on the line *x x* of Fig. 1.

Similar letters of reference indicate corresponding parts.

A is the trumpet-shaped guide, formed on or attached to the forward or upright arm *b* of the elbow-lever B, which latter is hinged or pivoted by a pin, *c*, between lugs in the post or standard C, and has its rear flat arm *b'* provided with a vertical circular slot, D, curved from a point or center, *d*, between the said slot D and the fulcrum of the elbow-lever or trumpet-lever B. At the said point *d* one end of the catch-lever E is pivoted to the short arm *b'* of the elbow-lever B, the other end being provided with the catch *e'*, which, when the breaking or too great fineness of the sliver reduces the friction enough to cause the lever E to fall, engages with the ordinary stop-wheel G, and throws off the belt to stop the motion of the rollers H and the drawing-frame.

The oscillation or throw of the lever E upon its pivot *d* in the arm *b'* is limited by the slot D and a headed stud-bolt, *e*, which latter is inserted through the slot D, and, with its reduced and threaded end, through a hole or slot, *g*, in the lever E, being firmly secured to the latter by a nut on the opposite side to that from which it is inserted. This allows the shank of the stud *e* to move freely in the slot D, so that the guide-trumpet A can be thrown back farther than what is necessary to cause the catch *e'* to engage with the stop-wheel G, in order to be in a position convenient for putting the sliver through the trumpet.

The friction between the sliver and the trumpet is counterpoised by the sliding weight F, securable at any point on the lever E by means of the set-screw *f*. In its normal position the lever E is about horizontal and resting by the stud *e* in the lower end of the slot D, as shown in the drawing, though its free end may be raised or lowered a little to accommodate inequalities in the drawing-frame by securing the stud *e* at a lower or higher point, respectively, in the slot *g* of the lever E.

The trumpet A is prevented from being drawn by the friction of the sliver too far in between the roller I by a toe or projection, *a*, on the elbow-lever B, which limits the movement in the said direction by contact with a stop, *c'*, on the post C.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of the pivoted catch-lever E, having the slot *g* and the stud *e* secured therein, and the elbow-lever B, having the arm *b'*, provided with a circular slot, D, with the trumpet A and standard C, as and for the purpose set forth.

WALTER S. KELLEY.

Witnesses:

WELCOME B. DARLING,

CHAS. KELLY.