P. J. WRIGHT & J. THOMPSON.

Stop-Motion for Drawing-Frames.

No. 139,447. Patented May 27, 1873.

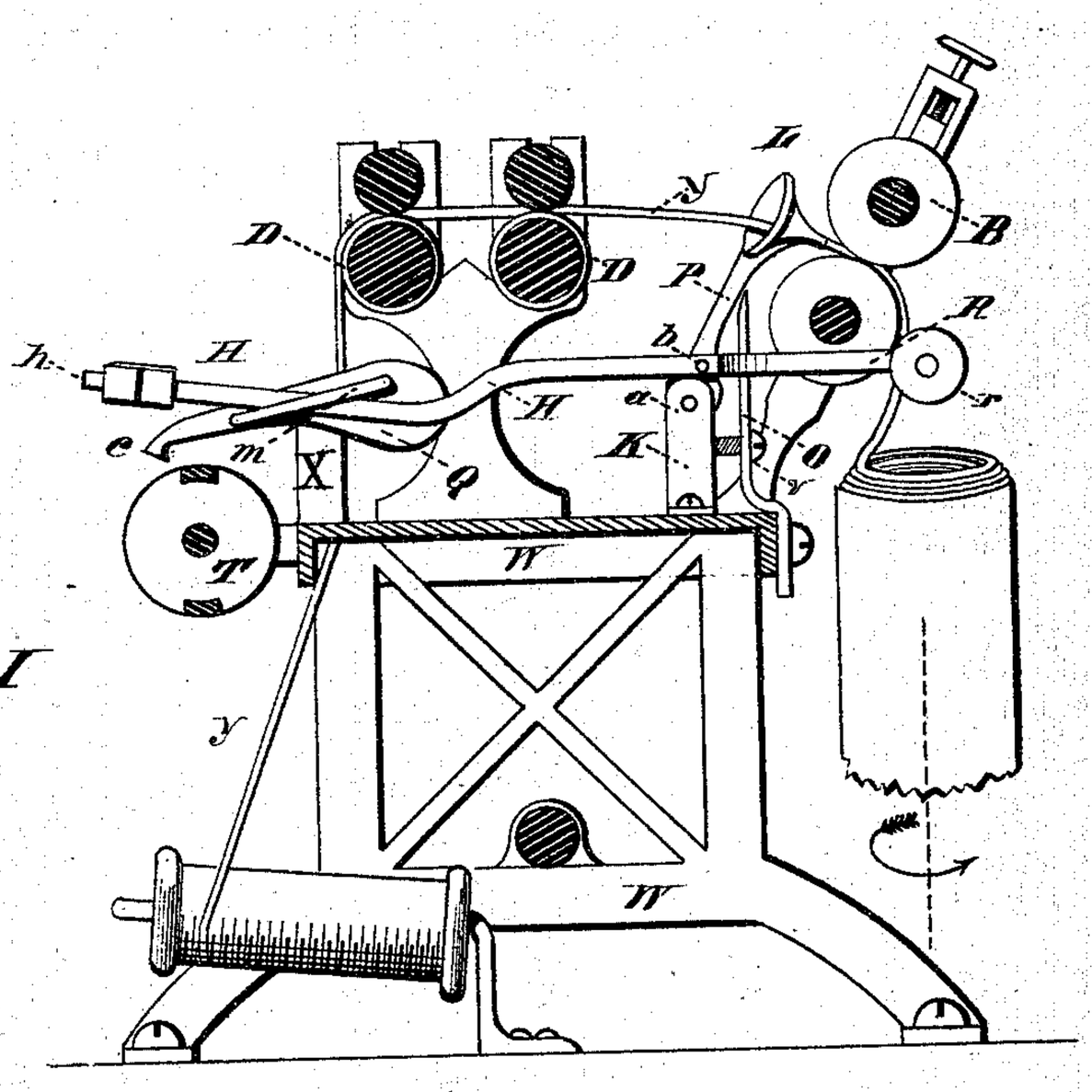

Fig I

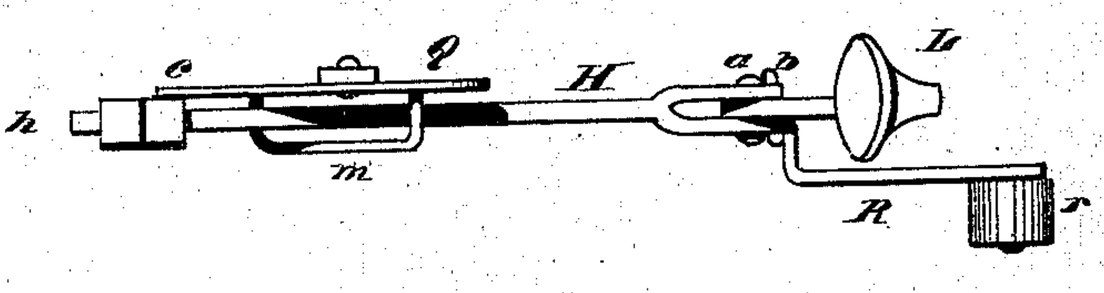

Fig II

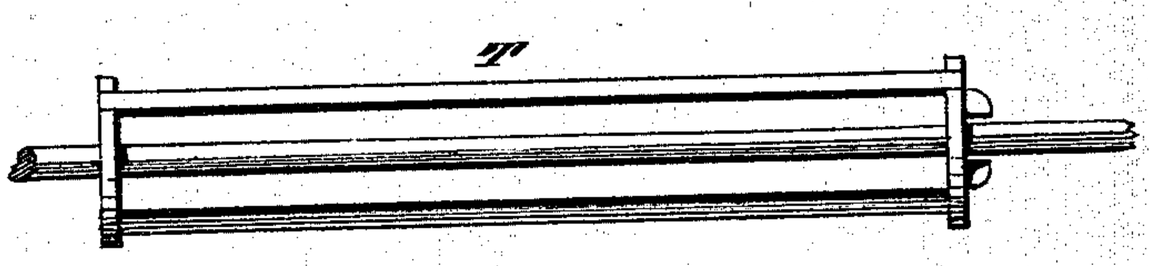

Fig III

Witnesses.

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UNITED STATES PATENT OFFICE.

PLINY J. WRIGHT AND JAMES THOMPSON, OF HOLYOKE, MASSACHUSETTS.

IMPROVEMENT IN STOP-MOTIONS FOR DRAWING-FRAMES.

Specification forming part of Letters Patent No. **139,447**, dated May 27, 1873; application filed January 21, 1873.

To all whom it may concern:

Be it known that we, PLINY J. WRIGHT and JAMES THOMPSON, both of Holyoke, Hampden county, State of Massachusetts, have made certain Improvements in Stop-Motions for Drawing-Frames, of which the following is a specification:

Our invention consists generally in the construction and relative arrangement of the system of levers, hereinafter described, operated directly by the drawing, to cause the stop-motion to be operated upon the occurrence of any derangement therein, and having the sensitiveness of its action variable.

In the drawings, Figure I shows a vertical section of a frame with the cover removed, having our improvements. Fig. II is a plan view of our invention; and Fig. III shows the frame-wheel for throwing out the clutch.

In Fig. I the drawing *y*, after leaving the rolls D D, passes to the delivering or calender rolls B B through the trumpet L, which is attached to the top of the lever P, hinged at *a* in the top of the upright K on the frame W. Bearing upon the post K, and hinged at *b* to the lever P, is the weighted lever H. It will be seen that any movement of the lever H upon its bearing upon post K will cause its end *h* to be raised or depressed, and, consequently, any movement of the trumpet to or from the calender-rolls will produce one of these results; and when, as seen in Fig. I, the pressure of the passing drawing keeps the trumpet-lever P against the spring O, the end of lever H is held in a central position, but, being balanced by weights, it will fall upon the breaking of one or more ends of drawing. The end of lever H is passed through the loop or slot *m* upon the lever Q, hinged to the post K rising from the frame W, and bears down its hooked end *c* to catch and stop the wheel T by bearing against either end of the loop *m*, the lever Q being so balanced as to have the hook *c* clear of the wheel T when the drawing is running properly. Bunches in the drawing endeavoring to pass through the trumpet will raise the weighted end of the lever H, and a diminished pressure upon the trumpet, caused by a break in the drawing (or the overflowing of the can, to be hereinafter described,) will cause the weighted end of the lever to be depressed, so that in either case the hooked end *c* of the lever Q will engage the wheel T and stop the machine. The spring O fastened to the frame W is adjusted by the the set-screw V, to regulate the degree of pressure against the trumpet required to give movement to lever H. This lever H we prolong and provide its end R with a roller, *r*, which comes immediately above the can for receiving the drawing, so that when the can would otherwise overflow the drawing raises the end of lever H and stops the machine.

The mouth of the trumpet in this device can be brought very close to the calendering-rolls, and can be swung, when desired, back to the nearest fluted one.

Now, having described our invention, what we claim is—

1. The combination and relative arrangement, substantially as described, of the levers H, Q, and P, and trumpet L, to operate as set forth.

2. In combination with levers H, Q, and P, the adjustable regulating-spring O.

3. In combination with levers H and Q the extension R, provided with roller *r*, or equivalent device, for receiving the upward pressure of the drawing in the can.

PLINY J. WRIGHT.
JAMES THOMPSON.

Witnesses:
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