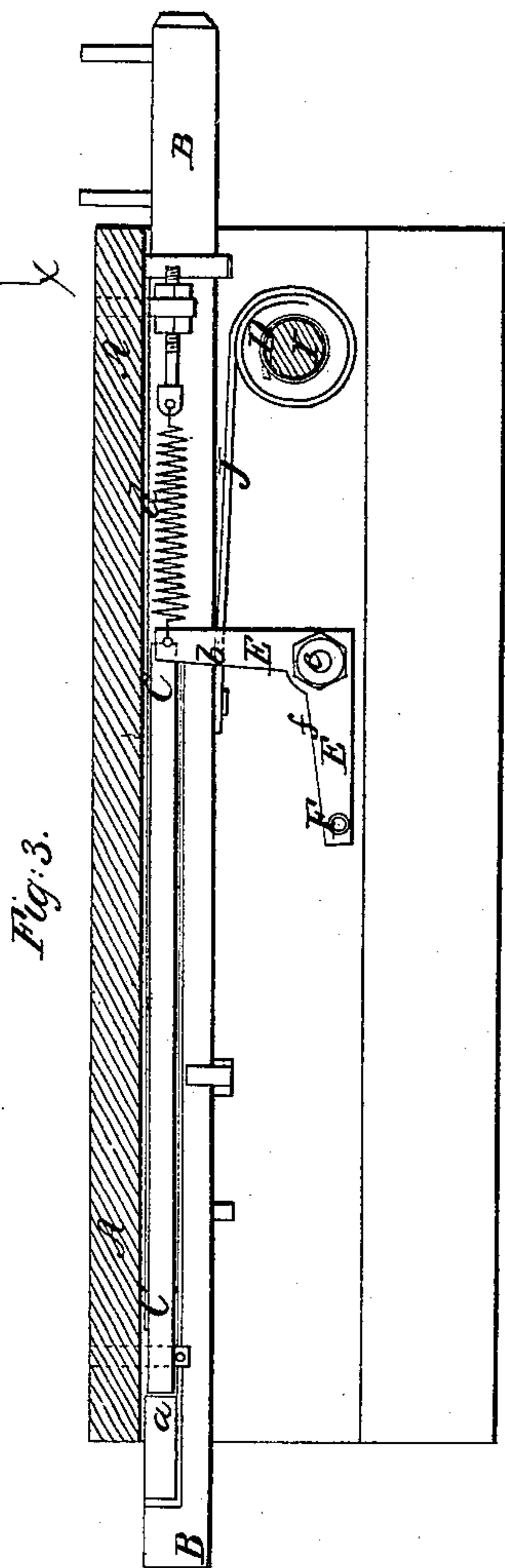
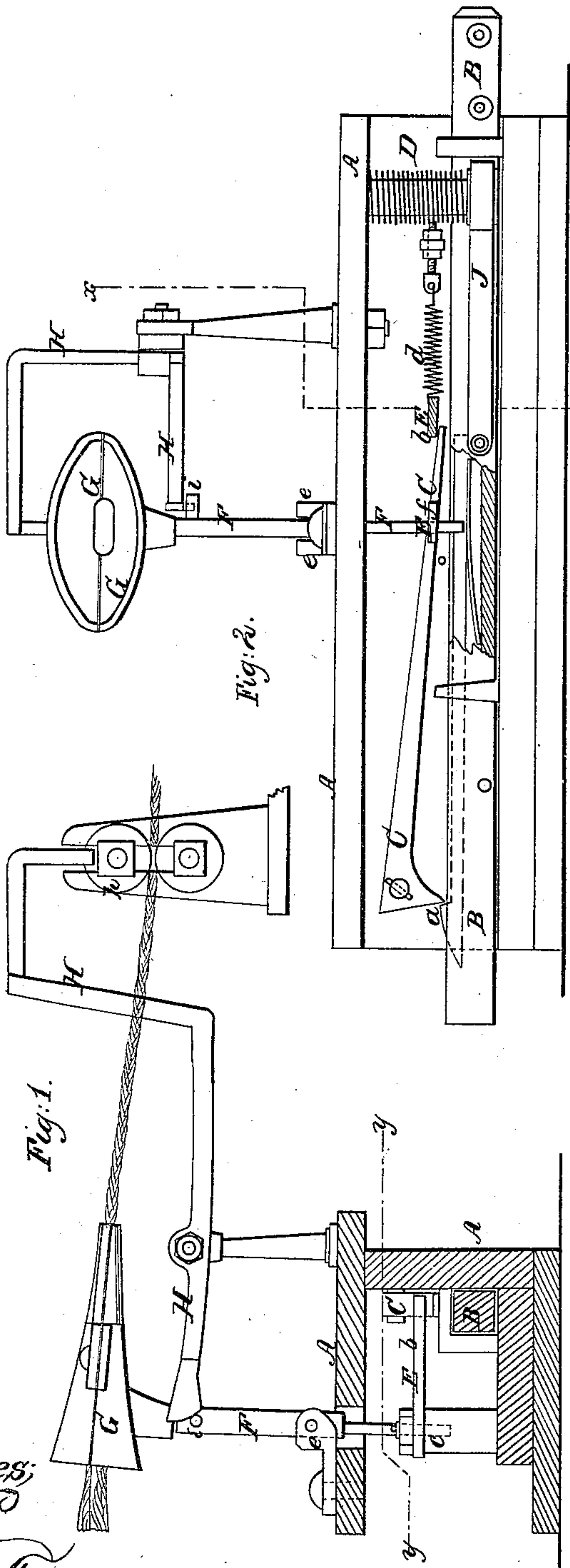


*C. W. Anderson.*

*Stop Motion for Carding Mach.*

*N<sup>o</sup> 100,247.*

*Patented Mar. 1, 1870.*



*Witnesses;*  
*Chas. Nida*  
*Edgar Tate.*

*Inventor;*  
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# United States Patent Office.

C. W. ANDERSON, OF GROSVENOR DALE, CONNECTICUT.

Letters Patent No. 100,247, dated March 1, 1870.

## IMPROVEMENT IN STOP-MECHANISM FOR CARDING-MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, C. W. ANDERSON, of Grosvenor Dale, in the county of Windham, and State of Connecticut, have invented a new and improved Stop-Motion for Carding-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings forming part of this specification.

This invention relates to devices employed to throw out of gear the driving mechanism of the carding-engine when the fibre breaks or doubles, and consists in the combination and arrangement of certain instrumentalities whereby this object may be more conveniently effected, and which will be more particularly specified hereinafter.

In the accompanying drawing—

Figure 1 represents a vertical transverse section of my invention, the plane of section being indicated by the line *x x*, fig. 2.

Figure 2 is a front view, partly in section, of the same.

Figure 3 is a horizontal section of the same, taken on the plane of the line *y y*, fig. 1.

Similar letters of reference indicate corresponding parts.

A, in the drawing, represents the frame of the railway head.

B is the shipper-bar.

This bar, when it holds the belt on the tight pulley, is in the position shown in figs. 2 and 3, and is retained in such position by a lock-lever, C.

A spring, D, or its equivalent, has the tendency, by turning the shaft I, around which it is coiled, to draw the bar B out by means of the belt J, connected at one end to the bar, and at the other to the shaft I, so as to throw the driving-belt upon the loose pulley.

On the bar B is a spring-catch, *a*, which serves to engage the lever C.

The lever C is a bell-crank, with a long horizontal and short vertical arm.

The horizontal arm is caught under one arm, *b*, of an elbow-lever, E, which is pivoted by a vertical pin, *c*, to the frame.

A spring, *d*, has the tendency to draw the arm *b* off the lever C.

Through the top plate of the frame A passes a bar, F, which is pivoted to projecting ears, *e*, as shown, so that it can swing forward and backward on the same.

The lower end of the bar F passes through the arm *f* of the elbow-lever E.

Its upper end carries a trumpet or funnel, G, through which the fleece is passed.

The cotton, as it is passed through the funnel, swings the same forward, throwing thereby the lower end of the bar F inward. This will cause the arm *b* of

the lever E to be held over the long arm of the lever C, whereby the short arm of the latter will be held against the spring-catch *a*.

The shipper-bar will thus be locked so as to retain the belt on the tight pulley.

As soon, however, as the fleece is separated, the strain on the funnel G and bar F will cease, and the spring *d* will be at liberty to draw the arm *b* of the lever E off the long arm of the lever C.

The power of the spring D will then be exerted to throw the shipper-bar outward, and shift the belt upon the loose pulley, the lever C being swung out of the way by the power of the spring D.

Thus, as soon as the fibers shall be separated, and the fleece that leaves the carding-machine be torn, will the shipper-bar be moved to throw the belt upon the loose pulley, and to thereby arrest the motion of the machine.

H is a lever pivoted to the frame A in front of the lever F. Its front or outer end is designed to rest upon the upper vertically-movable roller *h'*, while its rear end, which has a cam formation, fits against a pin, *i*, that projects from the lever F.

When the roller *h'* is raised by crowding or doubling of material between it and the roller *h*, the lever H is swung so as to force the upper end of the lever F back, and thereby also release the shipper-bar, and cause the arrest of the motion of the machine.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

1. The combination of the mechanism for operating the belt-shipper from the funnel when the sliver breaks, consisting of the vertical swinging-bar F, levers C E and springs D *d*, when constructed and arranged with respect to each other, in the manner described.

2. The combination with the pivoted lever F and the rollers *h h'* of the loosely-pivoted roller H, constructed and arranged as described, with one end resting over the journal of the movable roller *h*, and the other provided with a graduated cam bearing against a pin projecting from the lever F, by which the belt-shipping mechanism is operated when the sliver doubles or crowds between the rollers, all as set forth.

3. The combination with a pivoted bar, F, for operating belt-shipping mechanism, of a funnel G affixed to the top thereof, and a vibrating-lever H, resting with its cam end against the pin *i*, and operated by the elevation of the loosely-journalled roll *h'*, all arranged as specified, and for the double purpose of throwing the driving-belt from the fast pulley whenever the sliver breaks or doubles between the rolls.

C. W. ANDERSON.

Witnesses:

THOMAS WILLIAMS,  
PRESCOTT RANDALL.