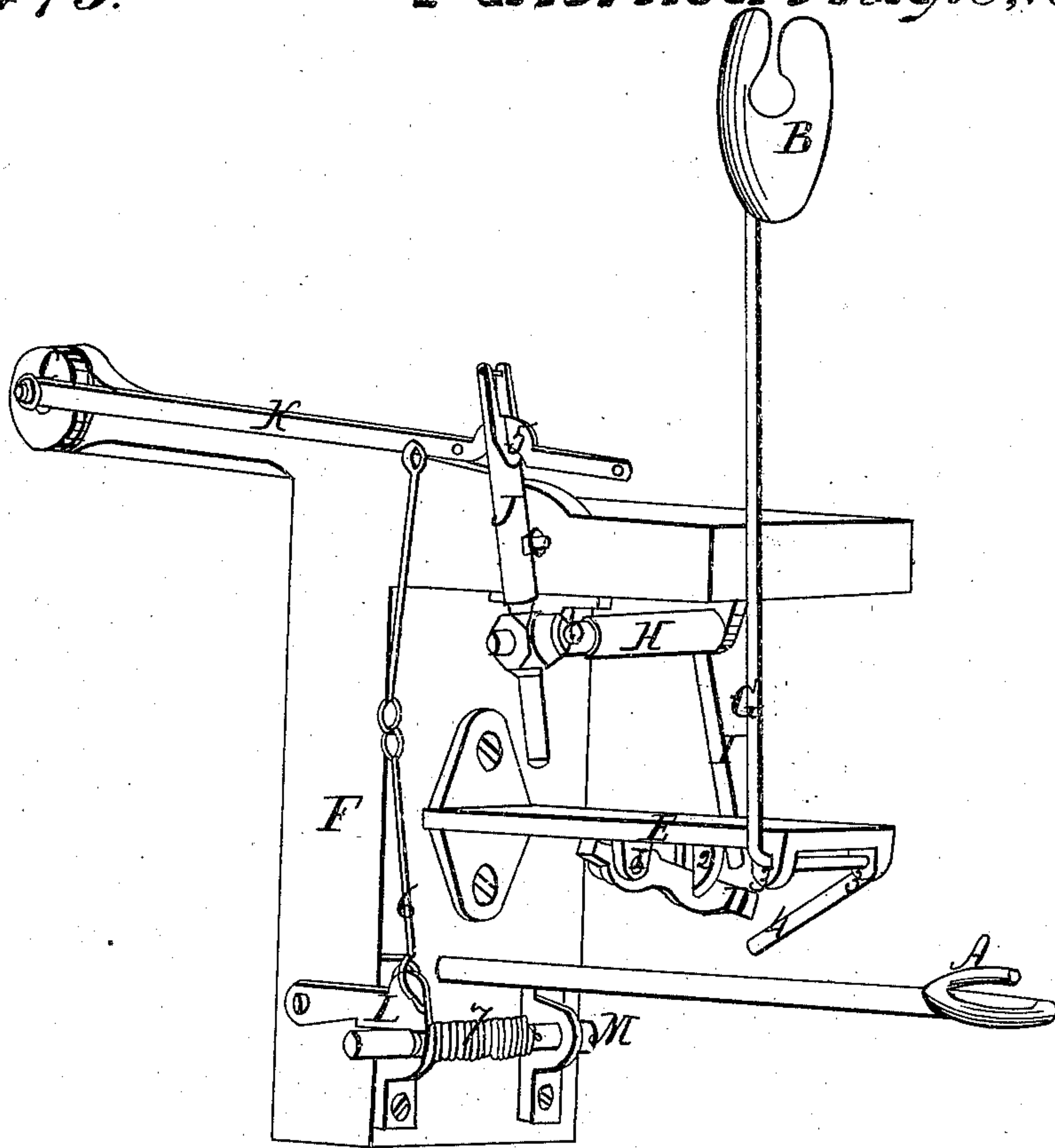


*L. Cutting.*  
*Drawing Attachment for Spinning*  
*Machine.*

*N<sup>o</sup> 11,475.*

*Patented Aug. 8, 1854.*





# UNITED STATES PATENT OFFICE.

LEWIS CUTTING, OF LOWELL, MASSACHUSETTS.

## STOP-MOTION FOR SPEEDERS.

Specification of Letters Patent No. 11,475, dated August 8, 1854.

*To all whom it may concern:*

Be it known that I, LEWIS CUTTING, of Lowell, in the county of Middlesex and State of Massachusetts, have invented certain  
5 new and useful Improvements in the Stop-Motions of Speeders, Stretchers, Slubbers, and Fly-Frames; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had  
10 to the accompanying drawing, making a part thereof, and which represents a perspective view of the several operative parts.

As heretofore constructed, no friction or guide, has been placed or applied between  
15 the can and the trumpet of this class of machines, and the unequal lifting of the lap or sliver from the can, often produces a slack, which allows the trumpet to fall and throw off the belt, even when the sliver has  
20 not broken or run out. This arises from the fact that the weight alone of the sliver, it being very inconsiderable, is not sufficient to hold up the trumpet. Another difficulty with the stop motions as at present used,  
25 that when the lap or sliver does break or run out, the shipper is not brought into action with the necessary certainty required, nor does it operate instantaneously. This evil produces another, viz: the winding or  
30 tangling of the thread or sliver around the fliers, it requiring much more time to strip or wipe the fliers, than to unite the broken thread or sliver.

The object of my invention is to remedy  
35 the above named defects, and consists first, in the interposition between the can and the trumpet of a guide or ring, for the purpose of producing friction sufficient in connection with the weight of the lap or sliver,  
40 to insure the holding up of the trumpet, and not depending solely upon the lifting of said sliver, which is variable, and I would state in this connection that guides have been used on the other side of the trumpet,  
45 or between it and the rolls or fly frames. This is no part of my invention.

The second part of my invention relates to the means for more certainly and instantaneously tripping of the shipper when a  
50 sliver breaks or runs out, and consists in the substitution of a very light lever, rod or wire, the weight of which merely is to be lifted, and to do this the trumpet need not fall or move more than an inch, and  
55 may be quite light, while in the other forms

the trigger must be moved against the action of one or more springs, and the trumpet have sufficient power or force to rock a shaft for the tripping of the shipper.

My invention may therefore be summed  
60 up as follows, first, to prevent the throwing off of the belt, by any other cause than that of the sliver breaking or running out, and second, that when it does break or run out, the belt shall be instantly thrown off.  
65

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

The can from which the sliver is taken  
70 may be placed immediately under the guide or ring A, said sliver first passing through said guide or ring, and thence through the trumpet B, to the rolls C. The friction in the ring or guide causes the trumpet to  
75 stand up, while without it the sliver would sometimes be raised unequally from the can, and cause a slack therein, which would admit of the trumpet's falling, and tripping the shipper without the breaking or running  
80 out of the thread.

A lever D, which may be a light wire, is hinged at 1, and plays between guides 2, said lever and guides being attached to a plate E, projecting from the frame F. The  
85 trumpet wire G, is so bent as to pass through the lugs 3 on said plate E, and terminates in an arm 4, which when the trumpet drops, lifts up the lever D.

H, is a rock shaft, having at one end the  
90 rod I projecting downward, and at the other end an arm J, projecting upward. A lever or rod K, connected by a wrist pin to the rolls C, passes through a slot in the arm J, and is hollowed out at that point, as at 5.  
95 A chain 6 connects the lever K, with the catch L, which holds the shipper M, against the action of the helical spring 7 around it. When the lever D, is down the arm I, passes over, but when raised up this arm strikes it,  
100 throwing up the rod K, forcing its depression 5 out of the slot in the arm J, and by means of the chain 6, lifting the catch L. The catch L, being released the helical  
105 spring 7, immediately throws the shipper M, which runs off the belt. To perform these movements the lever D need only be raised from a sixteenth to an eighth of an inch.

Having thus fully described the nature of 110



my invention, what I claim therein as new, and desire to secure by Letters Patent is—

1. The use of the independent hinged lever, rod, or wire, moving in guides, for tripping the shipper and throwing off the belt, thus relieving the trumpet from any further duty in throwing off the belt, than the mere raising of said lever, rod or wire, which makes its operation more certain, substantially as described.

2. I also claim in combination with the

hinged lever, the interposition between the can and trumpet of a guide so arranged as to give sufficient friction to the roving when it rises irregularly from the can, to prevent the dropping of the trumpet and consequent throwing off of the belt, substantially as described.

LEWIS CUTTING.

Witnesses:

A. B. STOUGHTON,  
THOS. H. UPPERMAN.