

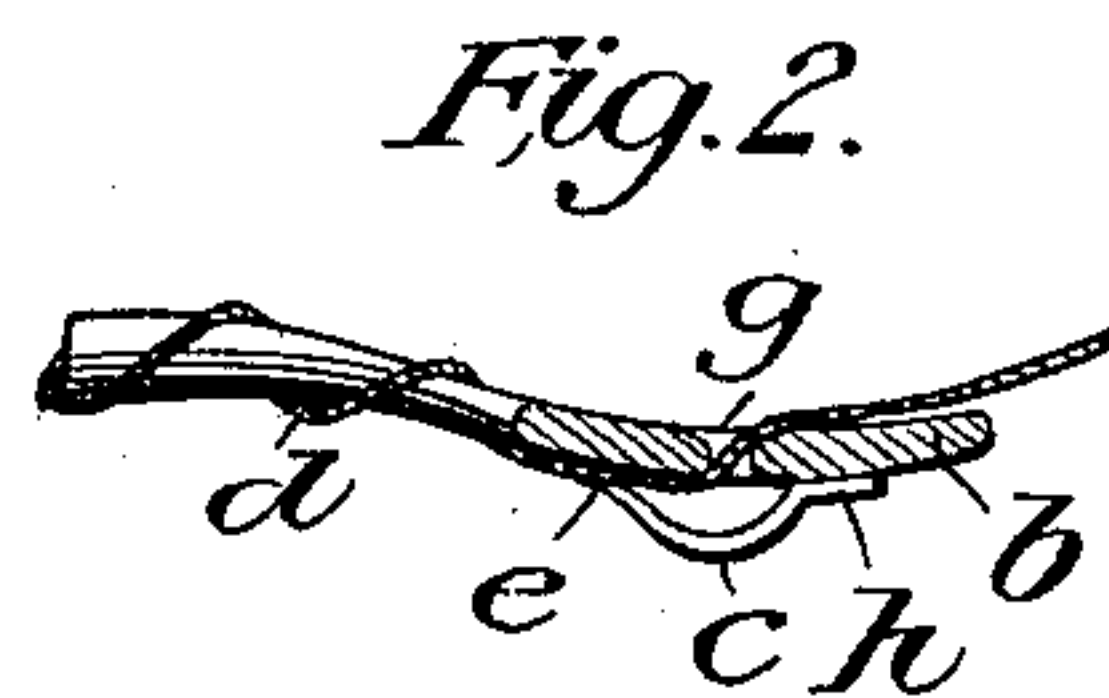
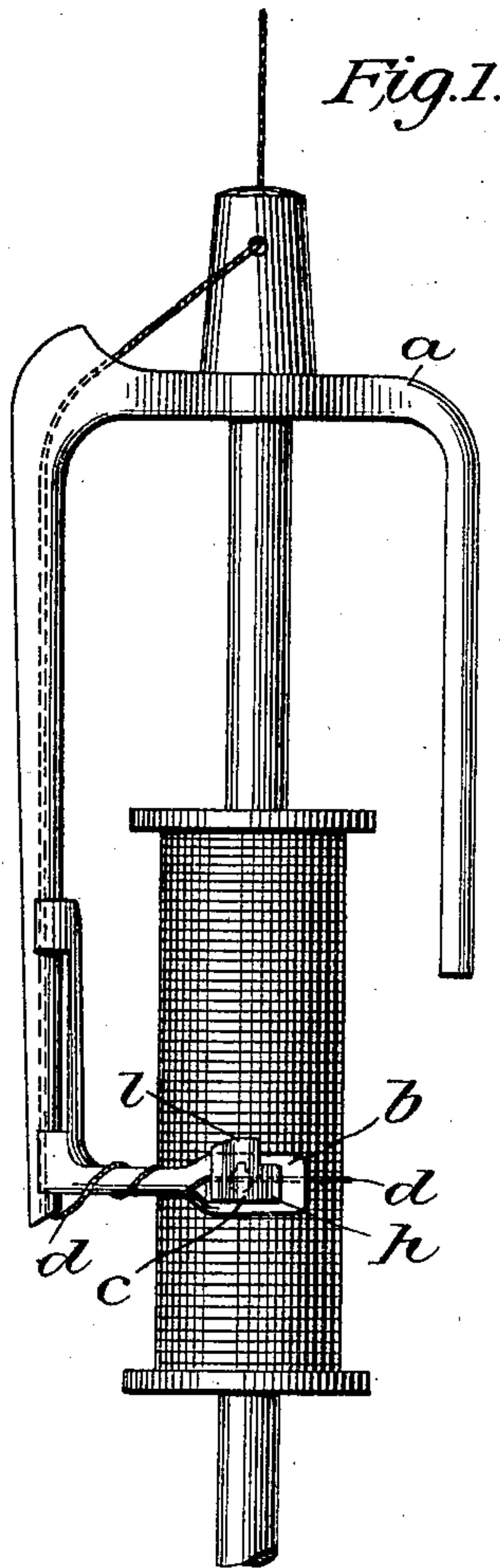
No. 682,556.

Patented Sept. 10, 1901.

W. A. LEHAN.  
FLIER.

(Application filed Apr. 15, 1901.)

(No Model.)



*Witnesses:*

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# UNITED STATES PATENT OFFICE.

WILLIAM ALBERT LEHAN, OF NEW BEDFORD, MASSACHUSETTS, ASSIGNOR  
OF TWO-THIRDS TO ROBERT BURGESS, OF SAME PLACE, AND FYANS,  
FRASER AND BLACKWAY CO., OF FALL RIVER, MASSACHUSETTS.

## FLIER.

SPECIFICATION forming part of Letters Patent No. 682,556, dated September 10, 1901.

Application filed April 15, 1901. Serial No. 56,566. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM ALBERT LEHAN, a citizen of the United States of America, and a resident of New Bedford, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Fliers, of which the following is a specification.

My invention relates to the fliers used on slubbing-machines in cotton-mills; and its object is to remove any bunches which may be in the sliver or bits of shell or dirt which may adhere to it and prevent the same from being wound upon the spool, and thus cause trouble and waste in the further process of spinning.

To this end my invention consists in providing a narrow slot or opening through which the sliver is caused to pass before it reaches the eye in the presser-foot, one side of said narrow opening having a sharp edge and being adjustable in order that the said opening may be made narrower or wider, as desired.

The accompanying drawings illustrate my invention, in which—

Figure 1 is a side elevation of a flier such as is used in a slubbing-machine, showing the presser-foot provided with my improvement. Fig. 2 is a top view of a portion of the presser-foot provided with my improvement.

Similar letters refer to like parts in both views.

The letter *a* represents one of the fliers of a slubbing-machine, and *b* represents the presser-foot of the same.

The letter *c* represents my improvement, which is composed of metal or other suitable material, secured to the presser-foot and having a sharp edge adapted to be adjusted to or from the outside surface of the presser-foot and is designed to act as a scraper to remove bunches and particles of shell and dirt from the sliver.

The device is secured to the presser-foot in such a manner that the sharp edge *e* shall be practically at right angles to the draft of the sliver and between the eye *g* in the presser-

foot and the point from whence the sliver is delivered to said eye.

The device is preferably made of brass, having a flat portion *h*, which is soldered or otherwise secured to the presser-foot, and a curving portion extending over the eye *g*, the free end of said device *c* being provided with a sharp edge *e*.

For convenience in introducing the sliver to the eye the device *c* is provided with a lip or projection *l*, rising above the upper edge of the presser-foot *b*. The curving portion of the device *c* allows the edge *e* to be adjusted to or from the surface of the presser-foot by bending.

In operation, the device being adjusted, as shown, the sliver is adjusted in the eye of the presser-foot in the usual manner, and as it is wound upon the spool is drawn through the narrow opening between the edge *e* and the surface of the presser-foot, thereby flattening it and causing the greater part, if not all, of the shell and dirt adhering to it to be scraped therefrom by the edge *e*. If a bunch in the sliver comes along which the edge will not remove, the sliver is broken at that point and the operative clears away the bunch and pieces up the sliver in the usual manner.

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

1. In a flier of a slubbing-machine, a scraper arranged between the eye in the presser-foot and the point from whence the sliver is delivered to the said eye.

2. In a flier of a slubbing-machine, a scraper arranged between the eye in the presser-foot and the point from whence the sliver is delivered to the said eye, one side of said scraper having a sharpened edge to engage the sliver.

3. In a flier of a slubbing-machine, a scraper arranged between the eye in the presser-foot and the point from whence the sliver is delivered to the said eye, one side of said scraper having a sharp edge and capable of being adjusted to or from the presser-foot.

4. In a flier of a slubbing-machine, a scraper

arranged between the eye in the presser-foot  
and the point from whence the sliver is de-  
livered to the said eye, a knife-edge formed  
on one side of said scraper, capable of ad-  
5 justment to and from the presser-foot and a  
projection extending from the upper edge of  
the scraper.

Signed by me at New Bedford, Massachu-  
setts, this 14th day of March, 1901.

WILLIAM ALBERT LEHAN.

Witnesses:

EDWARD P. HASKELL,  
HENRY W. MASON.