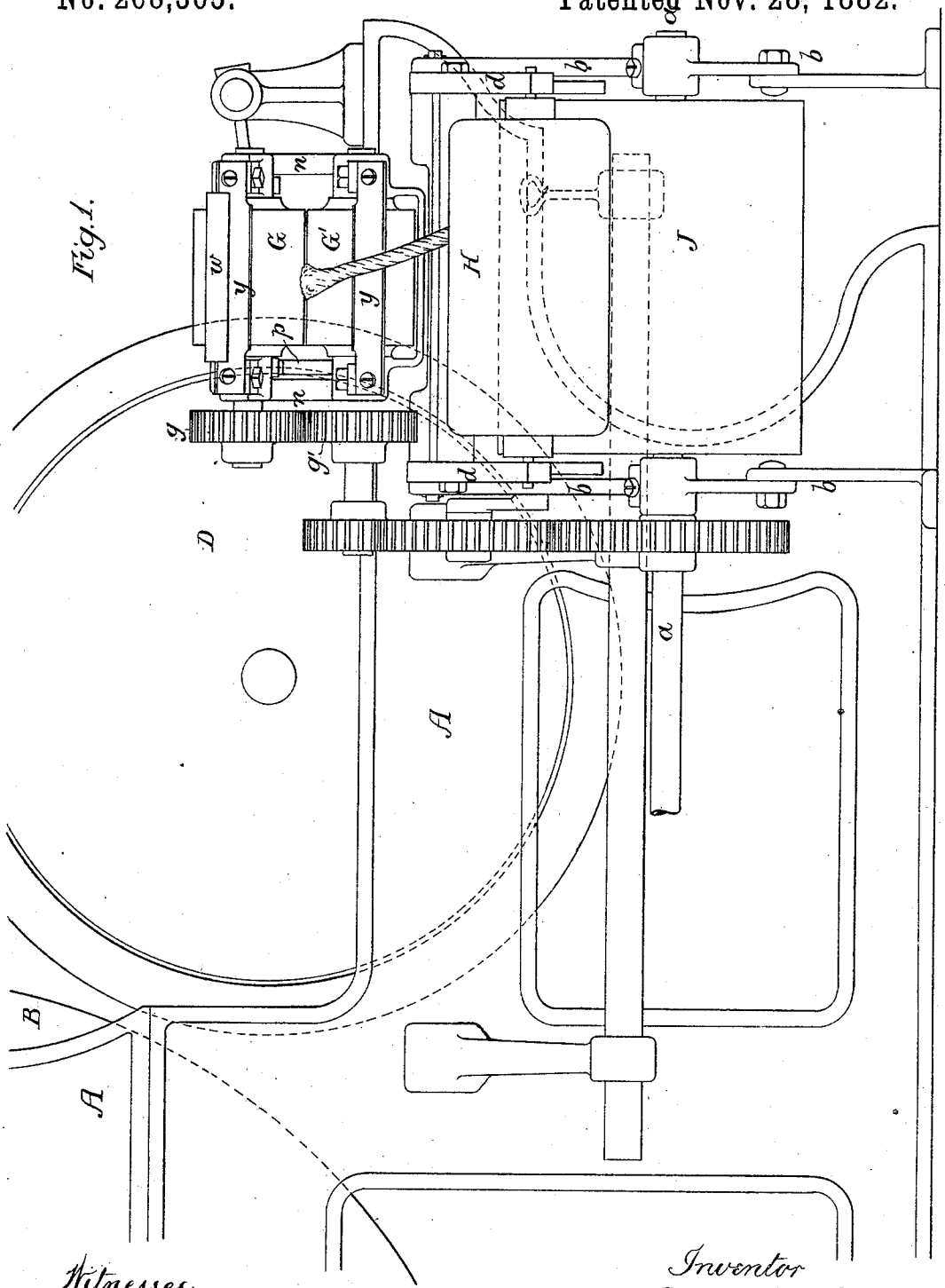
(No Model.) 2 Sheets—Sheet 1.

M. A. FURBUSH.

SIDE DRAWING DEVICE FOR CARDING MACHINES.

No. 268,365. Patented Nov. 28, 1882.

Fig. 1.



Witnesses:
Harry Drury
James J. Tobin

Inventor
M. A. Furbush
by his attorneys
Howson and Sons

N. PETERS. Photo-Lithographer. Washington. D. C.

(No Model.) 2 Sheets—Sheet 2.

M. A. FURBUSH.

SIDE DRAWING DEVICE FOR CARDING MACHINES.

No. 268,365. Patented Nov. 28, 1882.

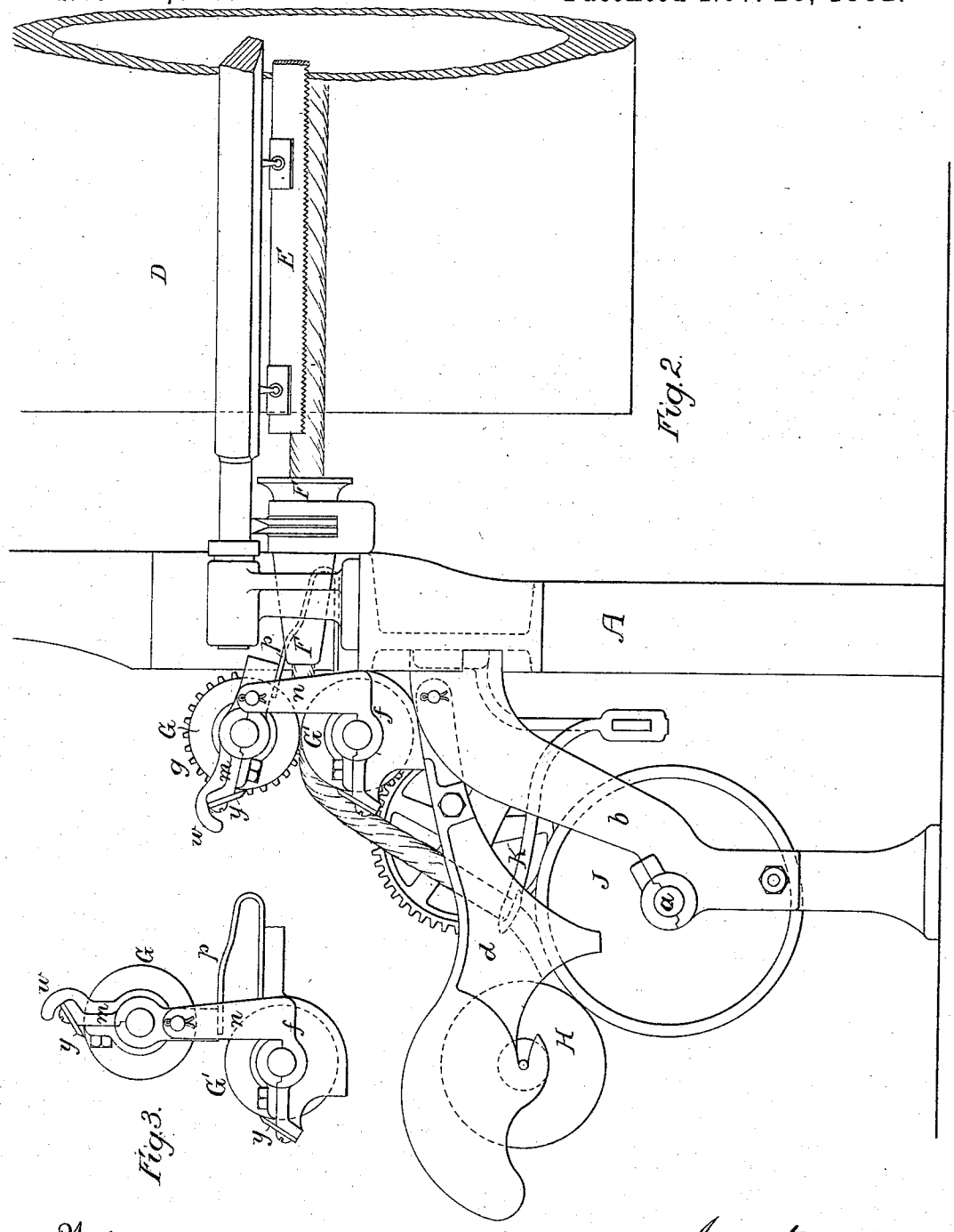


Fig. 2.

Fig. 3.

Witnesses
Harry Drury
James F. Dobin

Inventor.
M. A. Furbush
by his Attorneys
Howson and Sons

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

MERRILL A. FURBUSH, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND CHARLES A. FURBUSH, OF SAME PLACE.

SIDE-DRAWING DEVICE FOR CARDING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 268,365, dated November 28, 1882.

Application filed June 5, 1882. (No model.)

To all whom it may concern:

Be it known that I, MERRILL A. FURBUSH, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Side-Drawing Devices for Carding-Machines, of which the following is a specification.

The object of my invention is to so construct a side-drawing device for carding-machines as to provide a uniform draft on the sliver and permit the drawing devices to be readily thrown out of operation when the sliver breaks. This object I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawings, in which—

Figure 1, Sheet 1, is a side view of sufficient of a carding-machine to illustrate my invention; Fig. 2, Sheet 2, an end view of the same; and Fig. 3, a detached view of the drawing mechanism with one of the rolls in a different position from that shown in Fig. 2.

A represents part of one of the side frames of a carding-machine, B part of the main cylinder, D part of the doffer, and E part of the doffing-comb, these parts being constructed and driven as usual, and hence requiring no further description.

F is an ordinary twisting-head; G G′, a pair of drawing-rollers for the sliver; H, the spool on which the sliver is wound; J, a drum on which said spool rests and by which it is driven, and K the reciprocating fork, which serves to deliver the sliver from one end of the spool to the other. The shaft *a* of the drum J receives its motion from a shaft of the carding-machine, and is adapted to bearings in frames *b*, and the journals of the spool H are adapted to slots in weighted arms *d*, hung to the frames *b*, as usual. The journals of the lower roll, G′, are adapted to bearings in brackets *f* on the main frame, and said roll is driven from the shaft of the drum J through the medium of spur-gearing, as shown in Fig. 1, the upper roll, G, being driven from the lower roll through the medium of a pair of pinions, *g g′*. The journals of the upper roll, G, however, instead of being guided in slots in the frame, as usual, are carried by a pivoted yoke, *m*, to arms *n* on the brackets *f*, one of the arms of this yoke being acted upon by a spring, *p*, secured to the frame A, and adapted to bear either upon the under side of the arm when the yoke is in the position shown in Fig. 2 or upon the end of the arm when the yoke is turned to the position shown in Fig. 3. The spring thus serves to impart a downward pressure to the roll G, and insures the feeding of sliver between the same and the lower roll G′, or it tends to retain the roll in the elevated position shown in Fig. 3, when it has been moved to that position in order to permit the piecing of a broken sliver. To facilitate the lifting of the roll G the front end of the yoke *m* has a hooked projection, *w*, which can be readily grasped. Transverse knives or scraping-blades *y* are carried by both the yoke *m* and bracket *f*, these blades acting upon the surface of the rolls G G′ and serving to prevent the accumulation thereon of oil or other foreign matters which would interfere with their feeding action. By adapting the journals of the upper feed-roll to a pivoted yoke the elevation of one end of the roller independently of the other end, as in ordinary side-drawing rollers, is prevented, the face of the roller G being always kept parallel with that of the roller G′.

I claim as my invention—

1. The combination of the lower roll, G′, and the upper roll, G, gearing for connecting the same, and a pivoted yoke, *m*, carrying the journal of the upper roll, and hung to the frame, as described, whereby it can be turned to a vertical position in order to hold the said upper roll out of gear with the lower roll, as set forth.

2. The combination of the lower roll, G′, with the upper roll, G, the pivoted yoke *m*, carrying the same, and a spring, *p*, adapted to act upon said yoke, as described, whereby it serves to depress the roller or to maintain the same in an elevated position, as set forth.

3. The combination of the drawing-roller of a side-drawing device with a yoke or frame carrying a scraper adapted to act upon the surface of the roller, as set forth.

4. The combination of the lower roller, G′, the upper roller, G, and the pivoted yoke *m*, carrying the latter, and having a projection, *w*, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

MERRILL A. FURBUSH.

Witnesses:
HARRY SMITH,
HARRY DRURY.