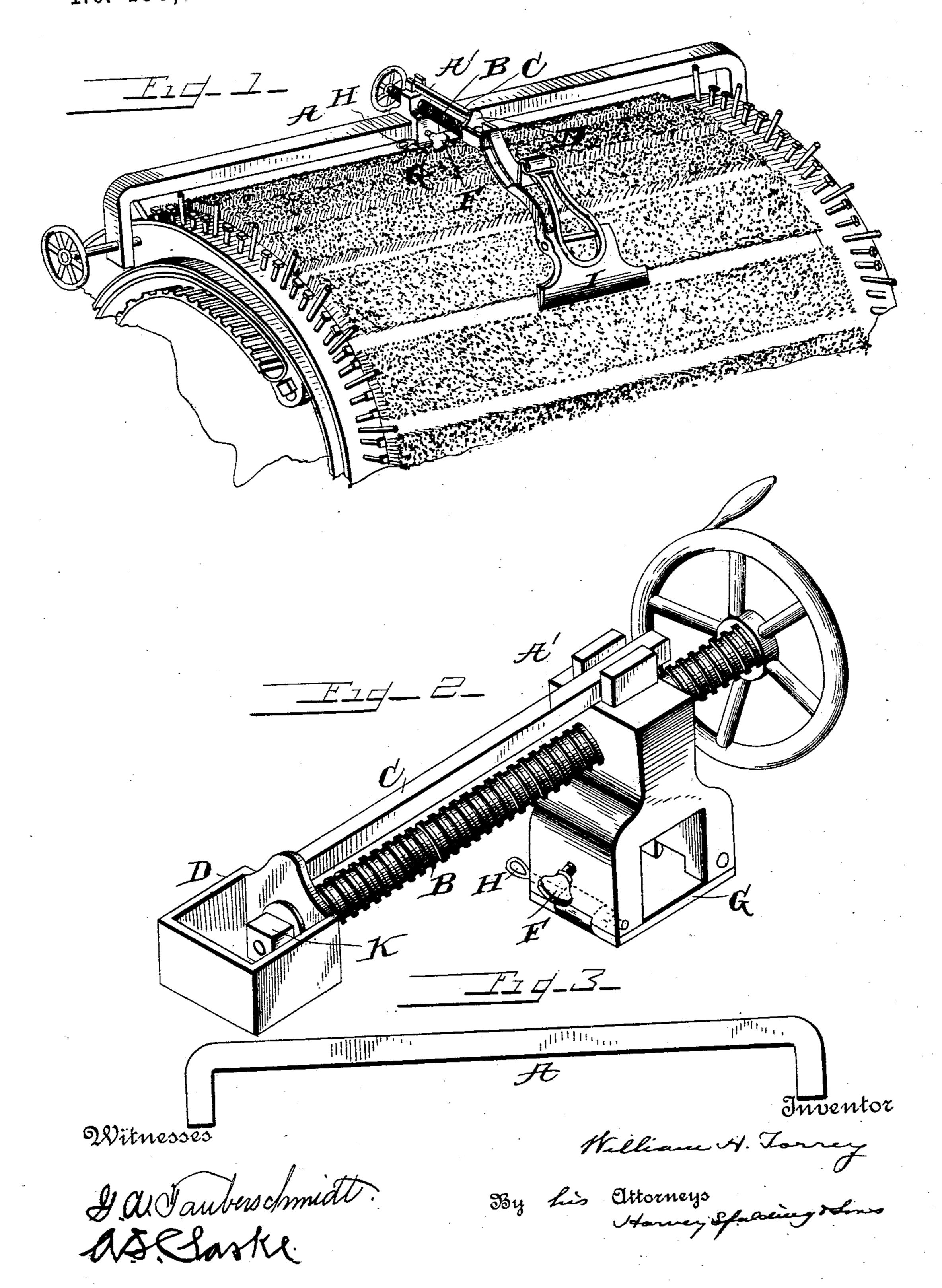
(No Model.)

W. H. TORREY.

MEANS FOR ADJUSTING AND STRETCHING CARD CLOTHING.

No. 455,672.

Patented July 7, 1891.



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## United States Patent Office.

WILLIAM H. TORREY, OF ADAMS, MASSACHUSETTS.

## MEANS FOR ADJUSTING AND STRETCHING CARD-CLOTHING.

SPECIFICATION forming part of Letters Patent No. 455,672, dated July 7, 1891.

Application filed December 26, 1890. Serial No. 375,849. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. TORREY, a citizen of the United States, residing at Adams, in the county of Berkshire and State of Mas-5 sachusetts, have invented certain new and useful Improvements in Means of Adjusting and | Stretching Card-Clothing, of which the following is a specification.

My invention relates to improvements in ic means to be applied to the tightening-bar of carding-cylinders for adjusting and stretching card-clothing upon the said cylinders.

My invention further relates to the tightening-bar employed to span the card-cylin-15 der from arch to arch between the pins after the removal of the flats and to be wedged and screwed so as to bring the arches tightly against the card-cylinder, making the latter immovable while the card-clothing is adjusted 20 and fastened.

The object of my invention is to facilitate the operation of stretching, adjusting, and fastening the card-clothing upon the card-cylinder.

With these ends in view the invention consists in the novel construction and arrangement of the several parts, as will be hereinafter more particularly described, and specifically pointed out in the claims.

30 I have fully and clearly illustrated my invention in the accompanying drawings, in which—

Figure 1 is a view of a card-cylinder clothing machine to which my invention is ap-35 plied. Fig. 2 is a detail perspective of the invention. Fig. 3 is a view of the tighteningbar removed from the machine.

Similar letters of reference indicate corresponding parts in the several figures.

In the drawings, A is a tightening-bar, which may be of any size or shape, said bar being applied to a cardin z-cylinder so as to span the same from arch to arch after the removal of the top-flats, and then wedged and screwed 45 so as to bring the arches tightly against the ends of the card-cylinder, holding the same rigidly in position while the card-clothing is adjusted and fastened. An adjusting-screw is employed to bring the arches together 50 against the card-cylinder.

My device for stretching, adjusting, and fastening the card-clothing upon the card-cylinder is used upon the tightening-bar by adjusting the hinged shaft-box on the bar and fastening the same with thumb-screws.

A' is a hinged shaft-box having a hinged side or bottom G, pin-fastening H, and setscrews F to hold the box steadily upon either a round or square shaft. Through this box passes a worm or screw B and guide-bar C, 60 both the worm B and guide-bar C being attached to the swivel D, the worm or screw by nut K, which has an opposite screw-thread to that of the worm or screw B, and the guidebar is secured permanently in any suitable 65 manner or formed integrally with the swivel D. The worm or screw is operated by means of a wheel or ratchet motion. The clamps I are attached to the card-clothing as ordinarily used and connected with the swivel D of the 70 stretcher or adjuster by means of a strap.

By means of the hinged box A' the machine is rendered readily adjustable relative to the tightening-bar of the card-cylinder and is operated at any angle desired, the set-screw F 75 holding the shaft-box in position upon either a round or square shaft. The guide-bar C gives additional strength and firmness to the device and serves to hold the swivel D in a fixed position.

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By the construction of my device it can be used on a tightening-bar without removing the doffer-roll, and from the opposite side or end of the card-cylinder by simply removing a few top-flats, thus making the operation of 85 clothing the card-cylinder or adjusting the card-clothing thereon very simple, resulting in a great saving of time and labor over the old construction. The card-clothing by this device can be drawn or stretched to the frac- 90 tional part of an inch, as desired, and retain its position until released.

From the foregoing description, taken in connection with the accompanying drawings, the operation of my device will be obvious. 95

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

1. The combination, with the tightening-bar of a card-clothing machine, of an adjustable 100 O

sleeve adapted to be clamped to the bar and formed with a threaded aperture and vertically-projecting guide-lugs, a threaded bar through the threaded aperture of the sleeve, a swivel on the end of the threaded bar, provided with a guide-rod arranged in the guide-lugs of the sleeve, and means, substantially as described, for turning the threaded rod.

2. The combination, with the tighteningrod of a card-clothing machine, of an adjustable sleeve provided with a hinged side or bottom adapted to clamp the sleeve on the rod, said sleeve being provided with a threaded aperture and vertically-projecting guide-lugs,

a threaded rod arranged in the aperture of the sleeve, a swivel on the end of the threaded bar, a rod connected to the swivel and adapted to travel between the guide-lugs of the sleeve, and means for turning the threaded rod, substantially as described, and for the purpose 20 specified.

In witness whereof I hereunto set my hand

in the presence of two witnesses.

WILLIAM H. TORREY.

Witnesses:
HERBERT O. HICKS,
JOHN M. WALPOLE.