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PATENTED DEC. 27, 1904.

W. ALLAN.  
TOP CLEARER FOR SPINNING FRAMES.

APPLICATION FILED DEC. 15, 1903.

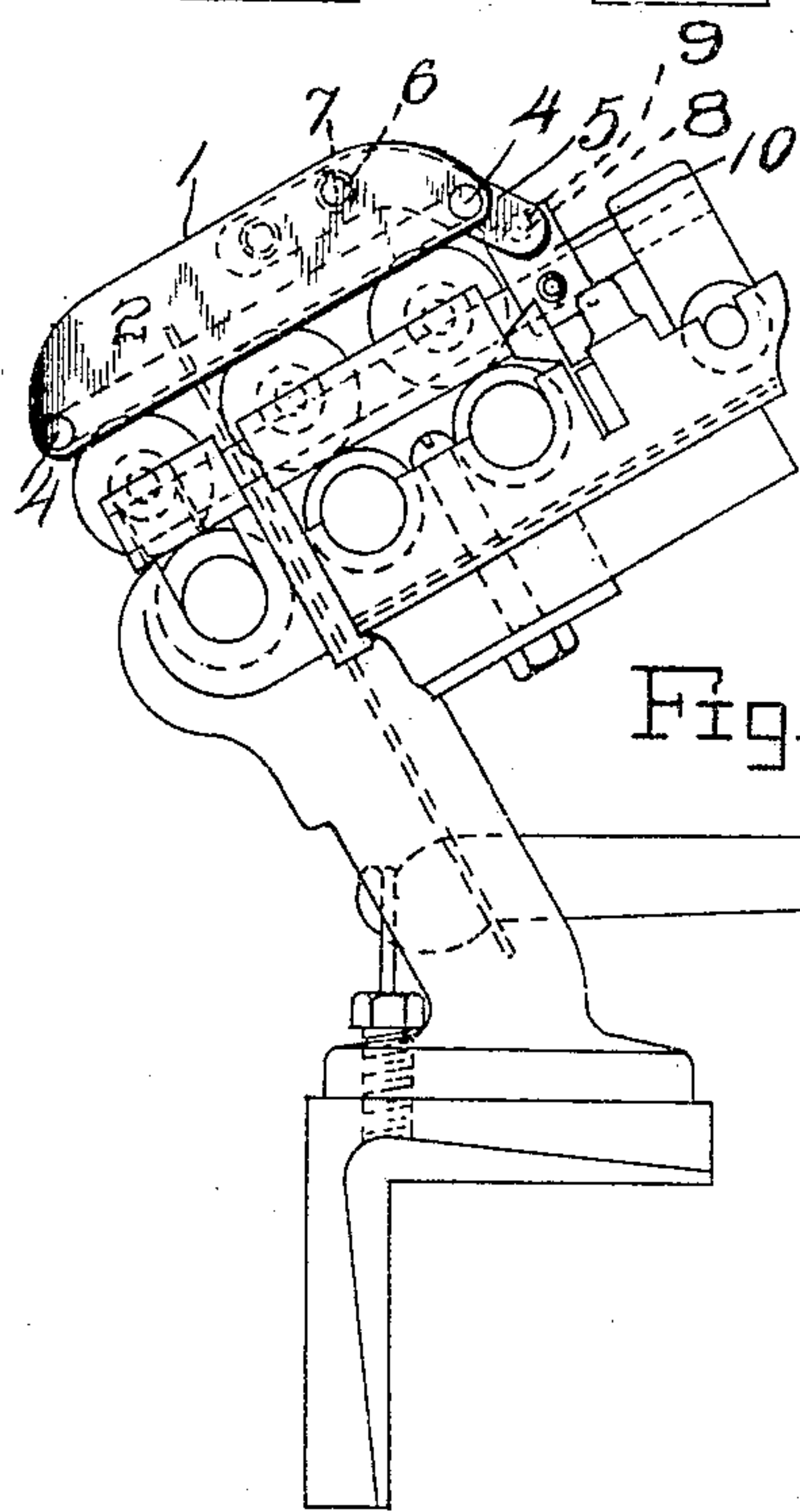
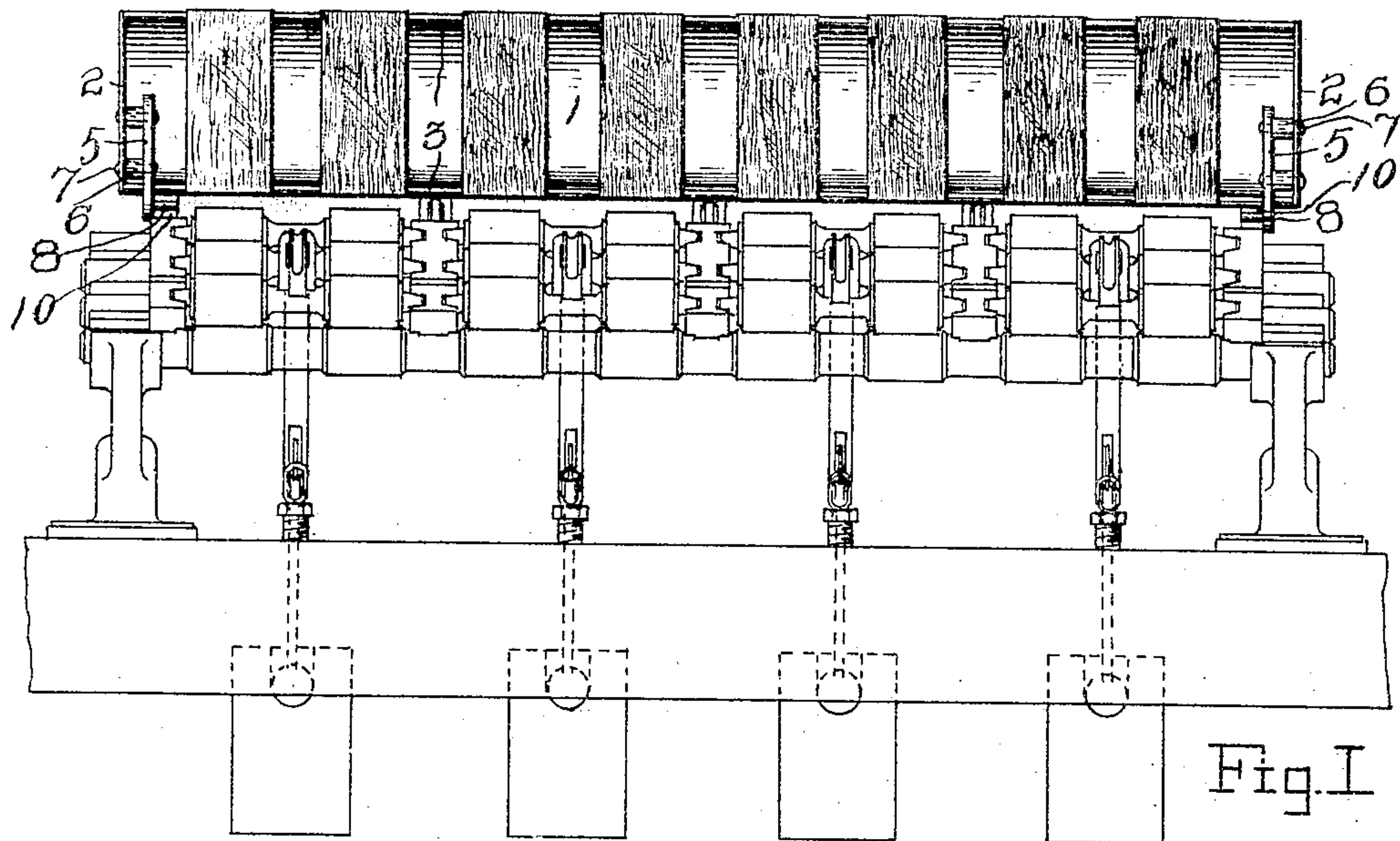


Fig. 2.

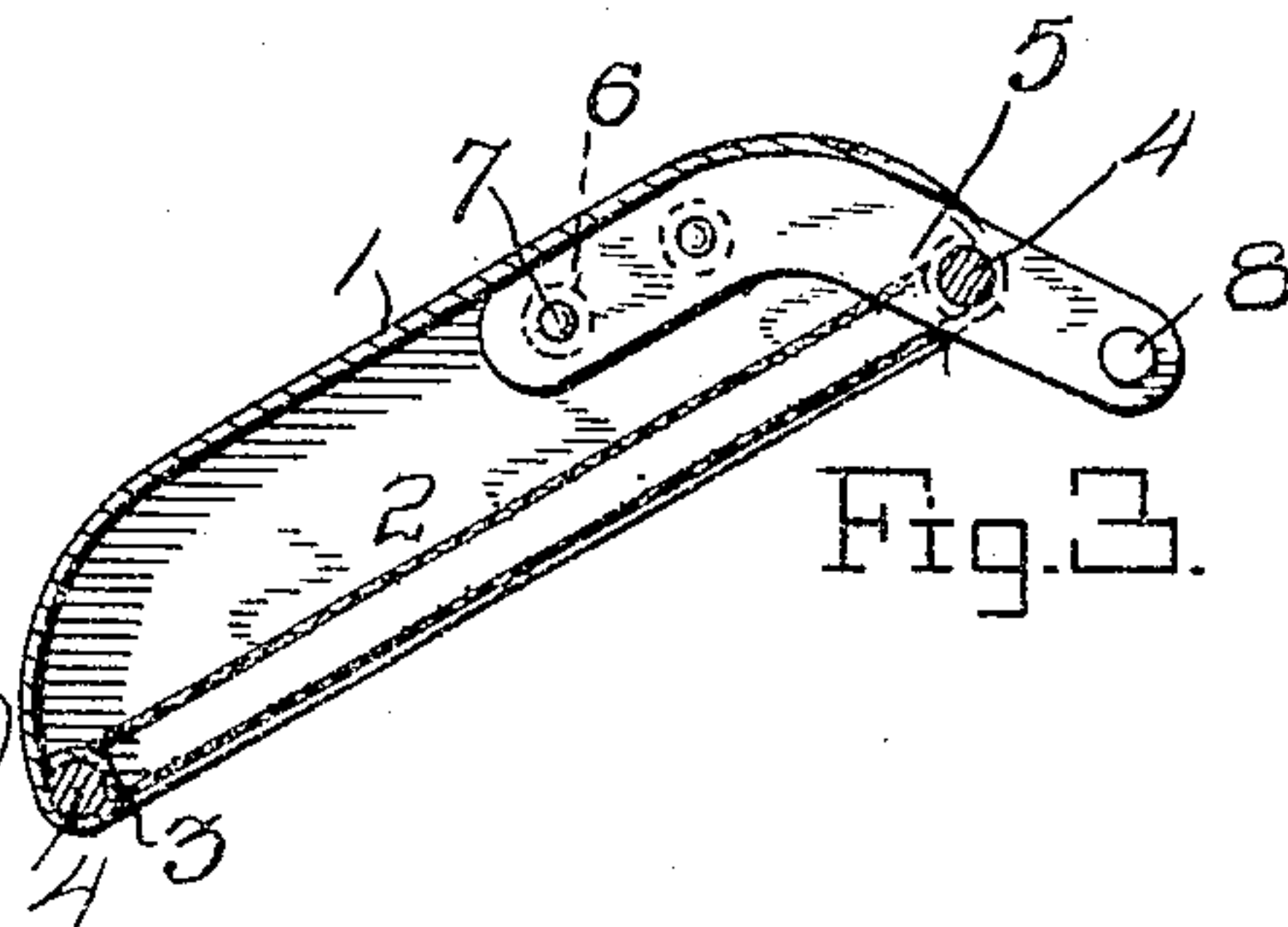


Fig. 3.

Witnesses

*C. H. Reichenbach.*

*J. P. Hillson.*

Inventor

*W. M. Allan.*

By

*A. Revillon.*

Attorney



# UNITED STATES PATENT OFFICE.

WILLIAM ALLAN, OF PAWTUCKET, RHODE ISLAND.

## TOP-CLEARER FOR SPINNING-FRAMES.

SPECIFICATION forming part of Letters Patent No. 778,733, dated December 27, 1904.

Application filed December 15, 1903. Serial No. 185,293.

*To all whom it may concern:*

Be it known that I, WILLIAM ALLAN, a citizen of the United States, residing at Pawtucket, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Top-Clearers for Spinning-Frames; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention is an improved top-clearer for spinning-frames; and it consists in the construction and arrangement of devices herein-after described and claimed.

One object of my invention is to provide a top-clearer for spinning-frames which is hinged at its rear side, so that it may readily be upturned to afford access to the rollers and clearer-cloths.

A further object of my invention is to provide a top-clearer for spinning-frames of improved construction composed of sheet metal and which is exceedingly strong and durable and is adapted to be readily removed from the spinning-frame or turned rearwardly on its hinges to afford access to the rollers and clearer-cloths.

In the accompanying drawings, Figure 1 is a front elevation of a portion of a spinning-frame provided with a top-clearer embodying my improvements, the latter being shown raised on its pivotal hinges to uncover the rollers. Fig. 2 is an end elevation of the same; and Fig. 3 is a detail transverse sectional view of the top-clearer, illustrating the construction thereof.

The spinning-frame here shown, with its rollers and tension devices, is of the usual construction.

In the embodiment of my invention I provide an improved form of top-clearer 1, which is made of a single piece of sheet metal bent to form the ends 2 and having its portion between the said ends curved to conform to the curved upper corners of the ends and its edges formed with lugs bent, as at 3, around a pair of longitudinally-disposed rods 4, which serve to strengthen the front and rear sides

of the clearer at the lower edges thereof and 50 which pass through and are secured to the ends 2 of the clearer, thereby binding the ends in place, as will be understood. The clearer flannels or cloths, which are doubled or endless, as shown in Fig. 3, connect the 55 rods 4 and are placed thereon as the rods are moved longitudinally when passing them through and engaging them with the eyes formed by the bent lugs 3 when the said rods are being put in place to connect and bind the 60 ends of the top-clearer.

In the end portions of the top-clearer 1 and the rear side of the same are a pair of metallic hinge-arms 5, which are disposed at a suitable distance within the ends 2 of the top-clearer or spaced therefrom by the spacer 6 65 and are secured thereto by pins, rivets, or bolts 7, which pass through said hinge-arms, spacers, and the ends 2 of the top-clearer. The rear ends of the hinge-arms extend rearwardly beyond the top-clearer and also are 70 curved downwardly to project somewhat below the rear side thereof, and the said hinge-arms are provided on the inner side of their downwardly and rearwardly projecting ends 75 with hinge pintles or studs 8. The same engage bearing-notches 9 in suitable bearing-blocks 10, the said bearing-notches being open on their upper sides and coacting with the hinge arms and pintles to provide a hinge 80 or pivotal connection between the rear side of the top-clearer and the spinning-frame to enable the top-clearer to be readily turned rearwardly to an upright position in order to uncover and afford access to the rollers and 85 clearer-cloths, and this construction also enables the top-clearer to be entirely removed from the spinning-frame by lifting the same so as to cause the hinge pintles or studs 8 to be entirely disengaged from the notches or 90 bearings 9.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without re- 95 quiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be

resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

1. A top-clearer for spinning-frames, made of sheet metal bent to form ends 2, having longitudinally-disposed stiffening-rods connecting and binding the end walls in place,  
10 and having the side edges of the portion between the end walls provided with lugs bent around the said stiffening-rods, the latter also forming means for the attachment and support of the clearers, the latter being disposed  
15 between the said lugs.

2. A top-clearer for spinning-frames comprising a single piece of sheet metal, bent to

form ends 2, and having its portion between the ends bent to conform to the shape thereof, 20 and longitudinally-disposed stiffening-rods connecting and binding the end walls in place, the side edges of the sheet-metal portion between the end walls being provided with lugs bent around the stiffening-rods, the latter also 25 forming means for the attachment and support of the clearers, the latter being disposed between the said lugs.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses. 30

WILLIAM ALLAN.

Witnesses:

ANDREW COCHRAN,  
GEORGE E. SMITH.