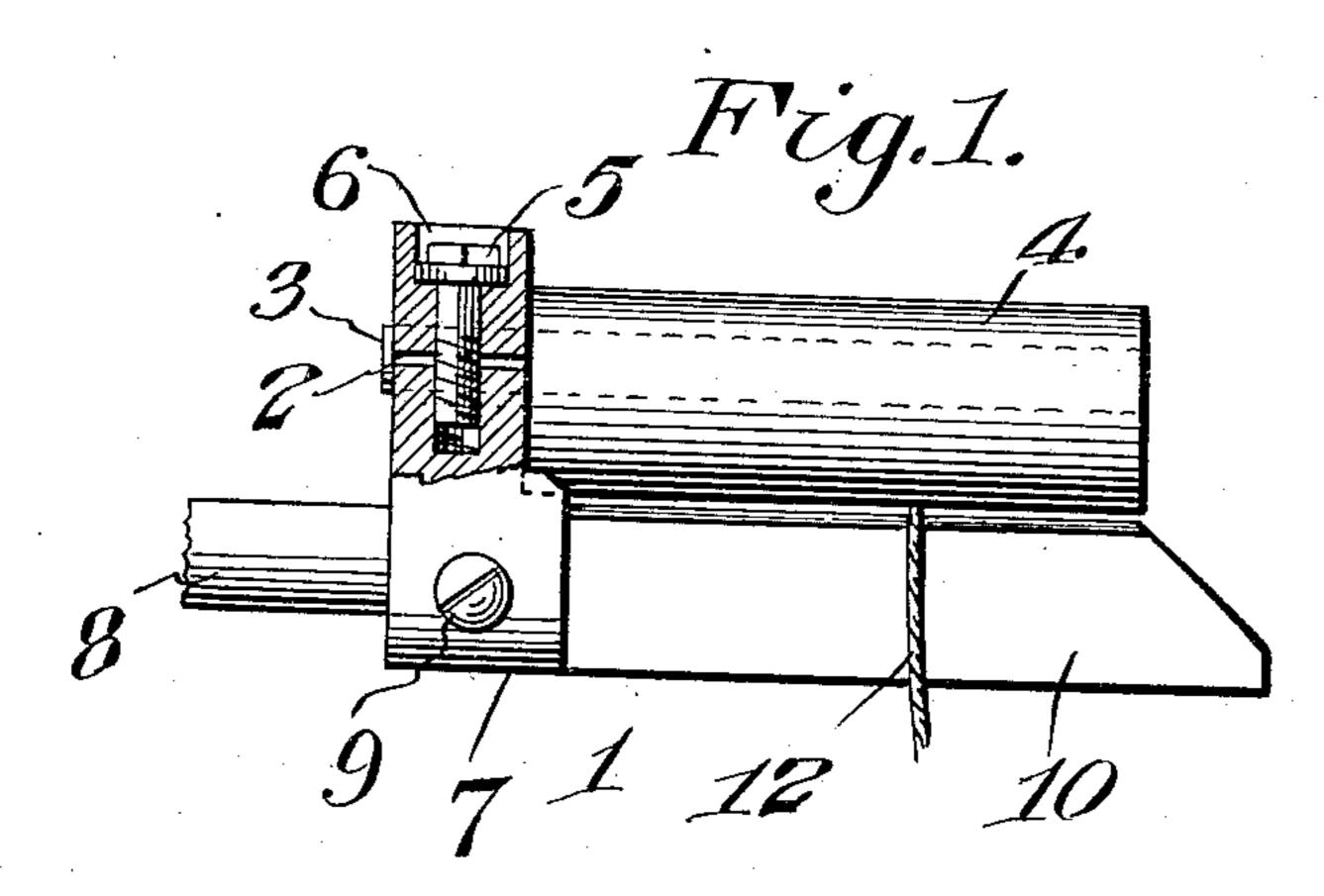
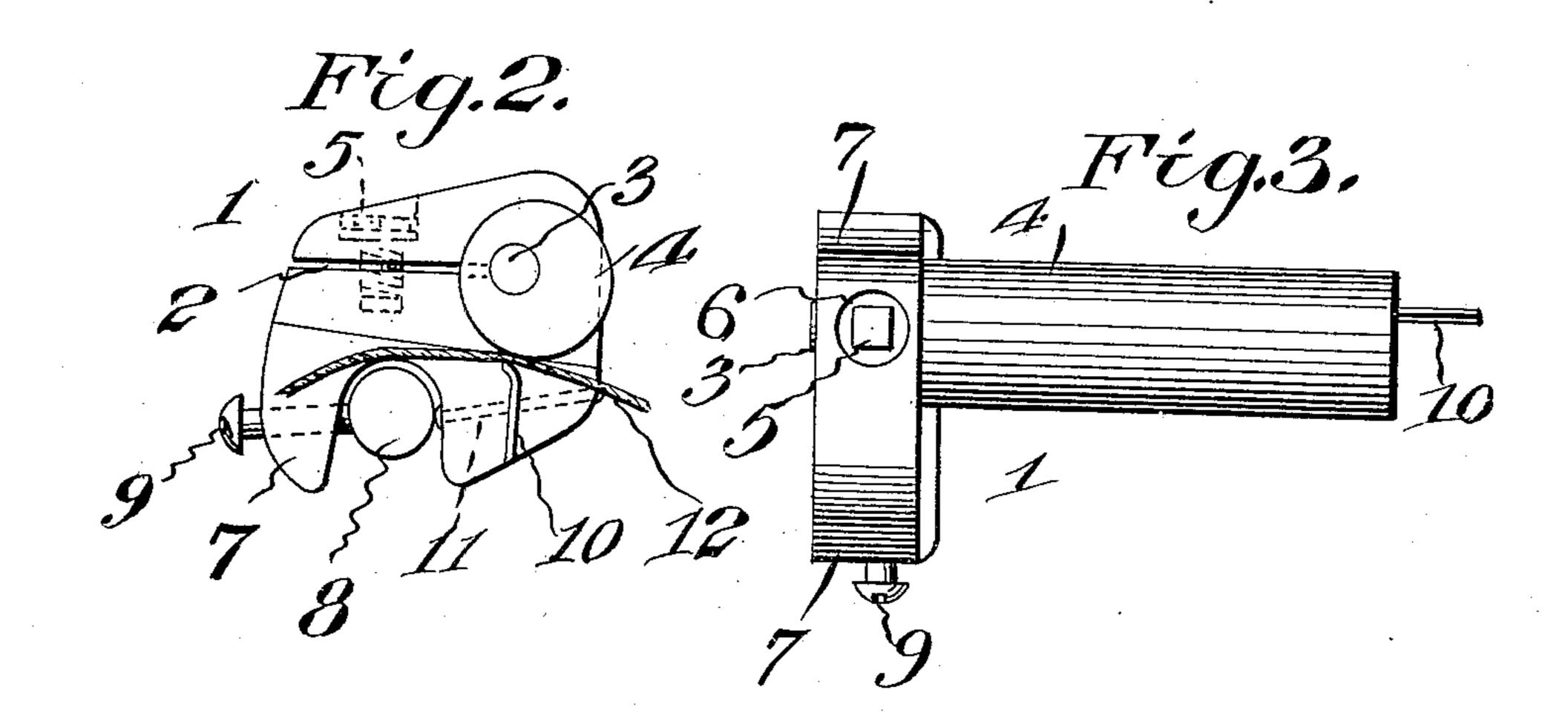
## A. L. WILLEY. SLUG CATCHER,

APPLICATION FILED OUT. 17, 1908.

917,692.

Patented Apr. 6, 1909.





Inventor

Arthur L. Willey,

Witnesses :\_\_

## UNITED STATES PATENT OFFICE.

ARTHUR L. WILLEY, OF FITCHBURG, MASSACHUSETTS.

## SLUG-CATCHER.

No. 917,692.

Specification of Letters Patent.

Patented April 6, 1909.

Application filed October 17, 1908. Serial No. 458,239.

To all whom it may concern:

Be it known that I, ARTHUR L. WILLEY, a citizen of the United States, residing at Fitchburg, in the county of Worcester and State of Massachusetts, have invented new and useful Improvements in Slug-Catchers, of which the following is a specification.

This invention relates to improved devices for removing bunches from yarn. These bunches are usually a fuzzy enlargement defect in the yarn and are commonly termed 'slugs," and it is more especially for the purpose of catching and removing the slugs that the present invention is intended.

With the above, and other objects in view which will appear as the description progresses, the invention resides in the novel construction and combination of elements hereinafter fully described and claimed.

In the accompanying drawing there has been illustrated a simple and preferred embodiment of the invention, and in which:

Figure 1 is a front elevation of the improvement, parts being shown in section to more clearly illustrate the details thereof. Fig. 2 is an end view of the improvement. Fig. 3 is a top plan view of the same.

In the drawing the numeral 1 designates what may be termed the head or support of 30 the device. This head 1 is constructed of a single piece of material constructed preferably of steel or other resilient metal having its upper portion slit transversely as indicated by the numeral 2 and the edges pro-35 vided by this slit portion terminating in a cylindrical opening adapted for the reception of a trunnion 3 provided upon a roller 4. The trunnion 3 of the roller 4 is eccentrically arranged, as clearly illustrated in Fig. 2 of 40 the drawing, and the portions of the head divided by the slitted portion 2 are secured together through the medium of a threaded element 5, which has its head positioned in a recessed portion 6 of the upper part of the 45 head 1.

The lower portion 7 of the head 1 is provided with a suitable cut away portion adapted for the reception of a suitable rod or other support 8, and the device is securely attached to this support through the medium of a threaded element, such as a screw 9.

Positioned directly beneath the trunnion 3 and the roller 4 upon the lower portions 7 of the head 1 is a longitudinally extending 55 knife blade 10. This blade 10 is secured upon

the lower portion 7 of the head 1 by suitable retaining elements 11, or if desired, the knife 10 may be integrally formed upon the head 1.

In the operation of the device the eccentrically trunnioned roller 4 is adjusted a sufficient distance away from the cutting edge of the knife 10 to provide for the size of the yarn passing between the knife and the roller. The threaded element 5 is then 65 screwed tightly into the threaded recess provided by the lower portion 7 of the head so as to rigidly and effectively retain the roller in its adjusted position. As the yarn is fed forward it passes easily between the 70 roller 4 and the cutting edge of the knife 10, but should a fuzzy defect or slug be formed upon the yarn, the knife 10 will readily remove the same or sever the yarn.

From the above description taken in connection with the accompanying drawing it will be noted that I have provided a comparatively simple and inexpensive device for removing the slugs from yarn, one which may be quickly and easily positioned upon a somachine and removed therefrom when desired, one which may be adjusted to accommodate itself to the various thicknesses of the yarn and one which will accommodate itself to the purposes desired with efficiency some and certainty.

Having thus fully described the invention what is claimed as new is:

1. In a device for the purpose set forth, a head, a knife blade upon the head, an eccen- 90 trically pivoted roller positioned upon the head above the knife, means for retaining the roller in spaced relation with the knife, substantially as described.

2. In a device for the purpose set forth, a 95 head, said head being provided with a longitudinal slit terminating in a circular opening, a trunnion eccentrically connected with a roller for the circular opening, means for compressing the slit portion of the head to 100 rigidly retain the trunnion upon the head, and a knife carried by the head and positioned beneath the roller.

3. In a device for the purpose set forth, a head member provided with a longitudinal 105 slot terminating in a circular opening, an eccentrically pivoted roller trunnioned within the circular opening, a threaded element adapted to compress the portions of the head formed by the slit to secure the trunnion of 110

the roller within the circular bearing provided by the cut away portions, a knife positioned below the roller, the lower portion of the head having a cut away portion, and a threaded element communicating with this cut away portion whereby the device may be secured to a suitable support.

In testimony whereof I affix my signature in presence of two witnesses.

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ARTHUR L. WILLEY.

Witnesses: M. F. Dunn,

Peter Sprowson.