(No Model.) 2 Sheets—Sheet 1.

E. TWEEDALE.

MOUNTING TOP ROLLERS.

No. 575,557. Patented Jan. 19, 1897.

Fig. 2.

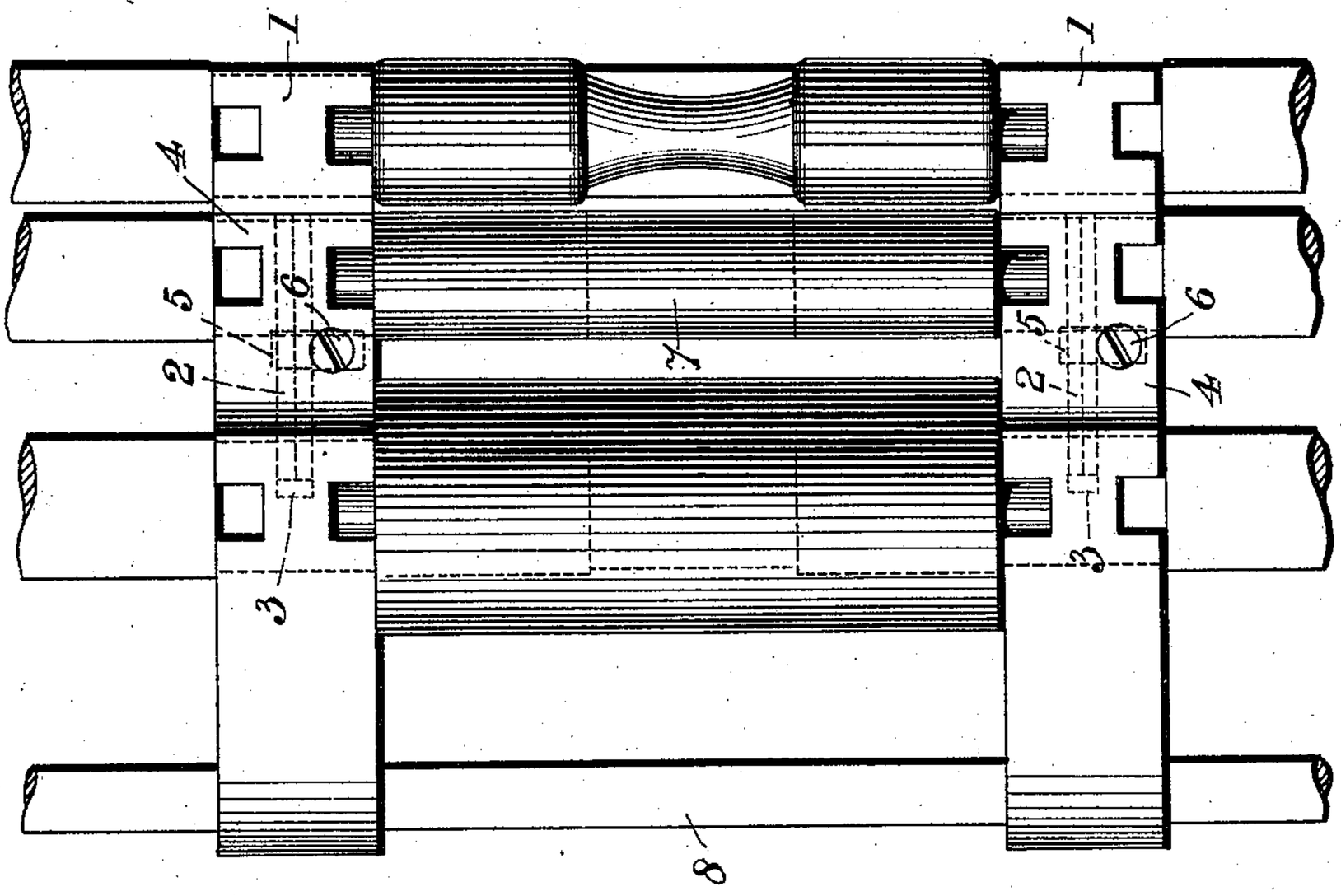
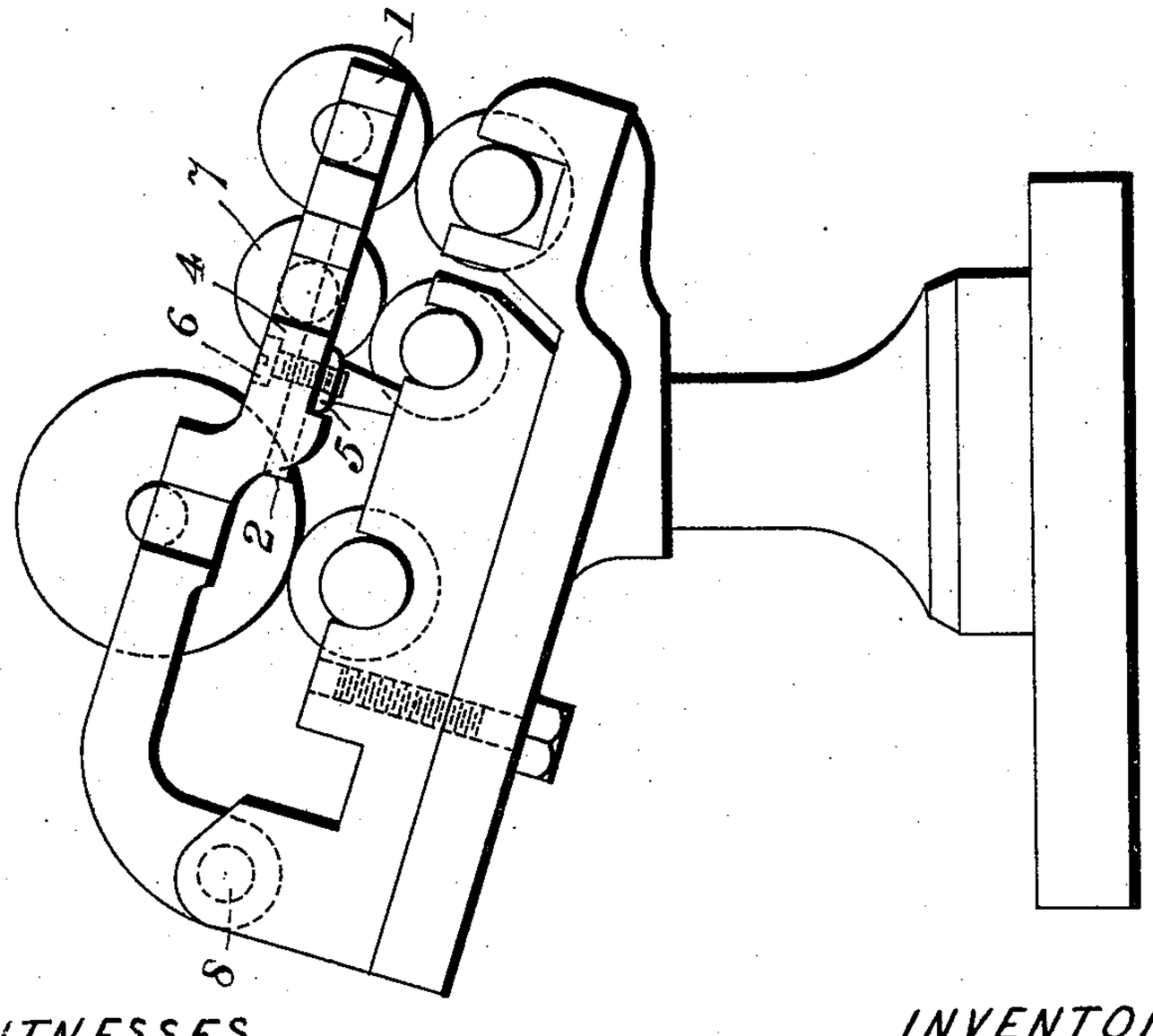


Fig. 1.



WITNESSES.

Frederick A. Verity.

Samuel Jackson

INVENTOR.

Edmund Tweedale

(No Model.) 2 Sheets—Sheet 2.

E. TWEEDALE.

MOUNTING TOP ROLLERS.

No. 575,557. Patented Jan. 19, 1897.

Fig. 5.

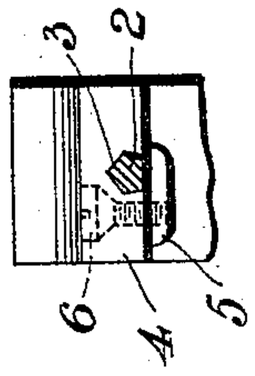


Fig. 4.

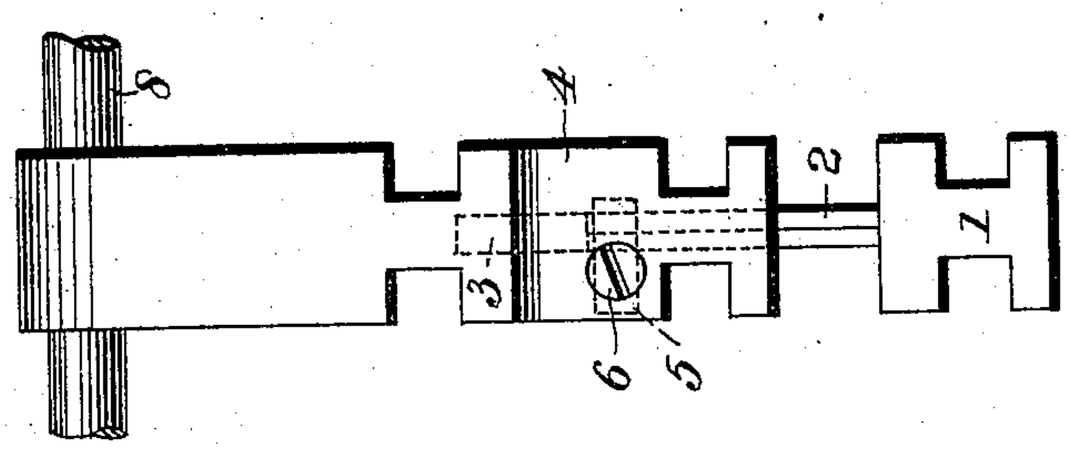
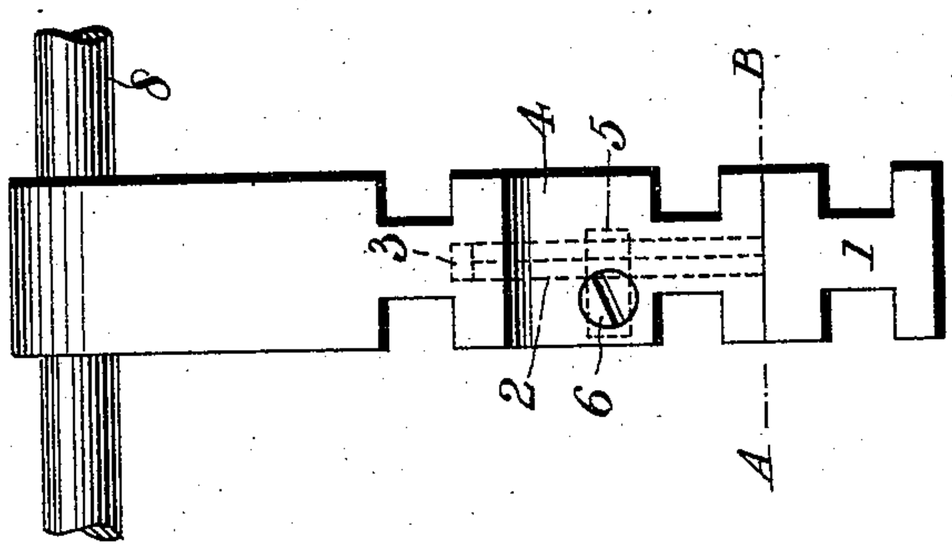


Fig. 3.



WITNESSES.

Frederick N. Verity

Samuel Jackson

INVENTOR

Edmund Tweedale

UNITED STATES PATENT OFFICE.

EDMUND TWEEDALE, OF MANCHESTER, ENGLAND.

MOUNTING TOP ROLLERS.

SPECIFICATION forming part of Letters Patent No. 575,557, dated January 19, 1897.

Application filed March 7, 1896. Serial No. 582,284. (No model.) Patented in England July 15, 1890, No. 11,006.

To all whom it may concern:

Be it known that I, EDMUND TWEEDALE, a subject of Her Majesty the Queen of Great Britain, residing at Castleton, Manchester, in the county of Lancaster, England, have invented a certain new and useful Improvement in Mounting the Top Rollers of Roving, Spinning, and Twisting Frames, (for which I have obtained Letters Patent in Great Britain under date of July 15, 1890, No. 11,006,) of which the following is a specification.

This invention relates to an improvement in the mounting of the top rollers of roving, spinning, and twisting frames, and is an improvement upon the construction of mounting for which Letters Patent of Great Britain No. 15,823 of the year 1888 were granted to the present applicant. It consists of such a construction of parts as enables the section of the "nib" or bearing-block carrying the front rollers to be made much thinner than usual, so that the journals of the rollers will project slightly above the nib, thereby affording a smaller opening for the lodgment of loose fiber and facilitating the removal of such fiber. The nibs are provided with fingers which afford an increased holding power, whereby tendency to lateral movement or "play" of the front nibs, when extended, is avoided.

According to my invention I cast to the front-top-roller nib a light finger or stem—preferably of steel—of three or more sides, (preferably five sides,) the angle of two sides being upward, forming a Λ, there being a slot or longitudinal groove cast, cut, or formed in the under side of the nib of the second roller, and within which the angular finger or stem is received, such finger passing under and being tightly held by a nipping-plate tapped and threaded so as to receive the threaded end of a screw or screws passed through and flush with the top or surface of that part of the cap-bar carrying the second top roller, so that on the said screw or screws being slackened the nib and its finger can be drawn outward or adjusted to the required position, and when the screw or screws are tightened the nib and finger are firmly held in position.

Referring to the accompanying drawings, Figure 1 is an end elevation of a portion of a roving, spinning, or twisting frame having the top rollers mounted according to my invention. Fig. 2 is a plan view of Fig. 1. Fig. 3 is a plan of the bracket-shaft, bracket-finger, and nibs or bearing-blocks. Fig. 4 is a similar view to Fig. 3, but showing the finger partly drawn out of the longitudinal slot or groove. Fig. 5 is an end sectional view on line A B of Fig. 3.

According to my invention I cast or secure to the front-top-roller nib 1 a light finger or stem 2—preferably of steel—of three or more sides, (preferably five sides, as shown in Fig. 5,) the angle of two of the sides being upward, forming a Λ, there being a slot or longitudinal groove 3 cast, cut, or formed in the under side of the bracket, in which is formed the fixed or stationary neb 4 of the second top roller, and within which slot or groove 3 the angular finger or stem 2 is received, said finger lying nearly flush therewith and being tightly held in position by a nut or nipping-plate 5, which is tapped and threaded so as to receive the threaded end of a screw 6, passed through and flush with the top or surface of that part of the cap-bar or fixed neb 4 carrying the second top roller 7, so that on the said screw or screws 6 being slackened the nib 1 and its finger 2 can be drawn outward or adjusted to the required position, as shown in Fig. 4, and when the screws 6 are tightened the nib 1 and finger 2 are firmly held in the position in which they have been set. The bracket in which are formed the fixed nibs is supported on shaft 8 in the usual manner.

By the use of the appliances as above described the section of the nib may be made much thinner and lighter than heretofore, and the journals of the top rollers may project above the upper surface of the nibs, and thus there is less opening for the lodgment of loose fibers and greater facility for removing the same, and the construction of the finger in the groove or slot, as above described, prevents lateral movement of the nibs 1 when extended or drawn out.

In place of making the groove in the under side of the bracket it might be made on the upper side, and in this case the nut or plate 5 would be on the upper side and would act on the upper surface of the finger.

What I claim is—

In combination, a nib or bearing-block, the front top roller, resting in same, an angular

finger with its upper edge in the form of an inverted V rigidly attached to said nib, a bracket provided with fixed nibs, the rollers supported in said fixed nibs, means for supporting said bracket, an angular groove on one of the surfaces of the bracket adapted to receive the angular finger and means bearing on the exposed surface of the finger for holding said angular finger in the position in which it is set in the groove substantially as described.

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

EDMUND TWEEDALE.

Witnesses:

FREDERICK A. VERITY,

SAMUEL JACKSON.