

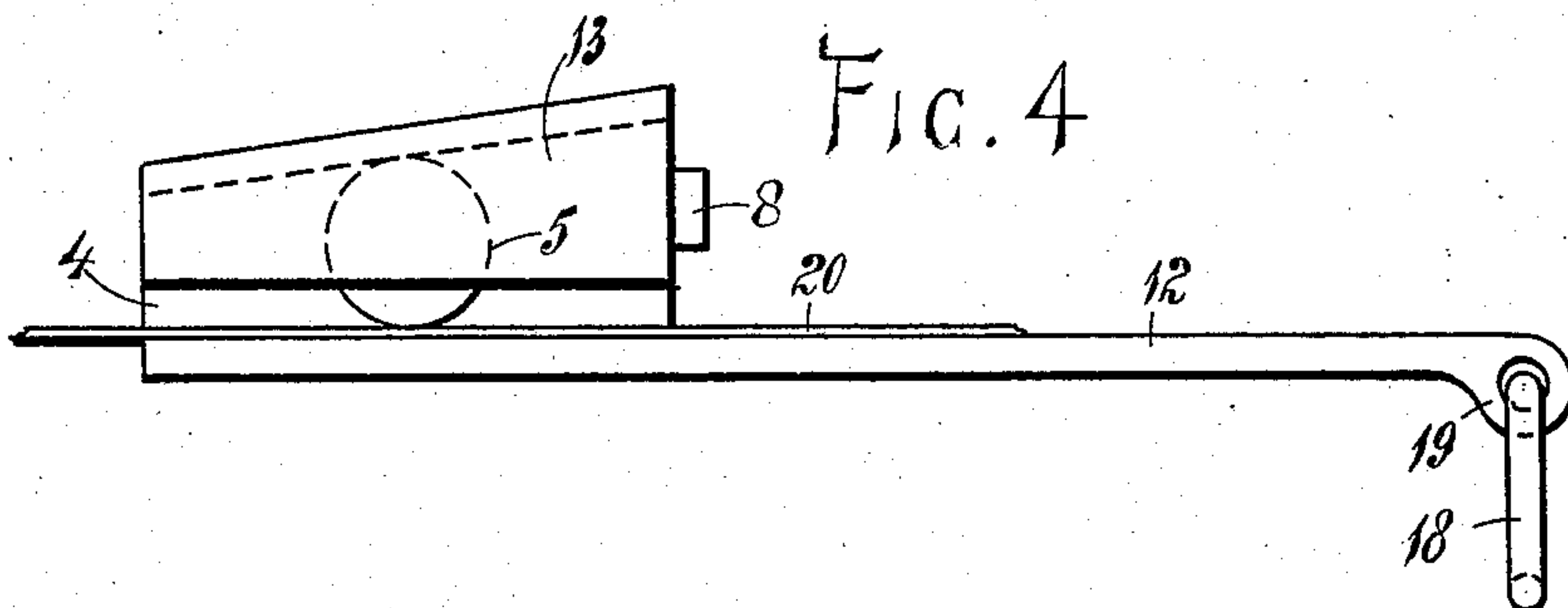
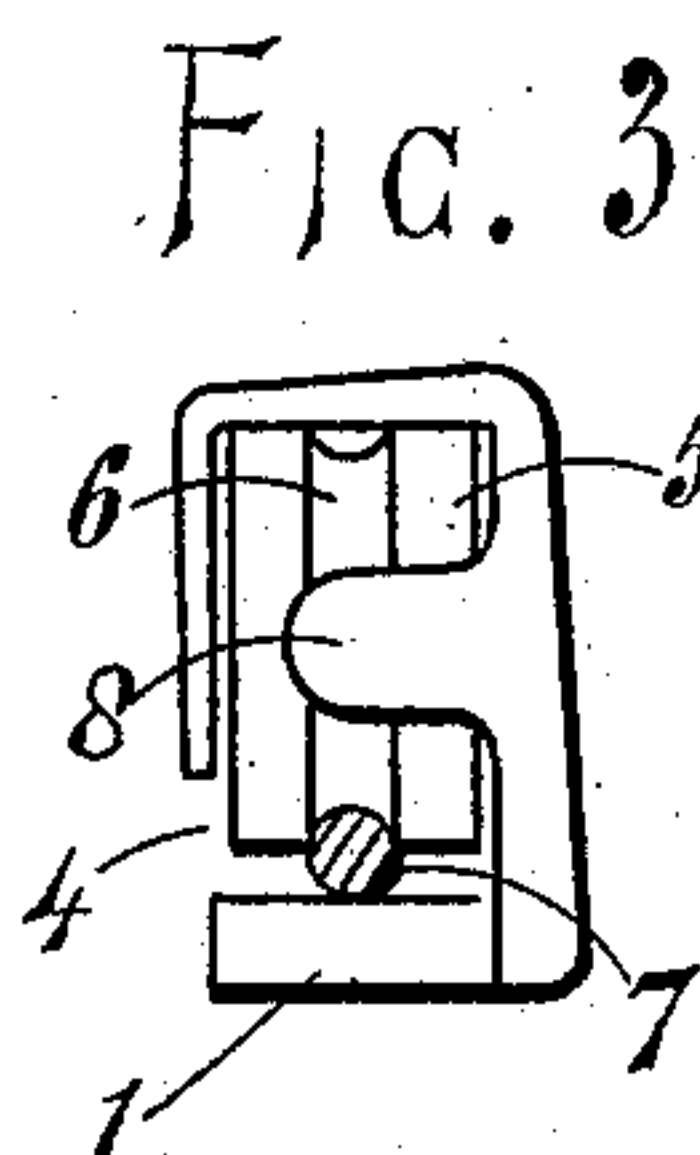
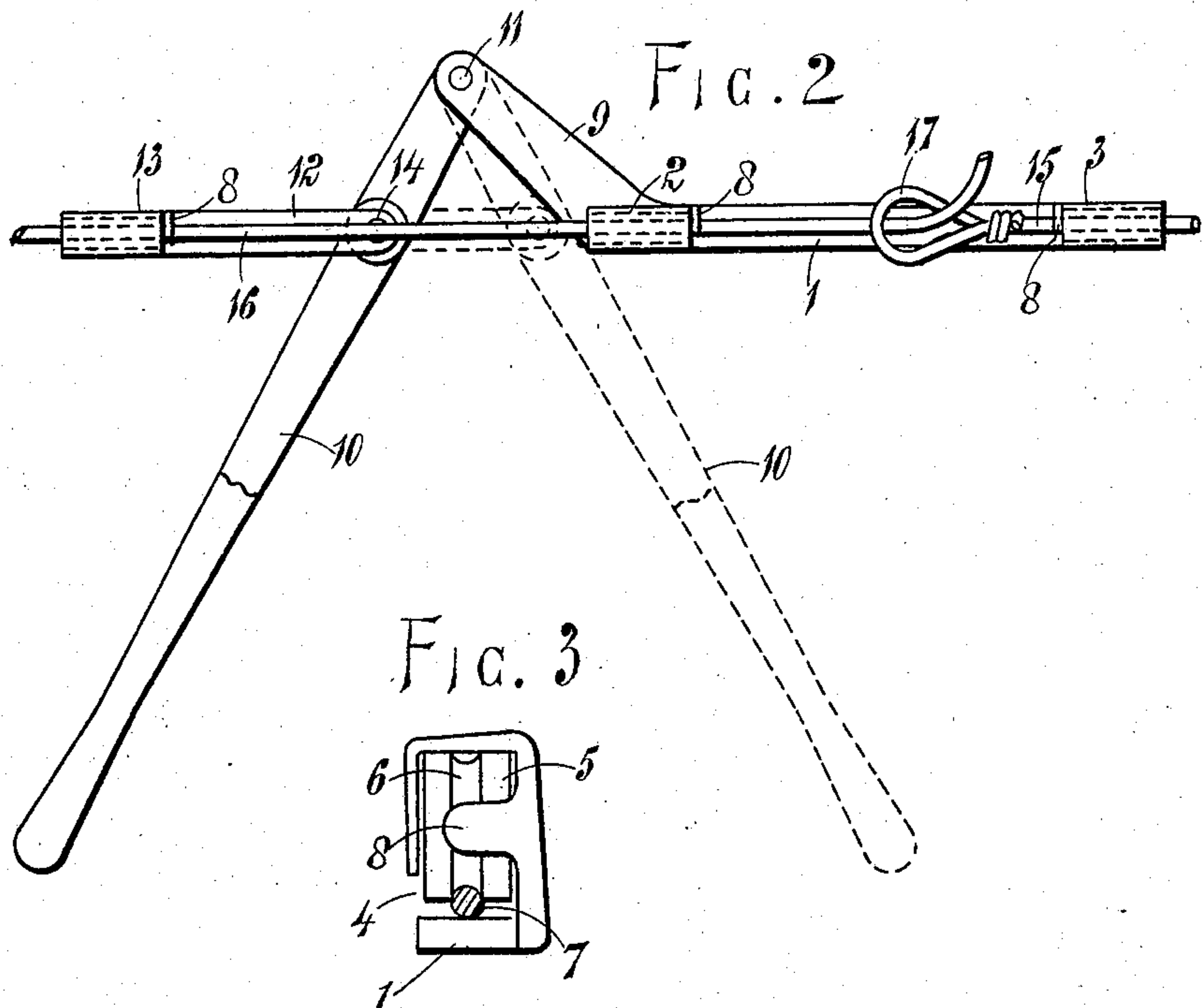
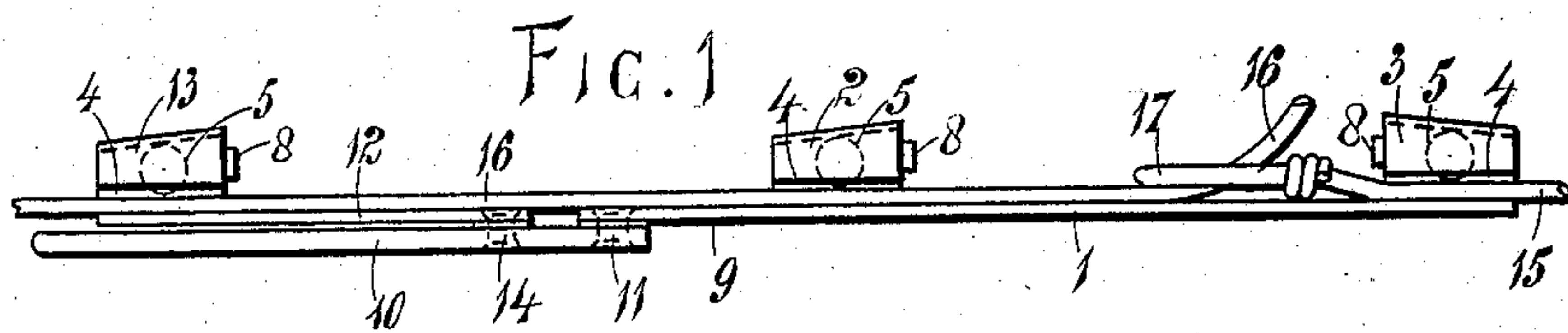
No. 867,241.

PATENTED OCT. 1, 1907.

C. BURTON.

APPARATUS FOR STRAINING WIRES AND THE LIKE.

APPLICATION FILED SEPT. 18, 1905.



Witnesses:  
E. P. O'Donnell  
J. M. Watson

Inventor  
Christopher Burton  
by his Attorney  
Hewitt H. Hayward

# UNITED STATES PATENT OFFICE.

CHRISTOPHER BURTON, OF WELLINGTON, NEW ZEALAND.

## APPARATUS FOR STRAINING WIRES AND THE LIKE.

No. 867,241.

Specification of Letters Patent.

Patented Oct. 1, 1907.

Application filed September 18, 1906. Serial No. 278,898.

*To all whom it may concern:*

Be it known that I, CHRISTOPHER BURTON, a subject of His Majesty the King of Great Britain and Ireland, residing at 85 Lambton Quay, Wellington, in the Provincial District of Wellington, in the Colony of New Zealand, have invented certain new and useful Improvements in Apparatus for Straining Wires and the Like, of which the following is a specification.

This invention relates to devices used for straining wires and articles of a similar nature, such as surveyors' measuring tapes.

According hereto a metal bar has a hood at each end with their tops sloping downwardly to the extremities of the bar. A disk is placed inside each hood and is retained therein by a bar bent into position across the larger end of the hood after the disk has been inserted. A slot is left throughout the length of the hood upon one side for the purpose of admitting one of the wires to be strained. An arm integral with one of the hoods extends laterally and forwardly and to its outer extremity an operating lever is fulcrumed. A third hood similar to those above described is mounted on a short bar which is pivoted to the operating lever.

The drawings herewith illustrate the invention.

Figure 1 is a side elevation of the apparatus, Fig. 2 a plan, Fig. 3 an end view of a hood, and Fig. 4 a side view of a hood and its bar.

The bar 1 is integral with hoods 2 and 3 which rise upwardly, see Fig. 3, from the bar 1 are bent over horizontally to form a top and then downwardly, leaving a slot 4 for insertion of wire or the like into the hood.

The tops of the hoods slope as clearly shown in Fig. 4, downwardly to their outer extremities.

A disk 5 is placed inside each hood and is provided with a circumferential groove 6 to fit upon the wire 7. The cylindrical portions of the disk on each side of the groove 6 are adapted for gripping a band such as a surveyor's measuring tape without injury. A bar 8 integral with the hood is bent across the larger end thereof to retain the disk.

The hood 2 has an arm 9 projecting forwardly and laterally as shown in Fig. 2, and an operating lever 10 is fulcrumed upon a pin 11 at the extremity of the arm.

A bar 12 provided with a hood 13, in all respects similar to the hoods 2 and 3, is pivoted by a pin 14 to the lever 10.

The end of one wire 15 which it is desired to strain and join to another wire 16, is passed through the slot 4 into the hood 3 while the disk therein is resting against the bar 8, and a loop 17 is made upon the end of the wire 15. Similarly the end of the wire 16 is

passed through the slots 4 of the hoods 13 and 2 and is threaded through the loop 17 of the wire 15.

When the disk is drawn towards the smaller end of the hood by the strain upon the wire, the wire is gripped between the disk and the bar.

By reciprocating the lever 10 to the position shown by dotted lines in Fig. 2, the hood 13 draws the wire 16 through the hood 2 wherein it is gripped by the disk, the hood being held so that the disk, when free will roll towards the outer extremity of the hood.

Upon the return stroke of the lever 10 the hood 13 slides along the wire 16. The cycle of operations is repeated until the wire is sufficiently taut, when the wire 16 is secured to the loop 17 by means of a corresponding loop, which is then made upon the end of the wire 16.

The bar 12 and hood 13 as shown in Fig. 4, may be used independently of the rest of the apparatus, for the purpose of gripping a surveyor's metal measuring tape, a ring 18 being passed into an eye 19 formed in the end of the bar whereby the operator may secure a firm hold, or an ordinary spring balance (not shown) may be hooked to the ring for the purpose of indicating the strain applied to the measuring tape.

By this invention a wire, measuring tape or the like is gripped without being injured.

What I do claim and desire to secure by Letters Patent of the United States is:—

1. Apparatus for the purpose indicated, comprising in combination, a bar, a hood integral with each end of the bar, there being a slot through one side of each hood, the top of each hood sloping downwardly, to its end of the bar, a disk within each hood, an arm projecting forwardly and laterally from one hood, an operating lever fulcrumed to the arm by a pin, a second bar pivoted to the lever and a hood integral with the end of the bar and having a slot through one of its sides and having a top sloping downwardly to the end of the bar, substantially as set forth.

2. Apparatus for the purpose indicated, comprising in combination, a bar, a hood integral with and upon each end of the bar, there being a slot through one side of each hood, the top of each hood sloping downwardly to its end of the bar a disk within the hood, and having a circumferential groove, a bar across the larger end of the hood, an arm projecting forwardly and laterally from one hood, an operating lever fulcrumed to the arm by a pin, a second bar pivoted to the lever, and a hood integral with the bar and having a slot through one of its sides and having a top sloping downwardly to the end of the bar, substantially as set forth.

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

CHRISTOPHER BURTON.

Witnesses:

ERNEST SMITH BALDWIN,  
E. P. O'DONNELL.