

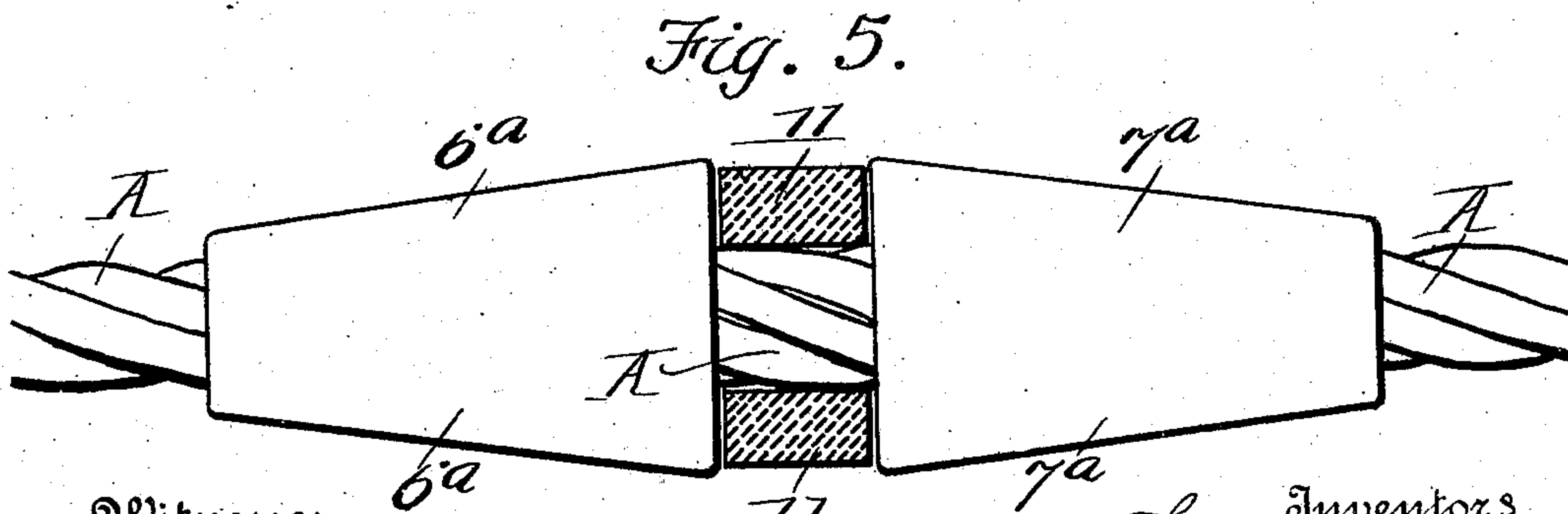
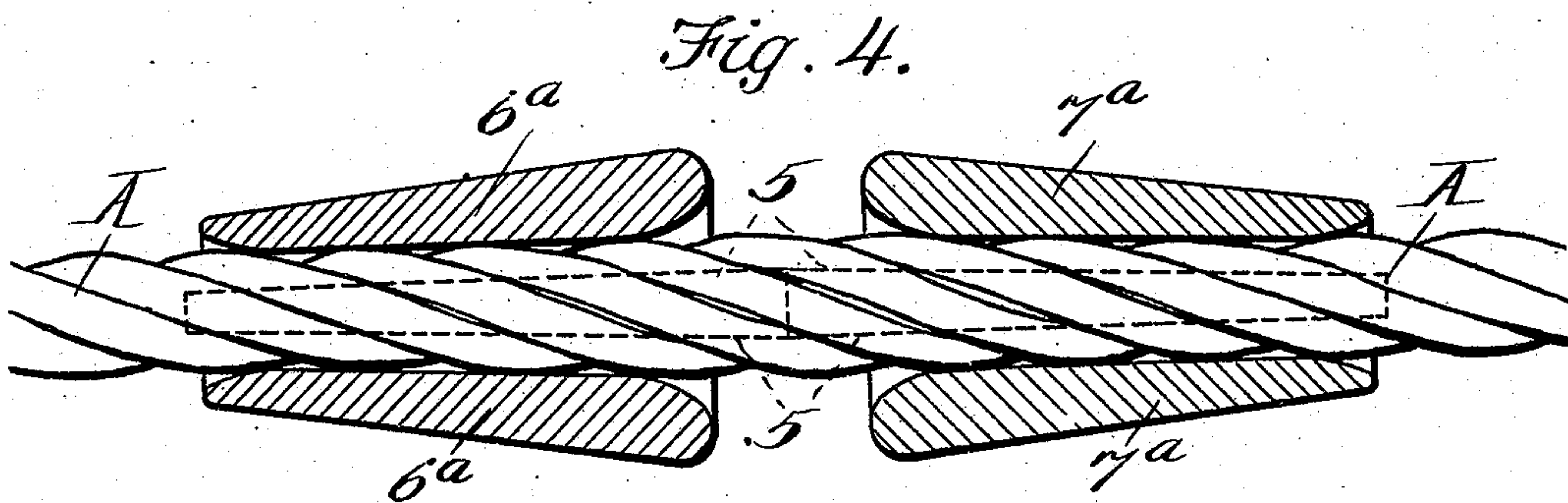
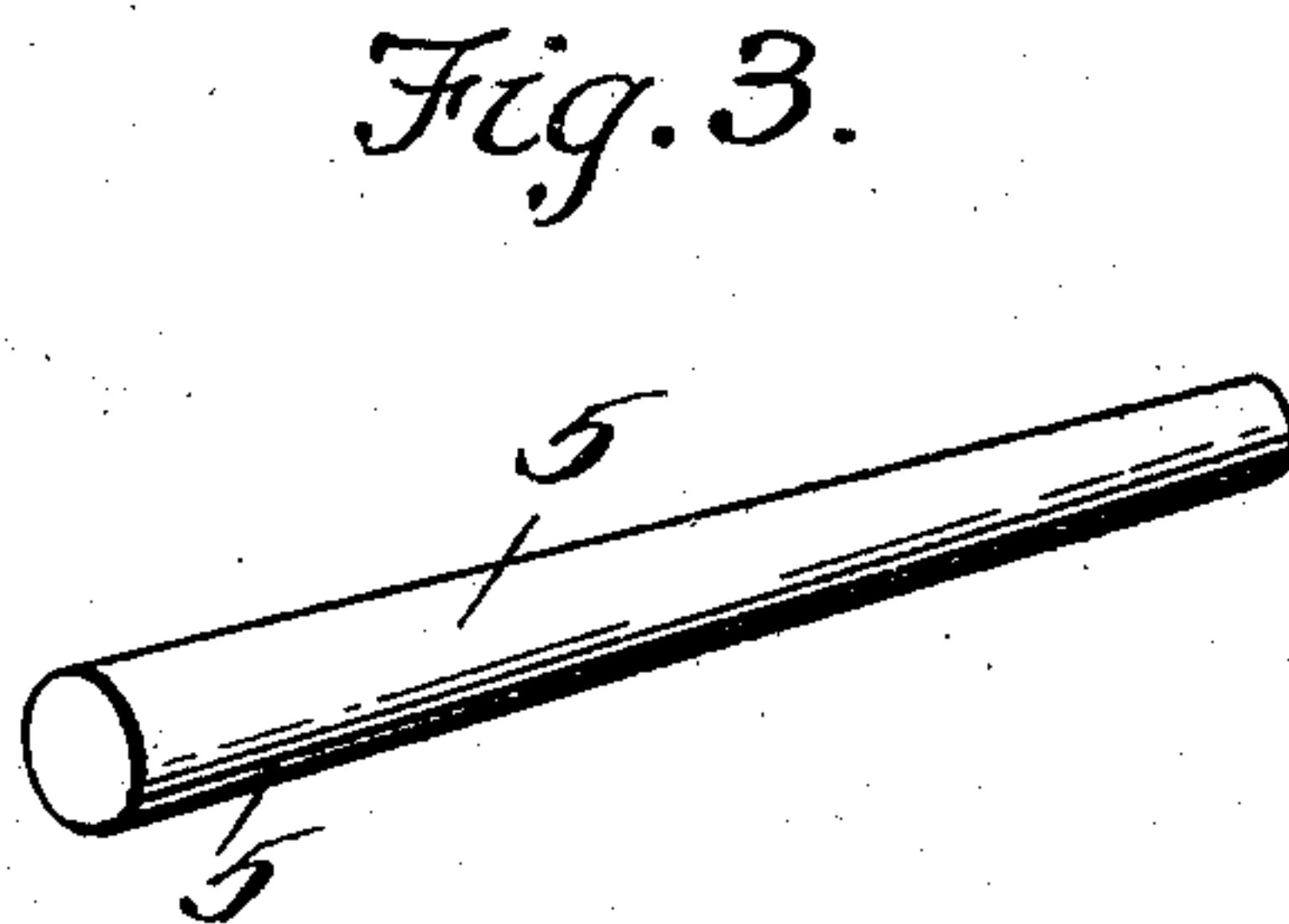
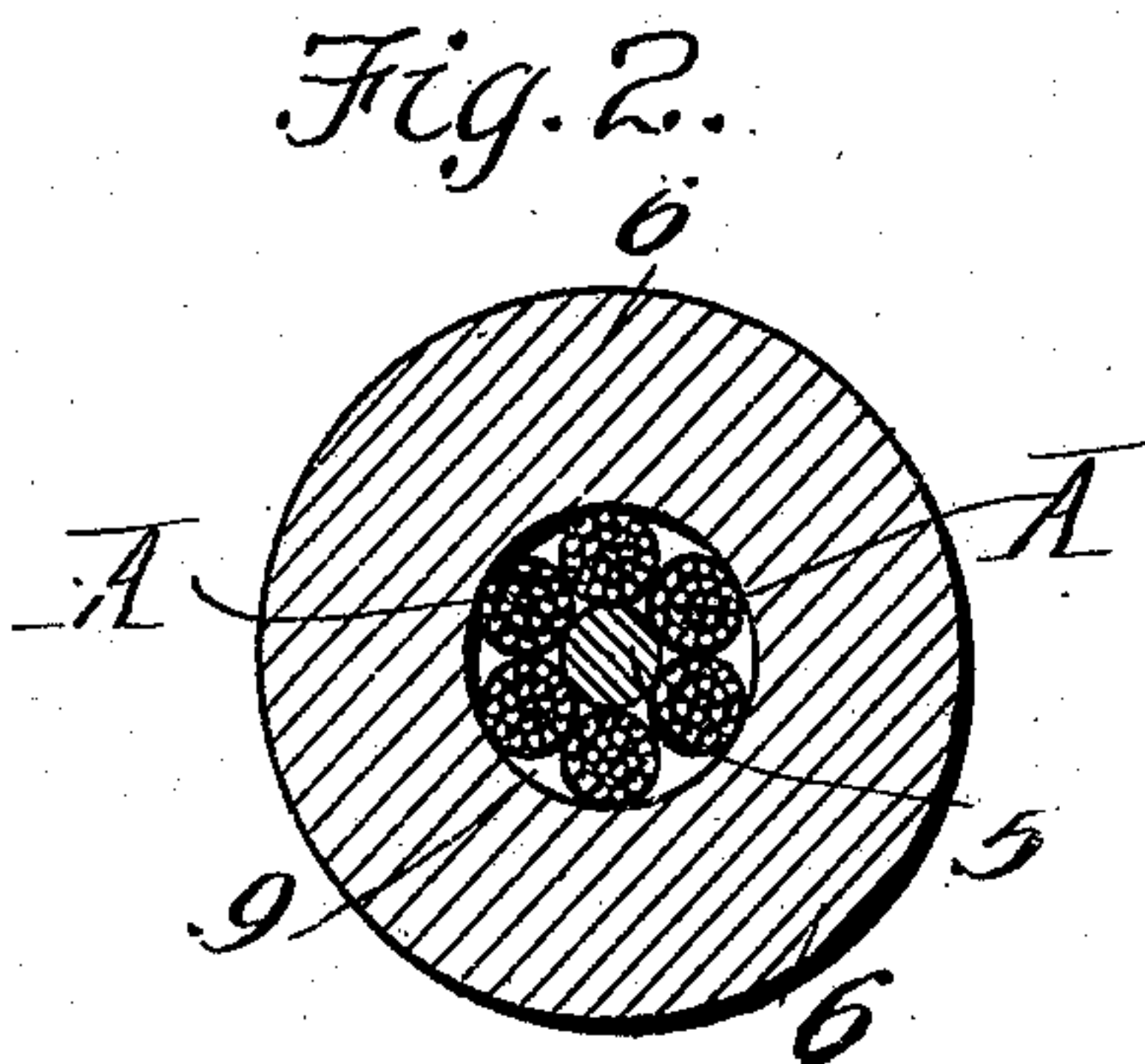
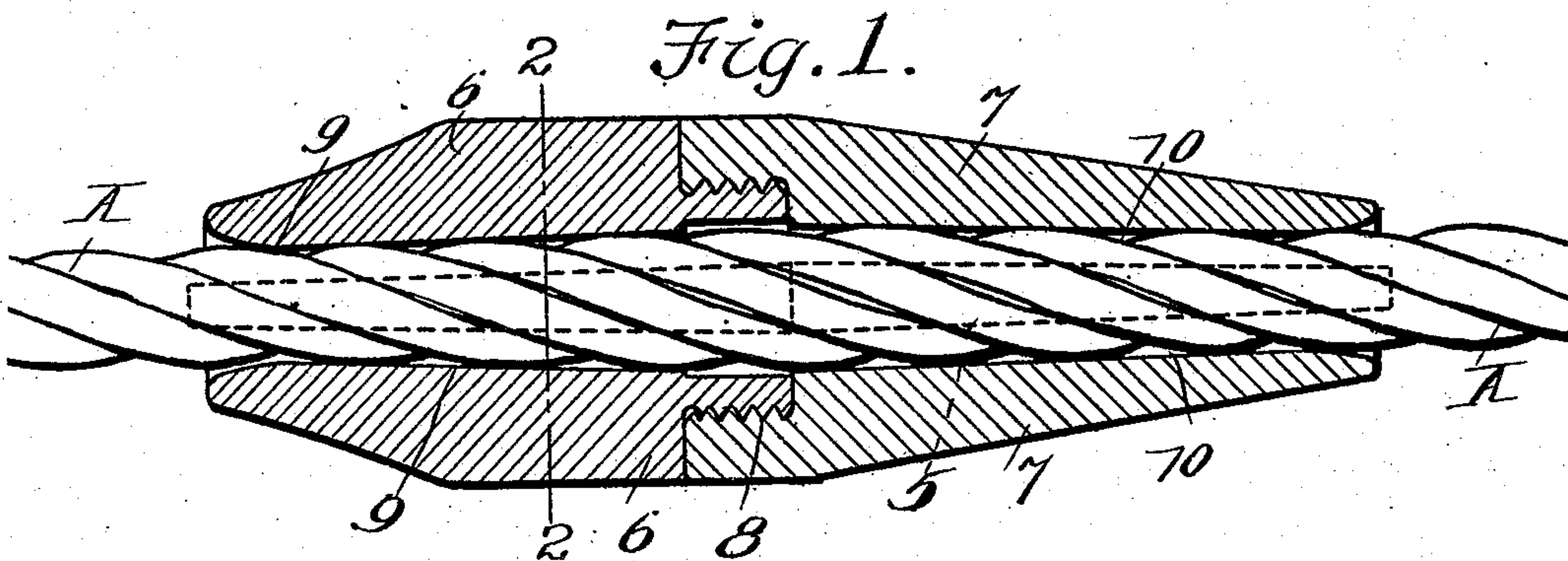
No. 854,957.

PATENTED MAY 28, 1907.

T. S. MILLER & C. L. WACHTER.
ROPE FASTENING OR BUTTON.

APPLICATION FILED JULY 26, 1906.

2 SHEETS—SHEET 1.



Witnesses
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J. M. Butters.

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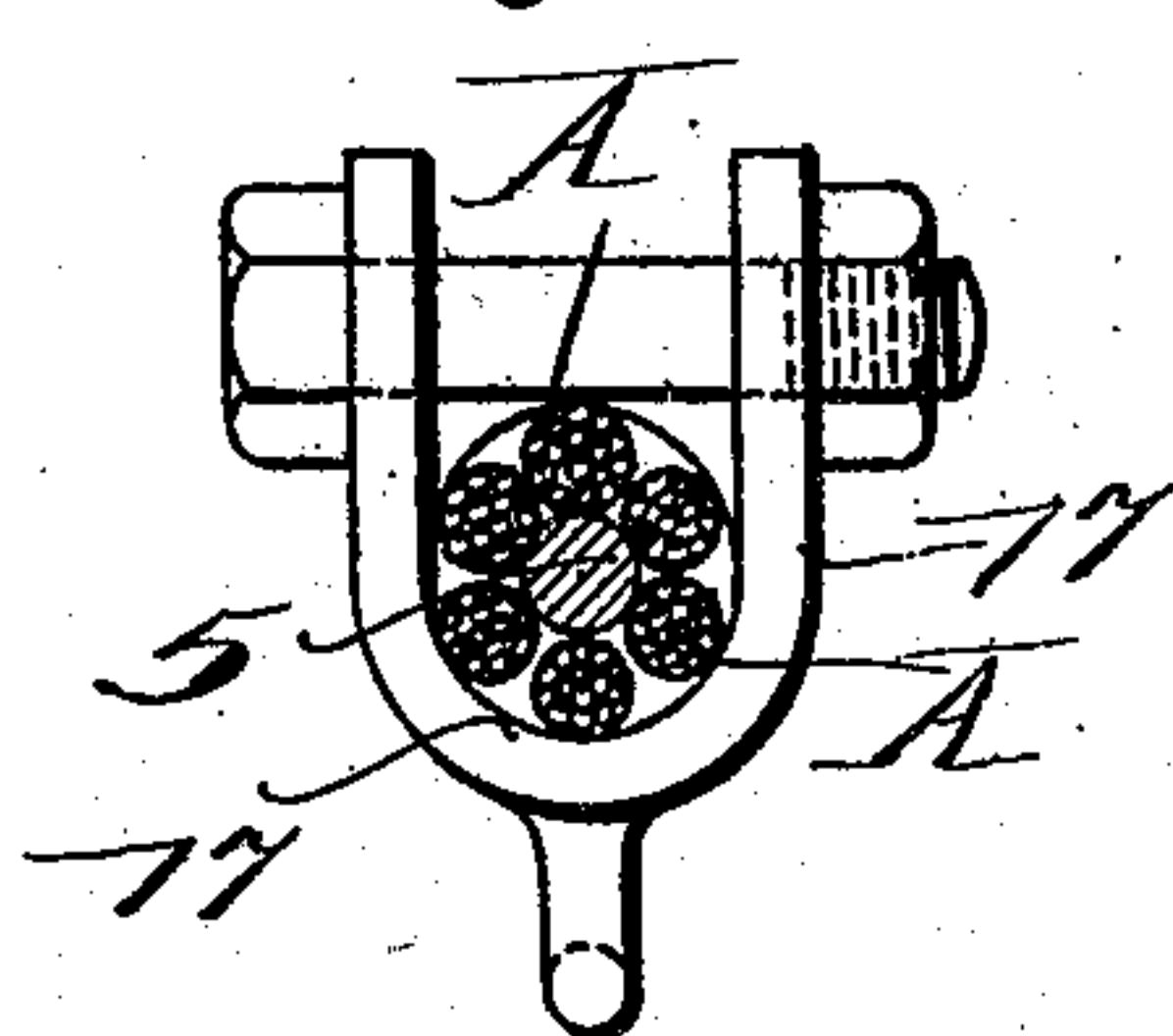
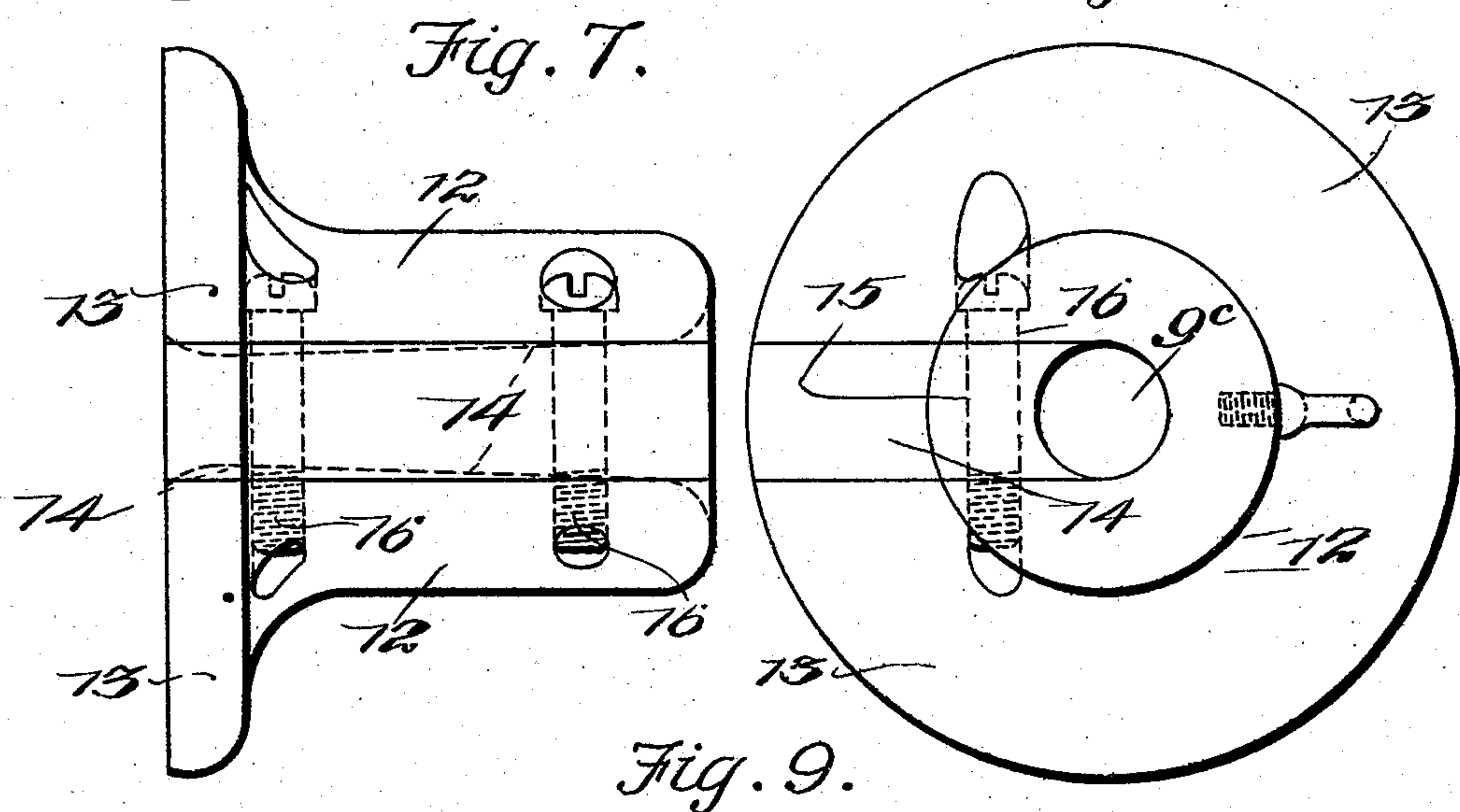
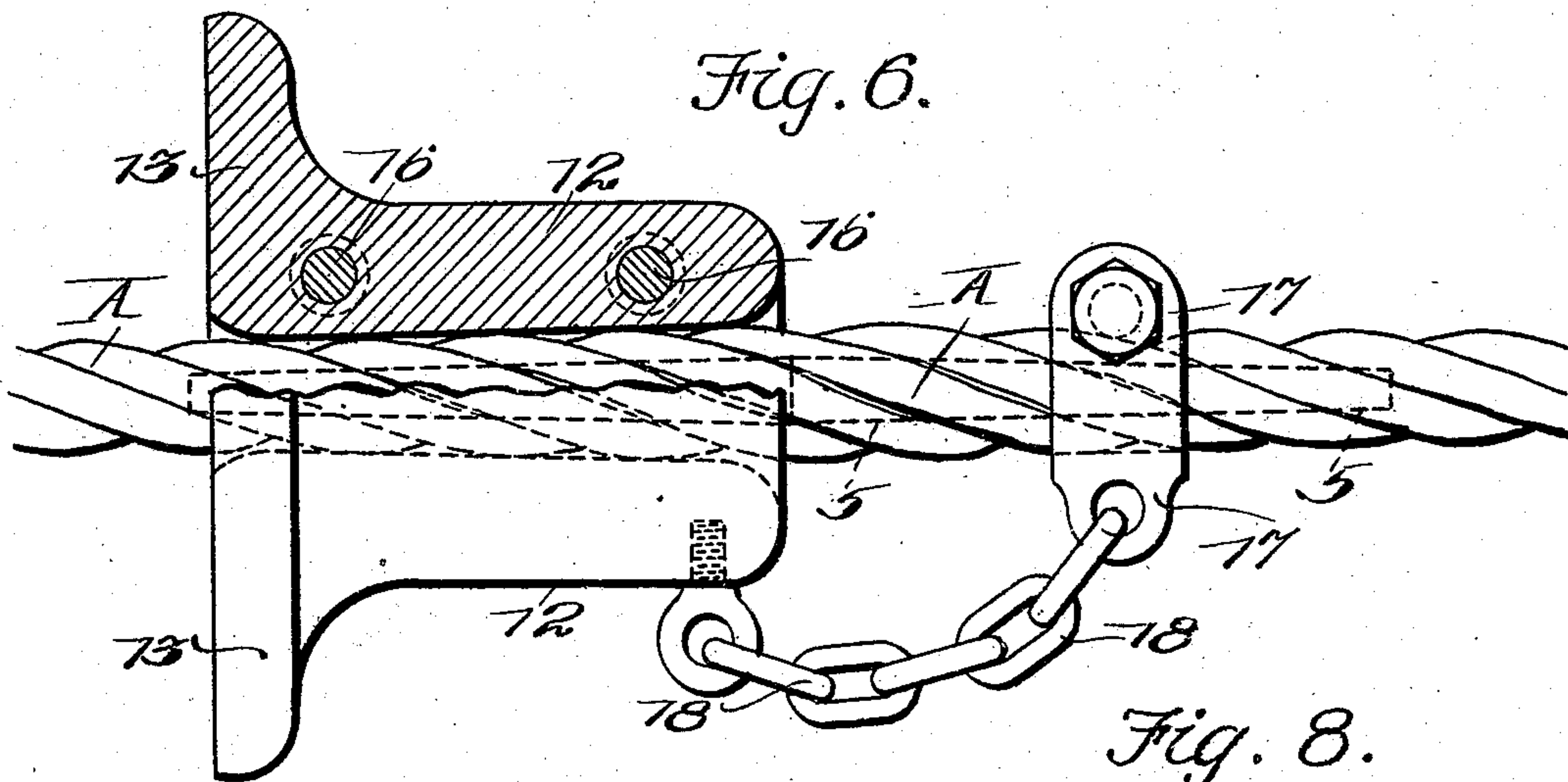
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2 SHEETS—SHEET 2.



Witnesses
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UNITED STATES PATENT OFFICE.

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ROPE FASTENING OR BUTTON.

No. 854,957.

Specification of Letters Patent.

Patented May 28, 1907.

Application filed July 25, 1906. Serial No. 327,626.

To all whom it may concern:

Be it known that we, THOMAS SPENCER MILLER, a citizen of the United States, and a resident of South Orange, in the county of Essex and State of New Jersey, and CHARLES L. WACHTER, a citizen of the United States, and a resident of Hoboken, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Rope Fastenings or Buttons, of which the following is a specification.

The present invention has reference to a button or fastener adapted to be secured to a rope.

In carrying out our invention we have in view as one purpose the provision of a fastening or button immovably secured to the rope and designed when brought into contact with an object, as when something is traveling toward the button on the rope, or the rope containing the button is traveling, to more firmly grip or take hold of the rope.

With the above and other objects in view our invention consists of the construction, combination and arrangement of parts set forth in and falling within the scope of the appended claims.

In the accompanying drawings like characters of reference indicate like parts in all the views, and Figure 1 is a view in longitudinal section showing a form of our improved button or fastening secured to a rope, such rope being shown in elevation; Fig. 2 is a transverse sectional view taken on the line 2—2 of Fig. 1; Fig. 3 is a perspective view of one form of tapered pin adapted to be inserted within the rope; Fig. 4 is a view similar to Fig. 1, of a slightly modified form of button; Fig. 5 is a view in side elevation showing two sections of the button spaced apart, the intervening space between the button sections being occupied by a collar or filling of any suitable material; Fig. 6 is a view partly in elevation and partly in section of still another modification of stop or button; Fig. 7 is a view in side elevation of the button shown in Fig. 6; Fig. 8 is a view in end elevation of the same; and Fig. 9 is a detail view of a portion of the hanger or clamp for securing the stop, such as is shown in Fig. 6, to the rope.

Referring now to the accompanying drawings in detail, A indicates a rope of any ordi-

nary form, in the present instance such rope being formed of twisted strands. Within this rope is inserted a tapered pin or spreader 5, the angle of which is less than the angle of repose and such pin being preferably relatively long. Upon the portion of the rope carrying the spreader are the two sections 60 of the button shown at 6 and 7, respectively, in Fig. 1, in such view the sections 6 and 7 being threaded or connected as at 8. In said Fig. 1 the angle of the exterior surface of the member 7 is greater than that of the member 6, so that if this rope is passing through a slot in one direction it will offer less resistance with a long angle than with a short angle. It will be noted, of course, that the bores 9 and 10 of the sections 6 and 7, respectively, which are in alinement, and form a passageway for the rope have an angle which is substantially the same as the angle of the taper of the pin. When the half button is once driven on there is no disposition for it to creep in the opposite direction unless hit by a blow in that direction and each half of the button acts as a fender for the opposite half. Any blow that may be given to the button as the rope is traveling, or when it is contacted with by an object moving toward the button on the rope, will tend to wedge or drive the section of the button onto the enlarged part of the rope, while there will be no blow transmitted to the other half.

In Fig. 4 the button is shown as comprising the two sections 6^a and 7^a, which are entirely disconnected, while in Fig. 5 between the sections 6^a and 7^a of the button we place a collar or filling 11 of any suitable material, such as rubber, marline, or wood, which is of a length equal to the distance between the two halves of the button when thoroughly and firmly seated. In Fig. 6 we have shown still another form of button or stop, this being indicated as an entirety by the numeral 12 and is provided with a widened or enlarged contact face 13. A slot 14 of a width equal to the rope extends from the outer surface of the button to the bore 9^c thereof so that the button or stop may be slipped sideways onto the rope. After the button has been suitably arranged over the portion of the rope carrying the tapered pin the key member 15 is inserted in the slot and locked

in position by means of the screws 16. The stop is then driven onto the widened or tapered portion of the rope where it is expected to remain. 17 is a clamp carrying the chain 5 18 connected at its other end with the button or stop, so that when the latter is disengaged from the rope it will not fall but will be suspended therefrom by means of the clamp and chain.

10 A button or stop constructed in accordance with our invention is designed for the most severe service, capable of withstanding the shocks and jars usually encountered in the class of work for which the device is used, 15 and such button or spreader may be placed on and removed from the rope with facility.

Having thus described our invention, what we claim is:—

20 1. The combination with a rope, cable, or the like, of a tapered pin inserted in the same, the angle of taper of the pin being less than the angle of repose, and a shell mounted upon the rope at that portion containing the pin.

25 2. The combination with a rope, cable or the like, of a pin inserted within the same, and a shell surrounding the portion of the rope containing the pin, said pin being of a length substantially equal to the length of the shell.

30 3. In combination with a rope containing a tapered spreader, the angle of which is less than the angle of repose, a shell member surrounding the portion of the rope containing

the spreader and having a bore extending approximately parallel to the angle of the 35 spreader and adapted to be locked against movement upon the rope.

4. The combination of a rope or cable, a spreader consisting of a tapered pin inserted within the rope, and a shell composed of two 40 sections surrounding the portion of the rope containing the spreader, the bore of the shell sections being approximately parallel to the tapering pin, whereby a blow on either shell section is not transmitted to the spreader or 45 to the other section.

5. The combination with a rope, of a stop or button therefor having a contact surface and a tapered bore, and a tapered pin within the rope extending approximately parallel 50 with the bore, whereby a blow upon the contact surface of the stop or button tends to drive the same more firmly into engagement with the rope.

In testimony whereof we have signed our 55 names in the presence of two subscribing witnesses.

THOMAS SPENCER MILLER.

CHARLES L. WACHTER.

Witnesses to C. L. Wachter's signature:

R. B. CAVANAGH,

S. N. BUTTERS.

Witnesses to Thomas Spencer Miller's signature:

R. B. CAVANAGH,

W. A. PAULING.