

No. 664,814.

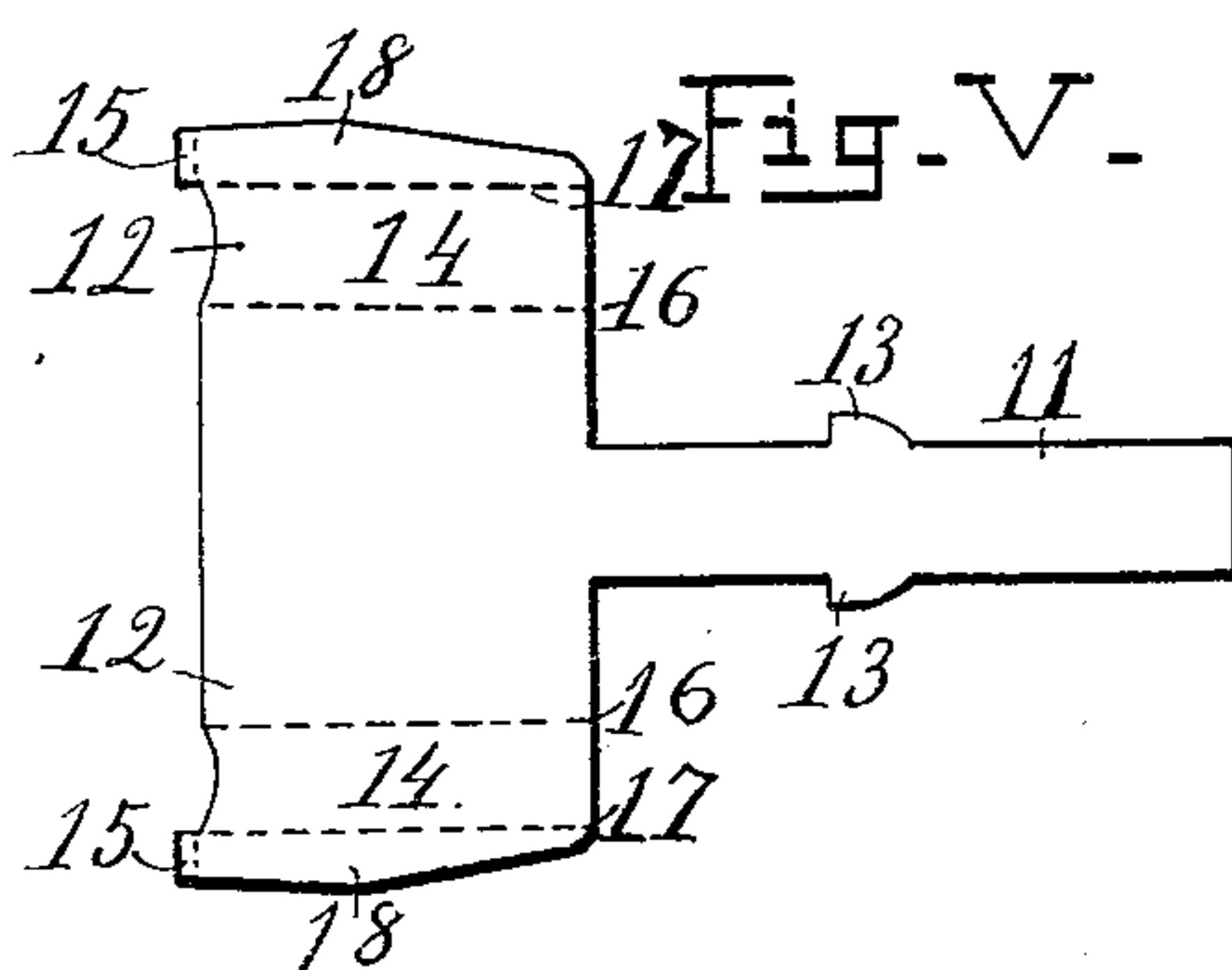
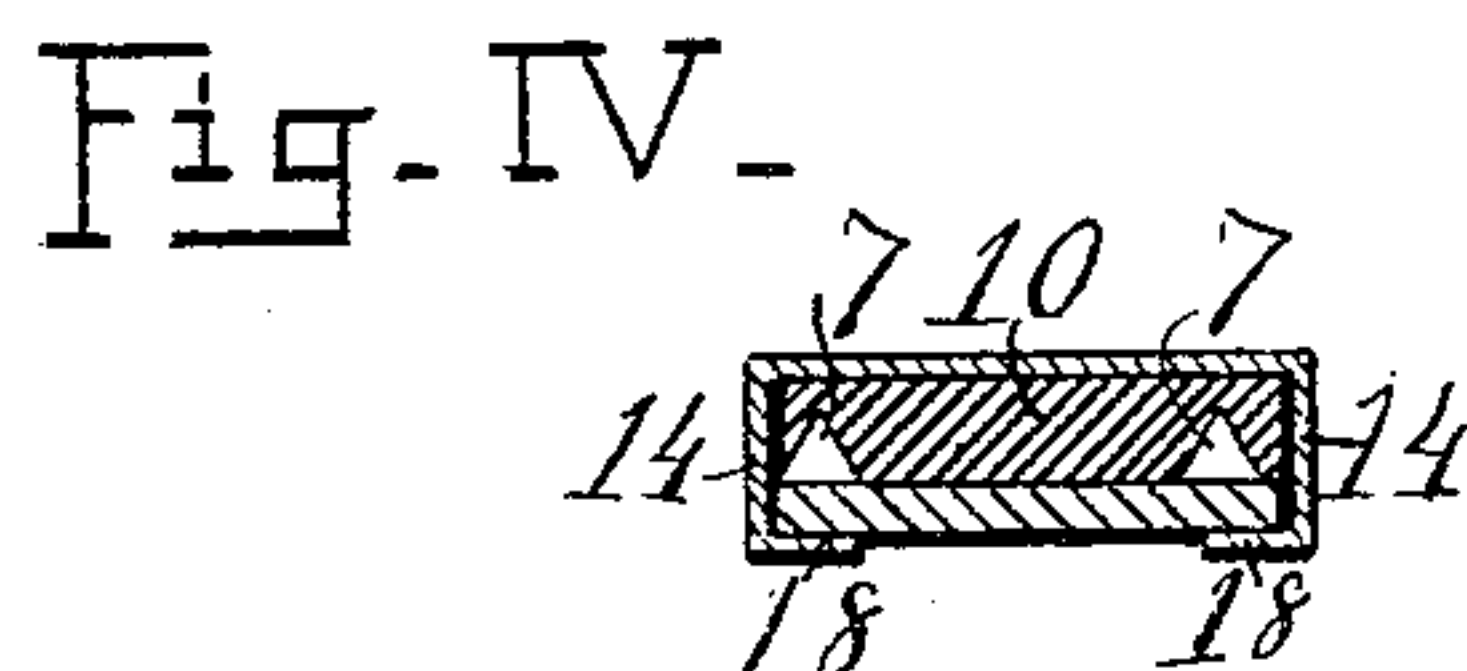
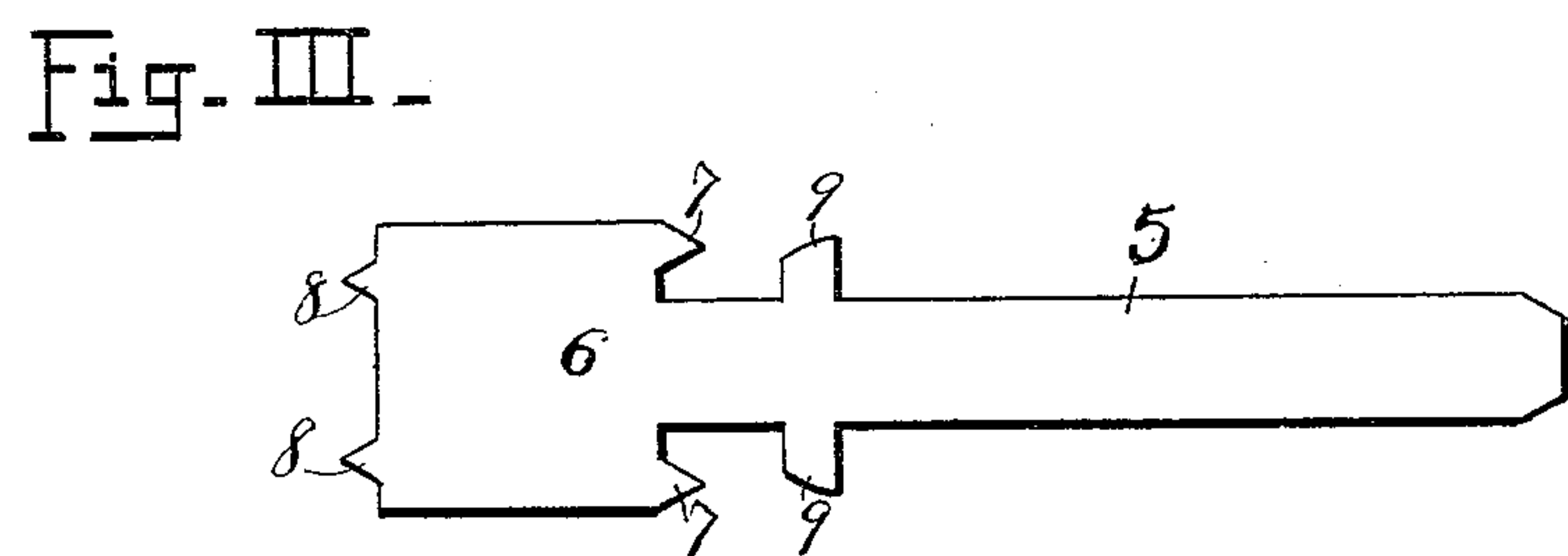
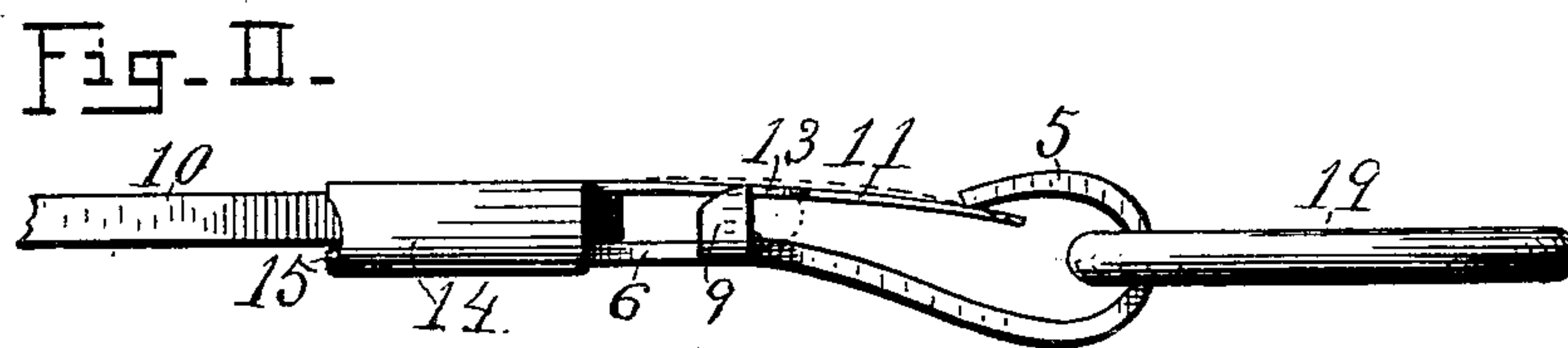
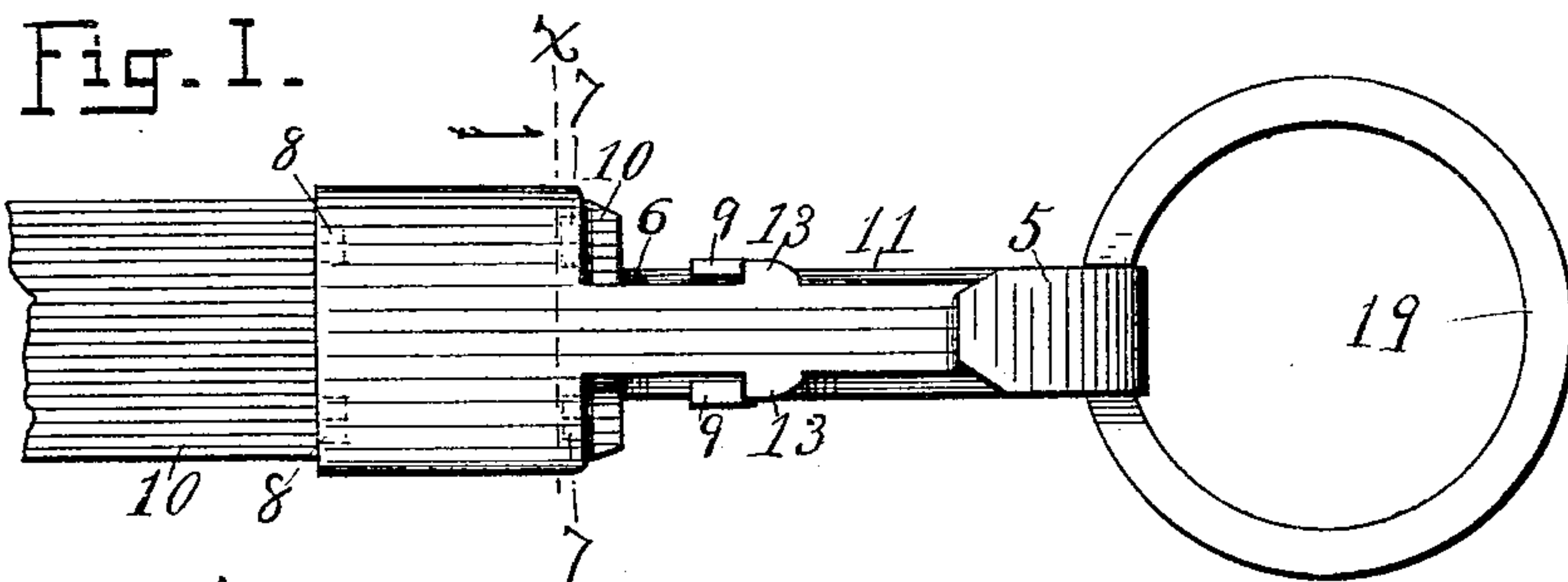
Patented Dec. 25, 1900.

E. MANES.

SNAP HOOK.

(Application filed Apr. 4, 1900.)

(No Model.)



WITNESSES,
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UNITED STATES PATENT OFFICE.

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SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 664,814, dated December 25, 1900.

Application filed April 4, 1900. Serial No. 11,502. (No model.)

To all whom it may concern:

Be it known that I, EPHRAIM MANES, a citizen of the United States, residing at Chattanooga, in the county of Hamilton and State of Tennessee, have invented a new and useful Improvement in Snap-Hooks; and I do hereby declare the following to be a full, clear, and exact description of the same.

This invention relates in general to snap-hooks which are used for separably connecting straps, cords, chains, &c., and more particularly to that class of snap-hooks having spring-tongues; and its objects are, first, to adapt the tongue to be attached to the hook without the aid of riveting or screws, and, secondly, to adapt the said tongue to serve as an auxiliary in removably securing a strap to the hook.

To this end my invention consists in the construction and combination of parts forming a snap-hook hereinafter more fully described, and particularly pointed out in the claims, reference being had to the accompanying drawings, in which—

Figure I is a face view of a snap-hook according to my invention attached to a strap and carrying a ring. Fig. II is an edgewise view of the same. Fig. III is a face view of the hook-blank. Fig. IV is a transverse section at the line *x* of Fig. I. Fig. V is a face view of the tongue-blank.

5 represents the hook proper provided with a body 6, which is integral therewith, this piece being usually punched as a blank out of heavy sheet metal and afterward bent into hook form.

7 7 and 8 8 are spurs, and 9 9 are side lugs which project from the edges of the body 6 when it is in the blank form, but which are afterward bent up to project about at right angles from the face. The spurs 7 8 are to penetrate the strap 10 and hold the hook to the strap.

11 is the tongue, made of sheet spring material and shaped with lateral wings 12, that extend across over the body 6 of the hook, and with side lugs 13 to engage the lugs 9, as shown in Figs. I and II. The wings 12 of the tongue are bent at the dotted lines 16 of the blank to form box sides 14, extending down past the edges of the hook-body 6, and they are

further bent at the lines 17 to extend laps 18 under the hook-body. The tongue thus forms a casing which may be slipped from the rear end forward over the hook-body above the spurs 7 and 8. In thus passing forward the tongue-lugs 13 come in contact with the body-lugs 9, but the top edges of the latter being slanted rearward guide the lugs 13 up over them. At this time the point of the tongue comes against the hook near its free end and requires to be pressed down to pass under that end into its normal position. The tongue and the hook-body form a box around the strap 10 near its end, and they are so fitted together that they hold the spring-tongue normally pressed up against the point of the hook. The tongue-blank is formed with lips 15 also, which being bent upward engage the rear end of the body to prevent the tongue from going farther forward, and the lugs 13 having passed beyond the lugs 9 the tongue is thereby held against working off or being detached from the body in service. A ring 19 or any other suitable device may be connected with this snap-hook by pressing it down upon the tongue and under the point of the hook in the usual manner. To attach the strap to the hook, remove the tongue by raising the middle of the spring until its lugs 13 are disengaged from the lugs 9 of the body. Then slide the tongue off from the hook rearward. Now place the strap in position over the spurs 7 8 and pound it down until the spurs penetrate the strap and the strap rests on the inner face of the hook-body. Then return the tongue to its normal position, as before described, when the whole snap-hook will be rigidly secured to the strap. While a nail or a chip of wood may be used to raise the tongue-lugs 13 over the body-lugs 9, yet I have made the height of the studs 9 equal to the thickness of the stock of the ring 19, so that by crowding the ring back under the middle of the tongue it raises the tongue and serves to disengage the lugs, so that the tongue may be removed. It must be understood that this midway bending of the spring causes so much friction on the bearing parts that a quite hard pull is necessary to start the spring backward, so there is no possible danger of its working loose and being lost off;

but after the spring-lugs are disengaged the ring may be pushed free, and then the tongue will slide off or on easily. Thus this snap-hook may be attached to a strap without the aid of any outside device--such as sewing, nailing, or riveting--and it may be done by any person without the aid of tools. Furthermore, it may also be removed from the strap without the aid of tools and without injury to the snap-hook and with no injury to the strap excepting the spur indentations. Without any material modification these spurs would engage a chain-link or a rope or cable if the box of the snap-hook were shaped to receive such.

Of course it will be readily understood that the spurs might be on the tongue-piece and the side boxing be on the hook-body and still conform to my invention. It will also be understood that either the hook portion or the spring portion of this snap-hook might be riveted or otherwise secured to its own box portion instead of being integral therewith, as herein shown.

Having thus fully described my invention, what I believe to be new, and desire to secure by Letters Patent, is the following:

1. A snap-hook comprising a body portion provided with spurs and with side lugs pro-

jecting from one face, and a tongue portion having box sides with underlaps to slip over the body portion, and further having lugs to engage the aforesaid side lugs, substantially as described.

2. A snap-hook comprising a hook portion and a tongue portion; one of these portions being fitted to slide forward upon the other portion and each of them provided with side lugs; the lugs of the outer portion being fitted to spring down beyond the lugs of the inner portion to engage the same, and to be raised out of engagement therewith, substantially as described.

3. A snap-hook comprising a hook portion and a tongue portion; one of these portions having box sides and underlaps to engage and slide forward upon the other; each of the portions having side lugs, the lugs of one portion to engage the lugs of the other portion and one of the portions having lips to engage the other portion and stop its forward movement thereon, substantially as described.

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

EPHRAIM MANES.

Witnesses:

H. F. LAURENCE,
J. A. WATTS.