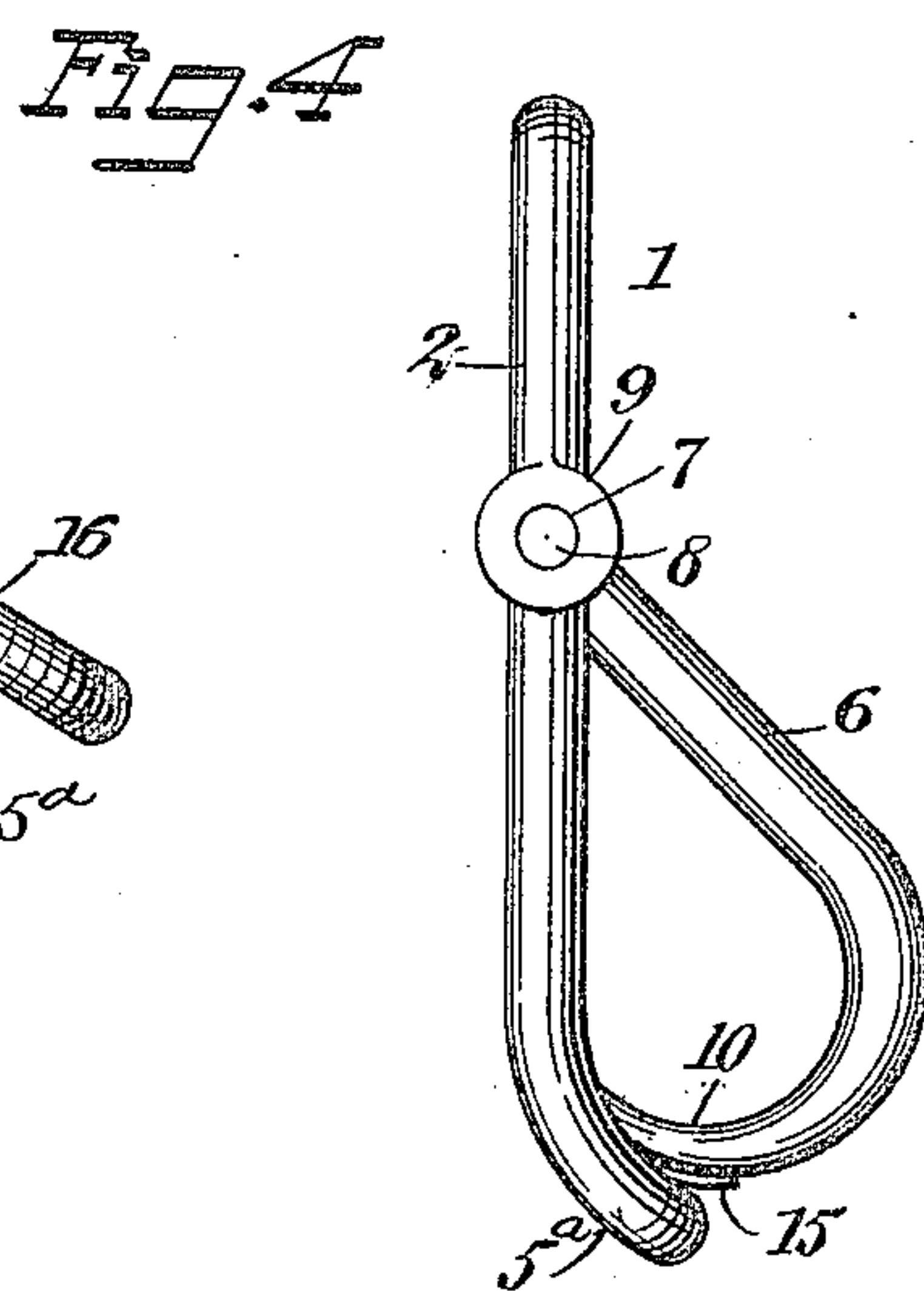
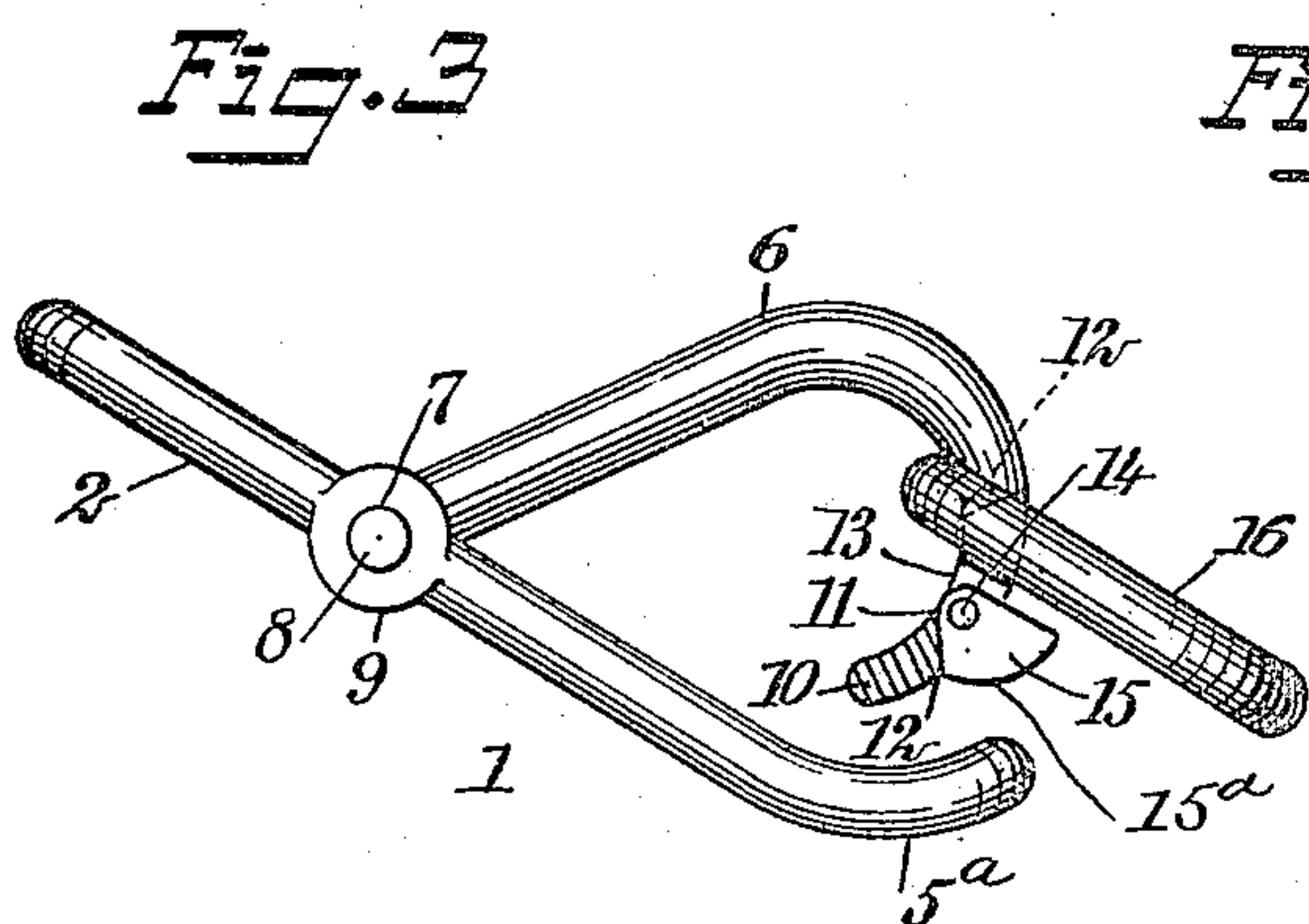
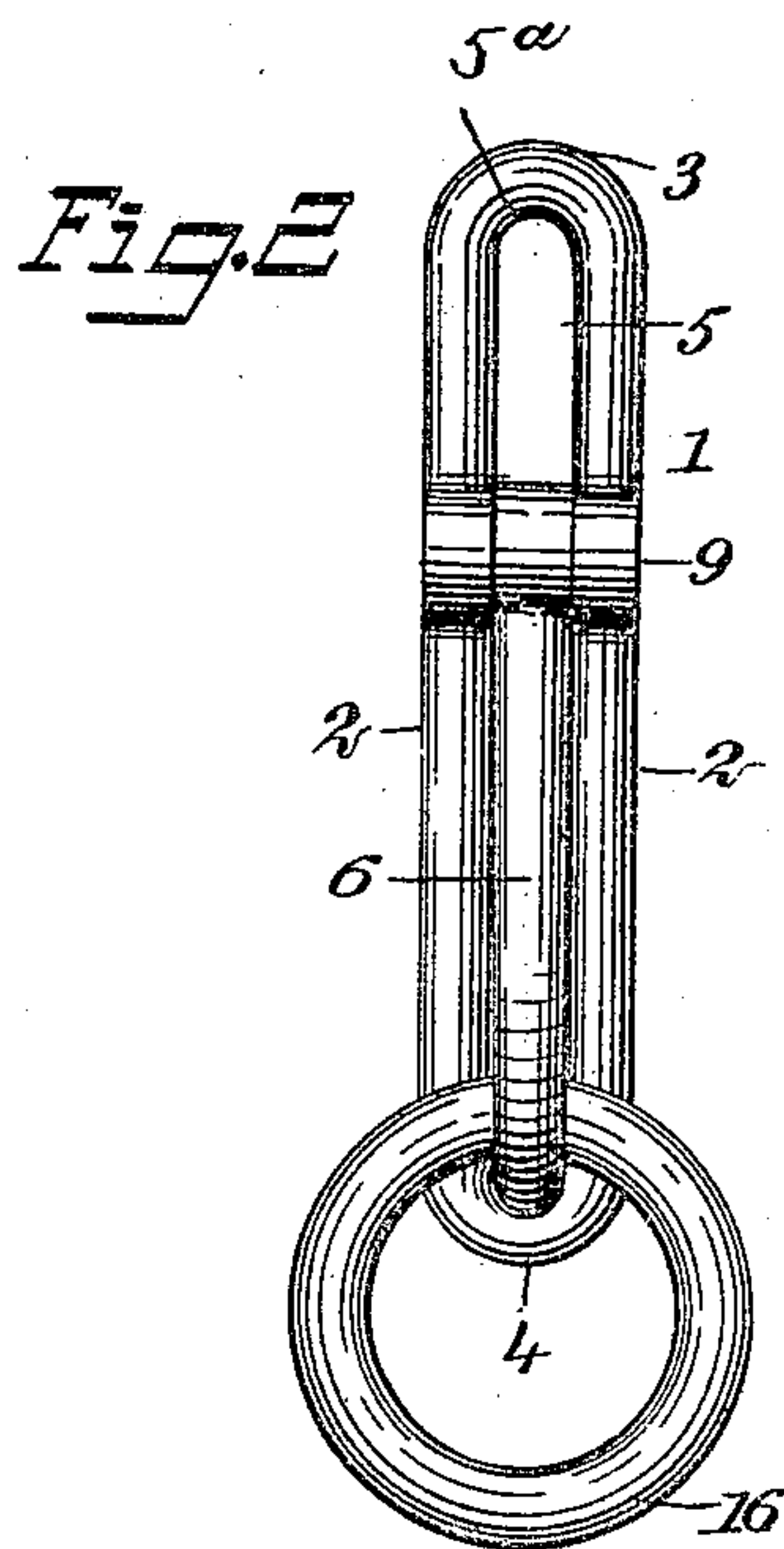
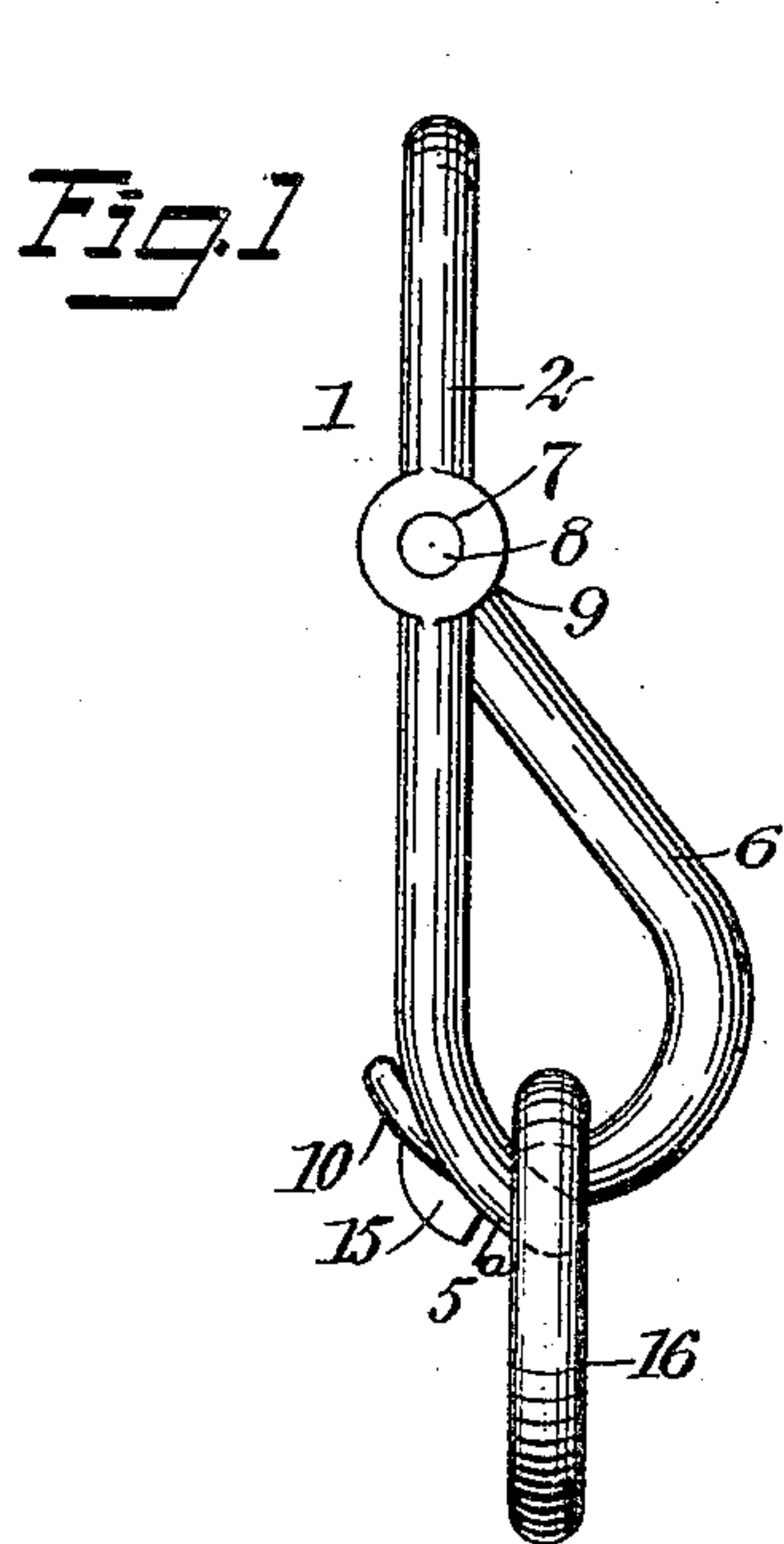


No. 817,561.

PATENTED APR. 10, 1906.

S. HOAR.
SNAP HOOK.

APPLICATION FILED JULY 8, 1905.



WITNESSES:
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SAMUEL HOAR, OF HIBBING, MINNESOTA.

SNAP-HOOK.

No. 817,561.

Specification of Letters Patent.

Patented April 10, 1906.

Application filed July 6, 1905. Serial No. 268,327.

To all whom it may concern:

Be it known that I, SAMUEL HOAR, a citizen of the United States, and a resident of Hibbing, in the county of St. Louis and State of Minnesota, have invented a new and Improved Snap-Hook, of which the following is a full, clear, and exact description.

This invention relates to safety or snap hooks; and it consists, substantially, in the details of construction and combinations of parts hereinafter more particularly described, and pointed out in the claims.

One of the principal objects of the invention is to provide a snap-hook of an embodiment to overcome numerous disadvantages and objections encountered in the use of many other structures hitherto devised for similar purposes.

A further object is to provide a device of the character mentioned which is exceedingly simple in construction and comparatively inexpensive to manufacture, besides being strong and durable, light in weight, and easy of manipulation, thoroughly effective and reliable for its purposes, and possessing the capacity for long and repeated service.

The above and additional objects are attained by means substantially such as are illustrated in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side view of a safety or snap hook embodying my improvements. Fig. 2 is a front view thereof. Fig. 3 is a side elevation indicating more clearly the construction and organization of parts and also illustrating the position assumed by the safety or gravity catch as the bill of the hook is about to be introduced into the mousing or body of the hook; and Fig. 4 is a view similar to Fig. 1, minus the ring and illustrating the position to which the safety or gravity catch is caused to be moved to enable the bill of the hook to be carried through the mousing or body thereof.

Before proceeding with a more detailed description it may be stated that in the form of my improvements herein shown I provide a safety or snap hook of special construction, together with a specially-constructed mousing or body, in which the hook is mounted and with which it coöperates, the hook being provided with special means for causing the same to become automatically engaged with

an end of the mousing or body as the bill of the hook is introduced thereinto to secure in place thereon a bit-ring or other device in connection with which the structure is employed. The embodiment is such as that the maximum of strength is derived for the structure, and while I have herein represented my improvements in a certain preferred embodiment it will be understood, of course, that I am not limited thereto in precise detail, since immaterial changes therein may be resorted to coming within the scope of my invention.

Reference being had to the drawings by the designating characters thereon, 1 represents in entirety the body of my improved safety or snap hook, the same being constructed of a single piece of metal of proper dimensions and comprising parallel members 2, having intersecting therewith in curvilinear angles the upper and lower integral end members 3 and 4, thus giving to the said body substantially an oblong form and leaving the desired extent of space 5 between said parallel members 2 thereof. The lower portion of the end member 4 of the body is bent or carried beyond the planes of the front faces of the said parallel members 2 of the body, as indicated at 5^a in Figs. 1, 3, and 4, thus to form a forwardly-projecting curved bearing for the hook 6 when the latter is in locked position. The upper end of the shank of said hook is pivotally mounted at 7 on a pin 8, supported in bearings 9 therefor, formed integrally with the said side members 2 of the body a suitable distance from the aforesaid end member 3, thus providing between the said end member and the pivotal support of the said shank of the hook a loop 5^a, in which may be fastened the strap or other device to which the structure is to be attached in use. The portions of the parallel members 2 of the body 1 lying intermediate of the said pivotal support of the shank of the hook and the forwardly or outwardly curved end member 4 of the body may be said to constitute the mousing for the hook, inasmuch as these portions of said members serve to connect the shank and bill 10 thereof, as will be apparent.

The bill 10 of the hook is formed at a suitable part thereof with a slot 11, the end walls 12 of which are divergent outwardly from the inner face of the bill, while between the side walls 13 thereof is pivoted at 14 the safety or gravity catch 15, which is widened at 15^a in the direction of the outer face of the bill of

the hook and formed with an outer curved edge and which has a swinging movement within the said slot, so that when the bill of the hook is carried within the mousing (body 1) and directly within the forwardly or outwardly curved lower member 4 thereof the said safety or gravity catch will be carried into the slot (as indicated in Fig. 4) until the hook has been moved to the position indicated in Fig. 1, whereupon the catch will gravitate or swing downwardly or outwardly within the slot, thus to form a locking engagement with the opposite side of the said forwardly or outwardly curved lower member 4 of the said mousing. It will thus be seen that the bit-ring 16 or other device which has previously been placed upon the bill of the hook will be securely held in place thereon and also that the greater the strain imposed upon said ring the tighter or more secure will be the locking effect. The curved portion of the hook is also given an increased bearing in a direction opposing that from which all strain upon the hook proceeds, and the parallel members 2 of the mousing (body 1) are also in such juxtaposition to the sides of the curved portion of the hook as to firmly brace and strengthen the latter in both directions laterally. In other words, I provide the body 1 of duplicate parts, as it were, forming both a specially-constructed mousing for the hook and a loop for the attachment of the structure to a strap or other device (not shown) and in virtue of which embodiment increased strength and serviceability are derived, as well as other advantages not found in many other structures for similar purposes.

The structure is not only adapted for use upon harness, but is equally applicable for many other uses, and it is thought the construction and organization of the parts thereof will be fully understood without further detailed description thereof.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A snap-hook comprising a body of oblong form, and a hook having the shank thereof pivoted between the parallel side members of the body and provided with means for automatically engaging a portion of the body when carried in the direction thereof, embodying a gravity-catch, said body being straight for its length and having an end thereof outwardly curved and including said mentioned portion.

2. A snap-hook comprising a body of oblong form, and a hook having the shank thereof pivoted between the parallel side members of the body and provided with means for automatically engaging a portion of the body when carried in the direction thereof, embodying a gravity-catch pivotally mounted within the

bill of the hook, said body being straight for its length and having an end thereof outwardly curved and including said mentioned portion.

3. A snap-hook comprising a body of oblong form, and a hook having the shank thereof pivoted between the parallel side members of the body and provided with means for automatically engaging a portion of the body when carried in the direction thereof, embodying a gravity-catch pivotally mounted within the bill of the hook, the same being widened in the direction of the outer face of said bill.

4. A snap-hook comprising a body of oblong form, and a hook having the shank thereof pivoted between the parallel side members of the body and provided with means for automatically engaging a portion of the body when carried in the direction thereof, embodying a gravity-catch pivotally mounted within the bill of the hook, the same being widened in the direction of the outer face of said bill and having its outer edge curved.

5. A snap-hook comprising a body constructed with parallel members having end members intersecting the same in curvilinear angles, one of said end members being outwardly curved with respect to one of the faces of said parallel members, a hook, the shank of which is pivotally mounted between the parallel members, and the bill of which is provided with means for automatically engaging with said outwardly-curved end member when the bill of the hook is carried thereover, the portions of the said parallel members lying between the pivotal support of the shank of the hook and this outwardly-curved end member of the body constituting a mousing.

6. A snap-hook comprising a body constructed with parallel members having end members intersecting the same in curvilinear angles, one of said end members being outwardly curved with respect to one of the faces of said parallel members, a hook, the shank of which is pivotally mounted between the parallel members, and the bill of which is provided with means for automatically engaging with said outwardly-curved end member when the bill of the hook is carried thereover, the portions of the said parallel members lying between the pivotal support of the shank of the hook and this outwardly-curved end member of the body constituting a mousing, said means embodying a pivoted safety device supported by the bill of the hook.

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

SAMUEL HOAR.

Witnesses:

F. N. GLEASON,
J. S. RAYBURN.