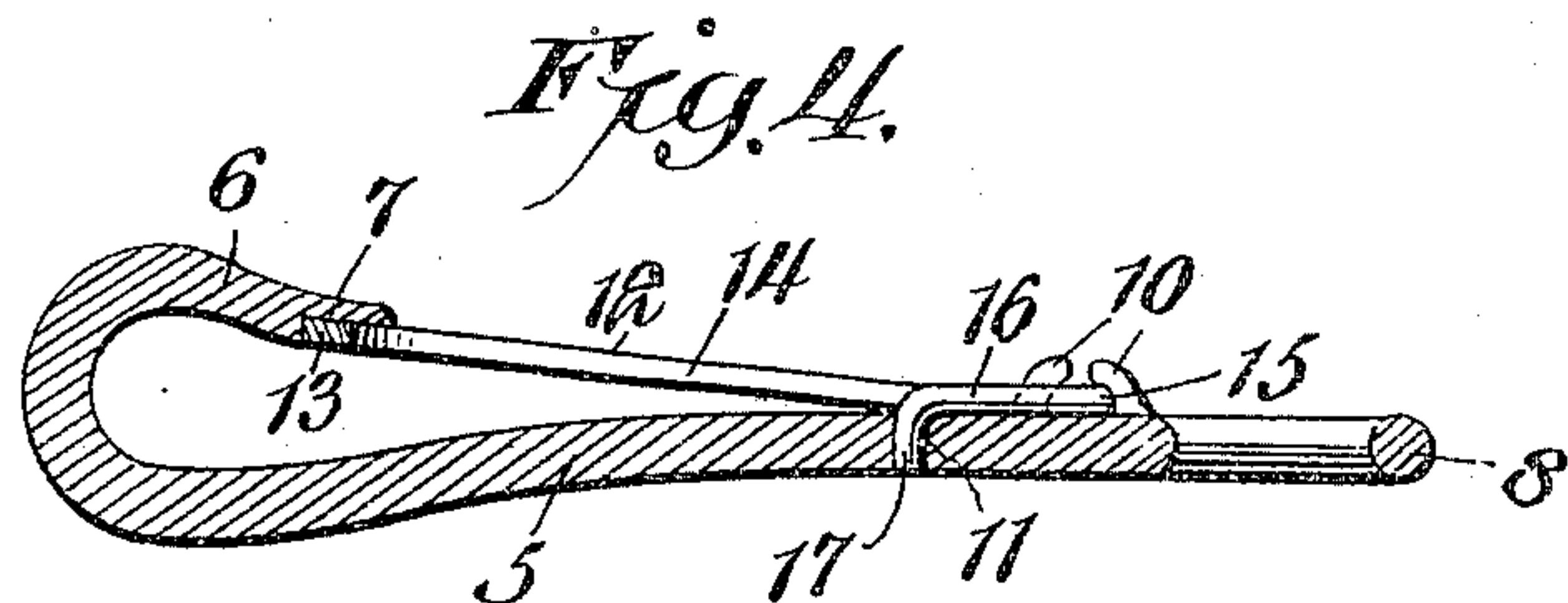
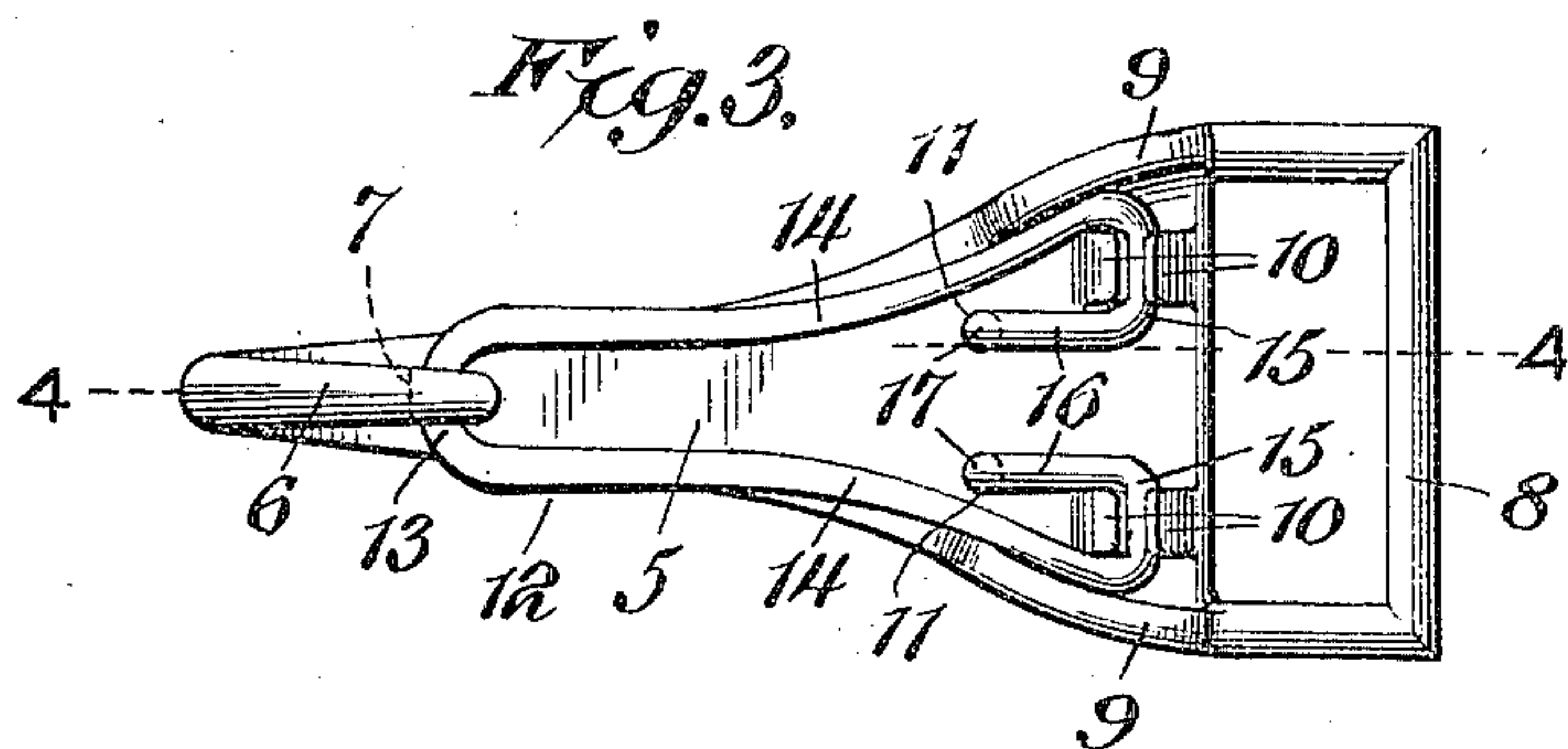
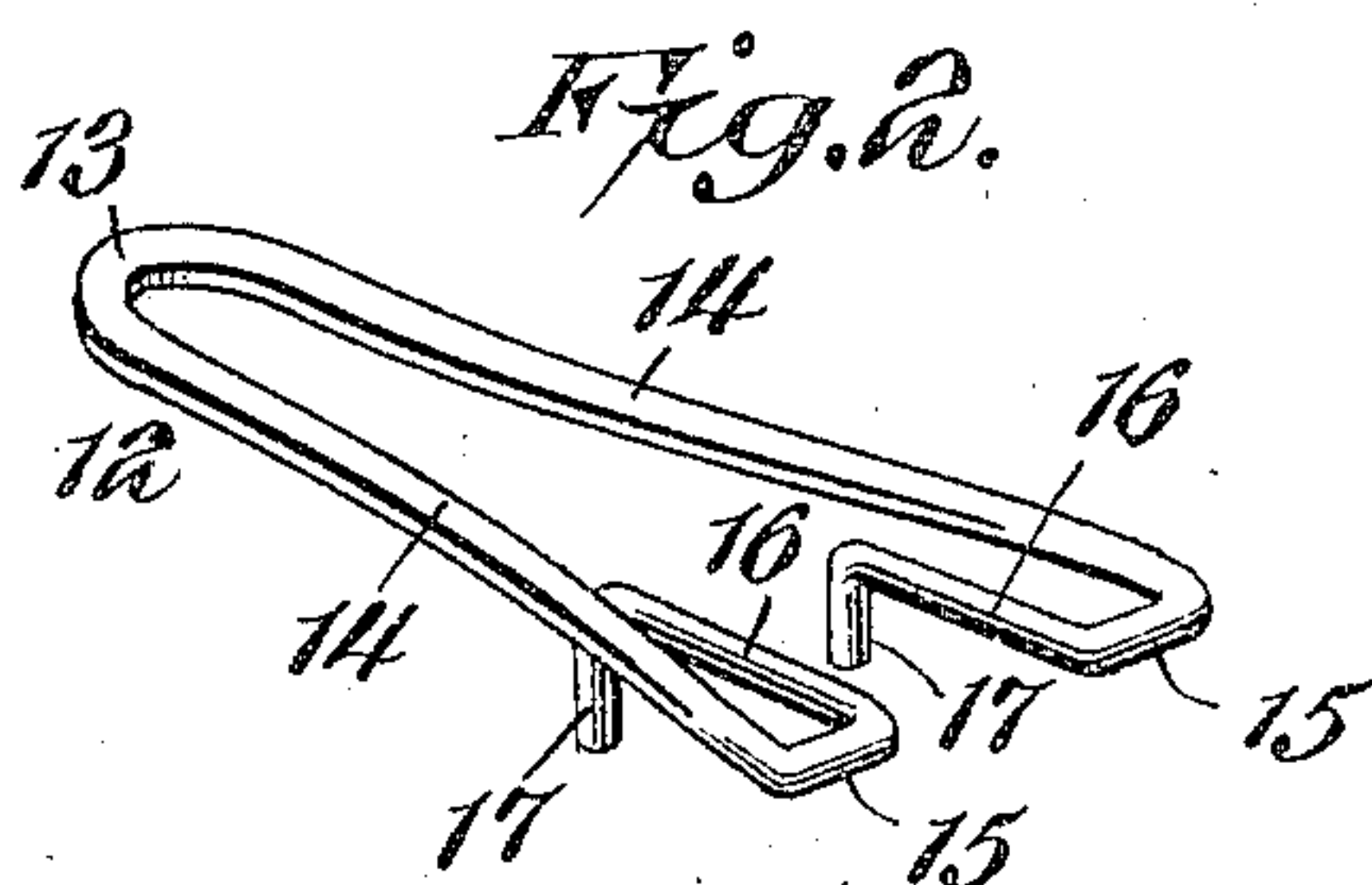
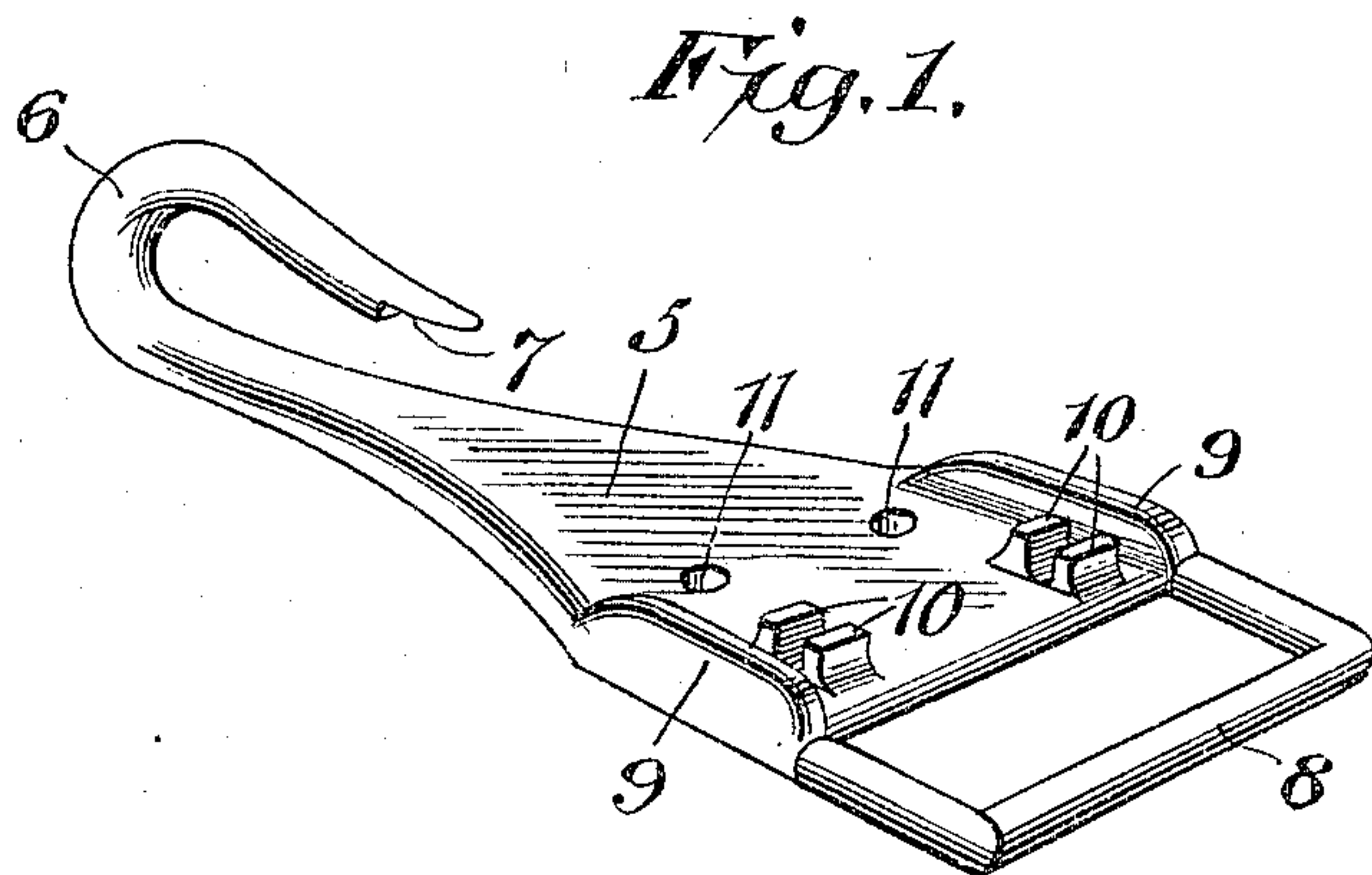


A. R. McDONNELL.
SNAP HOOK.
APPLICATION FILED JULY 22, 1909.

960,676.

Patented June 7, 1910.



Alexander R. McDonnell,
Inventor,

Witnesses
Howard D. Orr.
S. George Tate.

By *E. J. Siggers*
Attorney

UNITED STATES PATENT OFFICE.

ALEXANDER R. McDONNELL, OF PATTEN, MAINE.

SNAP-HOOK.

960,676.

Specification of Letters Patent.

Patented June 7, 1910.

Application filed July 22, 1909. Serial No. 508,943.

To all whom it may concern:

Be it known that I, ALEXANDER R. McDONNELL, a subject of the King of Great Britain, residing at Patten, in the county of Penobscot and State of Maine, have invented a new and useful Snap-Hook, of which the following is a specification.

This invention relates to snap-hooks, and particularly to that class of snap-hooks used in connection with harness or the like.

The principal object of this invention is to provide a device of the character described, in which a novel and simple construction of spring tongue is employed.

Another object of the invention is to provide a snap-hook which is simple in construction, easy of manipulation, and cheap to manufacture.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawing, and pointed out in the claims here-to appended; it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claims, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing:—Figure 1 is a perspective view of the hook-body showing the spring tongue removed therefrom. Fig. 2 is a perspective view of the spring tongue. Fig. 3 is a top plan view of the complete hook, and Fig. 4 is a longitudinal sectional view taken on the line 4—4 of Fig. 3.

Like reference numerals designate corresponding parts in all the figures of the drawing.

Referring to the drawing, 5 designates the body of the hook, which is provided with the usual bill 6, having the underside of the end thereof cut out to form a seat 7. A loop 8 of the usual construction is integrally formed at the opposite end of the body, said loop being adapted to engage a strap or the like. The body 5 further comprises upstanding side flanges 9—9 arranged in close proximity to the said loop 8. Upwardly extending from, and integral with the body 5, is a plurality of lugs 10—10. These lugs are arranged in pairs, and each pair is arranged in close proximity to, but spaced from said flanges 9, and correspondingly opposite each other. The lugs of each

pair are spaced from each other to form a seat for a purpose hereinafter described.

A plurality of openings 11—11 which are formed in the body, are arranged between the lugs 10 and the bill 6, and are preferably arranged in a line parallel to the said lugs. These openings preferably extend entirely through the body, but the depth of course is optional, as it is only necessary that seats be provided.

The invention further comprises a spring tongue designated as a whole by the numeral 12, and which is preferably formed from a single piece of spring wire. This wire is bent at its center to form a loop 13, the side arms 14—14 of which preferably flare outwardly. The arms 14 are respectively bent inwardly at the ends to form bearing portions 15—15. The wire is then respectively bent at the said portions in a forward direction as indicated by the numerals 16—16, thereby forming spaced loop portions. The extreme ends 17—17 of each loop portion are respectively bent downwardly at substantially right-angles to the plane of the tongue 12. The loop 13 and the arms 14—14 thereof, are preferably flattened, as clearly shown by reference to the drawing.

In applying the spring tongue 12 to the hook-body 5, the ends 17—17 are respectively positioned within the openings 11—11 in the body, the ends of the arms 14—14 are respectively arranged between the side flanges 9 and the adjacent pair of lugs, and the bearing portions 15—15 are respectively positioned between each pair of the lugs 10—10. The loop 13 will obviously be positioned to engage in the cut-out portion 7 of the bill 6. The lugs 10—10 of each pair are bent toward each other and consequently over the bearing portions 15—15 of the spring tongue, and thereby retain the said portions between the said lugs. The lugs 10—10 are adapted to retain the bearing portions 15—15 loosely so as to permit a slight rotating movement upon the depression of the tongue.

What I claim is:—

1. A snap hook comprising a body, a bill extending from the body, spaced clamping lugs arranged in pairs upstanding from the face of the body, seats formed in the face of the body between the lugs and the bill, and a spring wire tongue bent to engage the bill to normally close the hook, said tongue having its end portions bent and clamped

against the face of the body by the lugs and terminating in forwardly extending portions which bear upon the face of the body, and having their extremities thereof respectively engaging the said seats.

2. A snap hook comprising a body, a bill extending from the body, side flanges formed on the body, a plurality of clamping lugs upstanding from the body and arranged between and spaced from the flanges, and a tongue formed of spring-wire secured to the body by the lugs, said tongue being formed from a single piece of wire and bent at its center to form a bill-engaging loop and side arms, the ends of said arms being respectively arranged between the flanges and the adjacent lugs and terminating in inwardly extending bearing portions adapted to be positioned between and retained by the said lugs, the said portions terminating in forwardly bent and inclined spring arms adapted to normally cause the tongue to engage with the bill to close the said hook.

3. A snap-hook comprising a body, a bill extending from the body, a plurality of lugs upstanding from the body, a plurality of openings formed in the body between the lugs and the bill, and a spring tongue secured to the body by the lugs and the openings, and adapted to engage the bill and normally close the said hook, said tongue being formed from a single piece of wire and bent at its center to form a bill-engaging loop and side arms, the ends of said arms being respectively bent to form bearing portions adapted to be positioned between and retained by the said lugs, the said portions terminating in forwardly bent arms having

their extreme ends respectively bent downwardly and positioned within the said openings.

4. A snap-hook comprising a body having a bill at one end and a loop at the other, side flanges formed on the body and respectively arranged at opposite sides thereof and adjacent the loop, a plurality of upstanding lugs formed on the body and respectively arranged in pairs, each pair being respectively located near one of the flanges, a plurality of openings formed in the body between the lugs and the bill, and a spring tongue secured to the body by the lugs and the openings, said tongue being formed from a single piece of wire and bent at its center to form a loop which is adapted to engage the bill and normally close the said hook, outwardly curved arms extending from the loop, the loop and the arms being flattened, the ends of said arms being respectively arranged between the flanges and the adjacent pair of lugs and terminating in inwardly extending bearing portions adapted to be positioned between and retained by the said lugs, the said portions terminating in forwardly bent arms having their extreme ends respectively bent downwardly at substantially right-angles, said ends being respectively positioned within the said openings.

In testimony, that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ALEXANDER R. McDONNELL.

Witnesses:

ALEX. H. McDOUGALL,
ARCHIE McDONALD.