

No. 723,875.

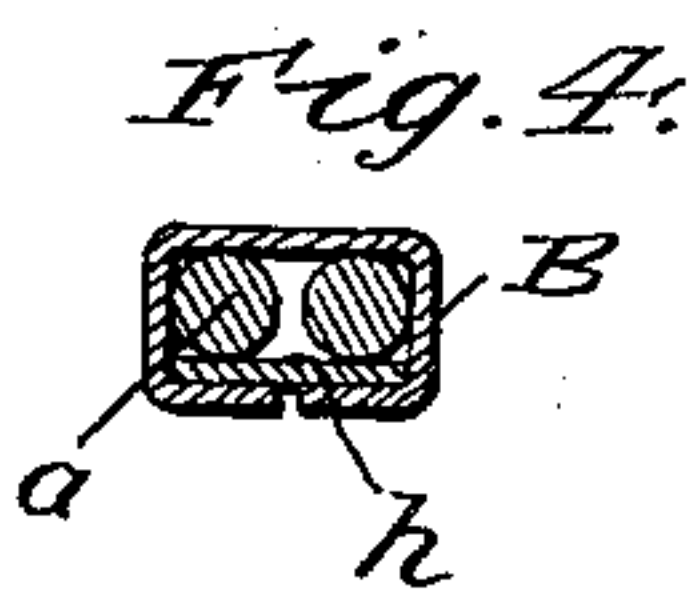
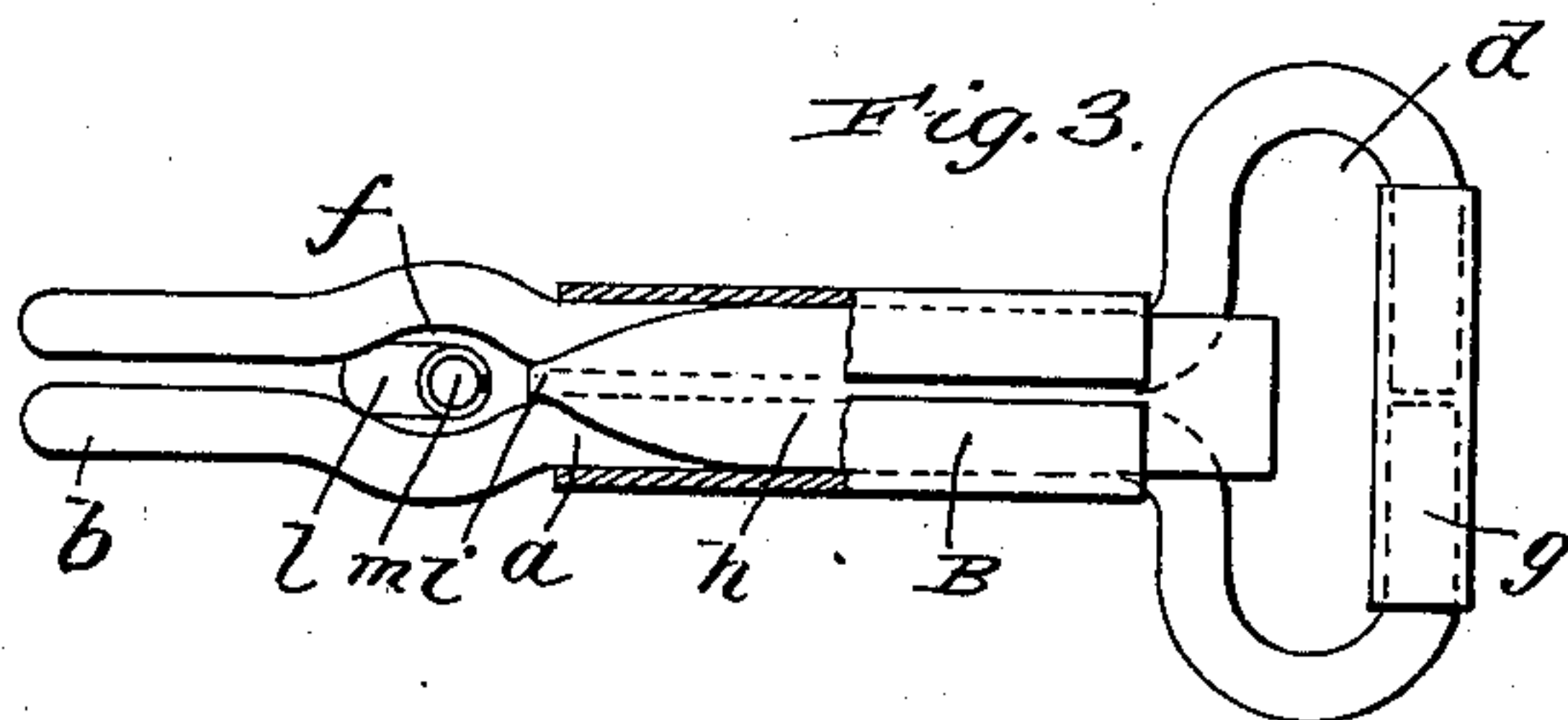
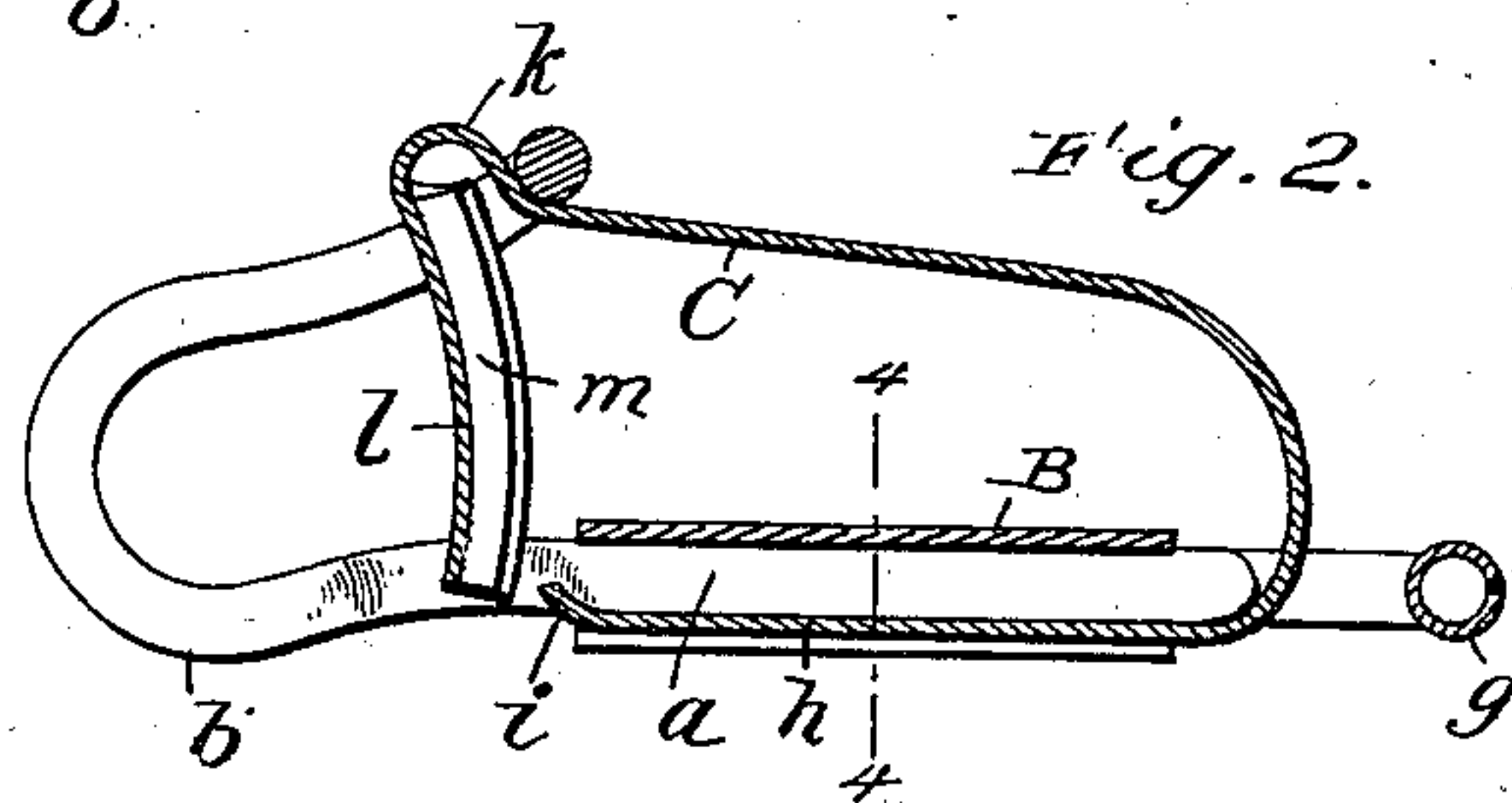
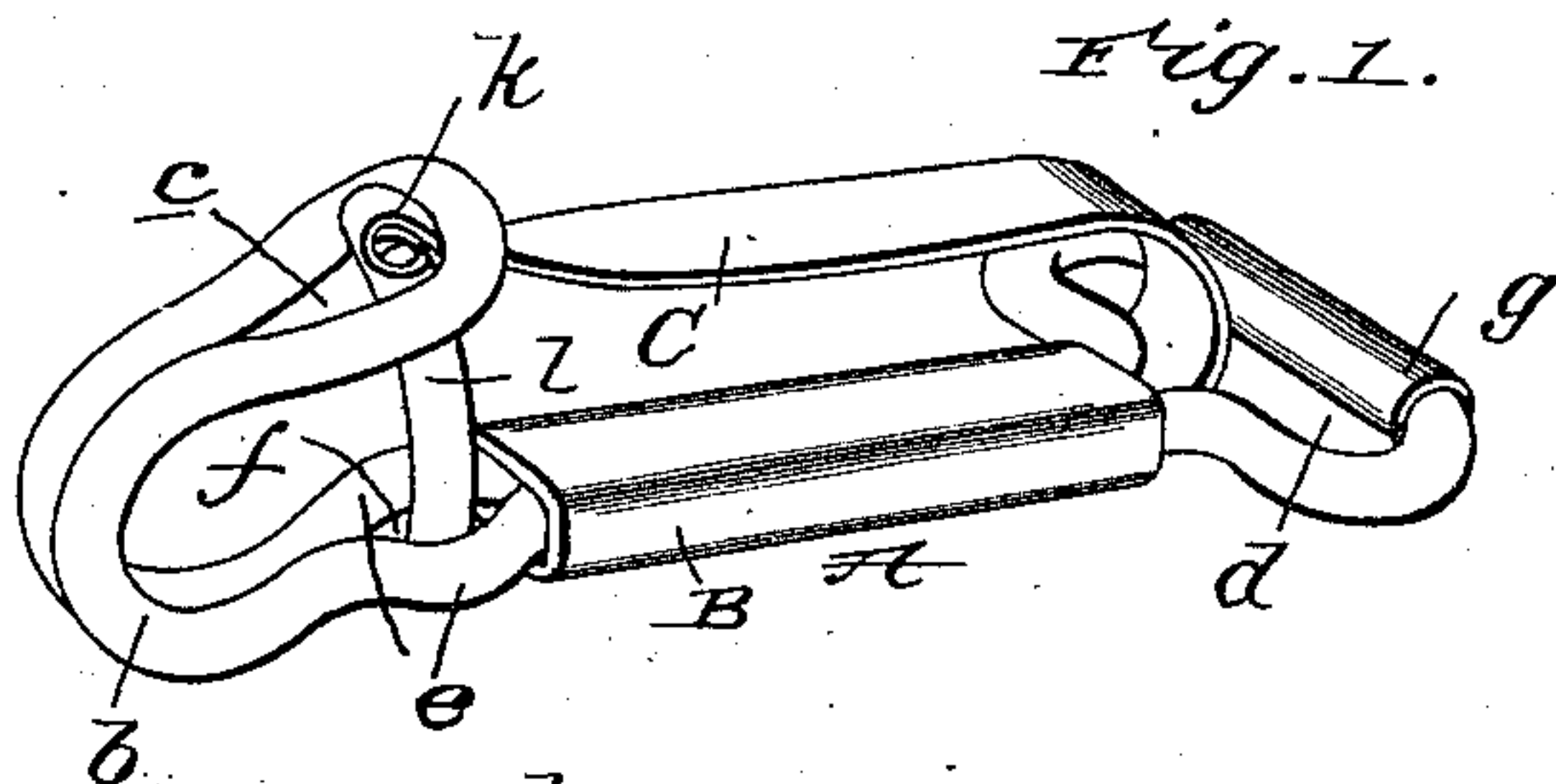
PATENTED MAR. 31, 1903

R. W. HUBBARD.

SNAP HOOK.

APPLICATION FILED JULY 7, 1902.

NO MODEL.



Witnesses
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UNITED STATES PATENT OFFICE.

RICHARD W. HUBBARD, OF ASHTABULA, OHIO.

SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 723,875, dated March 31, 1903.

Application filed July 7, 1902. Serial No. 114,603. (No model.)

To all whom it may concern:

Be it known that I, RICHARD W. HUBBARD, a citizen of the United States, residing at Ashtabula, in the county of Ashtabula and State of Ohio, have invented new and useful Improvements in Snap-Hooks, of which the following is a specification.

My invention relates to improvements in snap-hooks; and it consists in the peculiar and advantageous construction hereinafter described, and particularly pointed out in the claims appended.

In the accompanying drawings, Figure 1 is a perspective view of my improved snap-hook; Fig. 2, a longitudinal central section of the same; Fig. 3, an inverted plan view, partly in section; and Fig. 4, a transverse section taken in the plane indicated by the broken line 4 4 of Fig. 2.

Similar letters of reference designate corresponding parts in all of the several views of the drawings, referring to which—

A is the body of the improved snap-hook, which is preferably made of a single piece of wire, as shown, and comprises a shank *a*, a hook proper, *b*, at one end of the shank, provided with an eye *c*, and an eye *d* at the opposite end of the shank, designed for the connection of a strap or the like. In the formation of the said body the piece of wire is looped and bent to form the hook proper, *b*, and the shank *a* is formed of parallel portions of the said piece of wire, which parallel portions are deflected outwardly, as indicated by *e*, so as to form an opening *f* between them at a point below and coincident with the eye *c* of the hook proper. The eye *d* is formed by the end portions of the piece of wire, and the said end portions are by preference surrounded and joined by a barrel *g*, of sheet metal.

B is a sheet-metal sleeve, preferably of rectangular form in cross-section, which surrounds the shank *a* between the deflections *e* and eye *d* and is held against endwise movement by said deflections and eye, and C is a tongue which normally rests in the eye *c* and closes the hook. The said tongue is formed of a single piece of spring metal and terminates at one end in a straight flat portion *h*,

which is interposed between one of the horizontal walls of the sleeve B and one side of the shank *a* and has its forward end *i* reduced and bent into the opening *f* between the portions of wire forming said shank, whereby it is held against rearward movement. At its opposite and movable end, which normally rests in the eye *c* of the hook proper, the tongue has the rounded portion *k* and the depending portion *l*, the former being designed to enable a ring or the like to ride over the tongue and into the hook proper, *b*, and the latter having for its purpose to retain the ring in the hook proper.

The tongue C may be formed of a piece of metal of circular form in cross-section and its flat portion *h* produced by hammering said piece of metal or subjecting it to pressure without involving a departure from the scope of my invention. I prefer, however, to make the tongue of a piece of flat spring metal and to form its depending portion *l* by curling or bending the flat metal around a core *m*, of wire or the like, as shown in Figs. 2 and 3, this in order to lend rigidity and strength to said depending portion and enable it to better retain a ring or the like in the hook proper and prevent said ring from moving back to a position between the tongue and the shank *a* of body A, where any sudden strain placed upon the ring would be liable to break the tongue. Said depending portion *l* of the tongue is disposed and adapted to move in the opening *f*, formed between the shank portions of the wire forming the body, and hence lateral deflection or movement of the tongue incident to its movements toward and from the eye *c* of the hook proper is precluded.

It will be appreciated from the foregoing that the tongue C will give readily to pressure or pull when a ring or the like is drawn into the hook proper and will promptly close the hook proper subsequent to the passage of the ring and preclude the casual disengagement of the ring therefrom; also, that the connection of the tongue C to the body A is very strong and durable, and hence well calculated to withstand the shocks and strains to which snap-hooks are ordinarily subjected.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a snap-hook, the combination of a
5 body comprising a shank formed of parallel
portions of wire having lateral deflections *e*
whereby an opening *f* is formed between
them, a hook proper at one end of the shank,
having an eye, and an eye at the opposite
10 end of the shank, a metallic sleeve surround-
ing the shank, and interposed between the
eye at one end thereof and the deflections *e*,
and a spring-tongue having an end portion
interposed and secured between the sleeve
15 and shank, and also having the rounded por-
tion *k* and the depending portion *l*; said de-
pending portion *l* being disposed and adapted
to move in the opening *f* of the body.

2. In a snap-hook, the combination of a
20 body comprising a shank formed of parallel
portions of wire having lateral deflections *e*
whereby an opening *f* is formed between
them, a hook proper at one end of the shank,
having an eye, and an eye at the opposite end
25 of the shank, a metallic sleeve of rectangular
form in cross-section surrounding the shank,
and interposed between the eye at one end
thereof and the deflections *e*, and a tongue of
flat spring metal having an end portion in-
30 terposed between the shank of the body and

one wall of the sleeve and terminating in a
reduced end bent into the opening *f*, and also
having the rounded portion *k* and the de-
pending portion *l*; said depending portion hav-
ing a core of wire, and being disposed and
35 adapted to move in the opening *f* of the
body.

3. In a snap-hook, the combination of a
body comprising a shank formed of parallel
portions of wire having lateral deflections *e*
40 whereby an opening *f* is formed between
them, a hook proper at one end of the shank,
and an eye at the opposite end of the shank,
a metallic sleeve surrounding the shank, be-
tween the eye at one end thereof and the de-
45 flections *e*, and a spring-metal tongue having
a flattened end portion interposed and se-
cured between the shank of the body and the
sleeve, and also having a rounded portion
adapted to bear against the hook proper, and
50 a depending portion disposed and adapted to
move in the opening *f* of the body.

In testimony whereof I have hereunto set
my hand in presence of two subscribing wit-
nesses.

RICHARD W. HUBBARD.

Witnesses:

H. C. BIERCE,
E. C. HUBBARD.