

(No Model.)

R. A. BREUL.  
SNAP HOOK.

No. 518,485.

Patented Apr. 17, 1894.

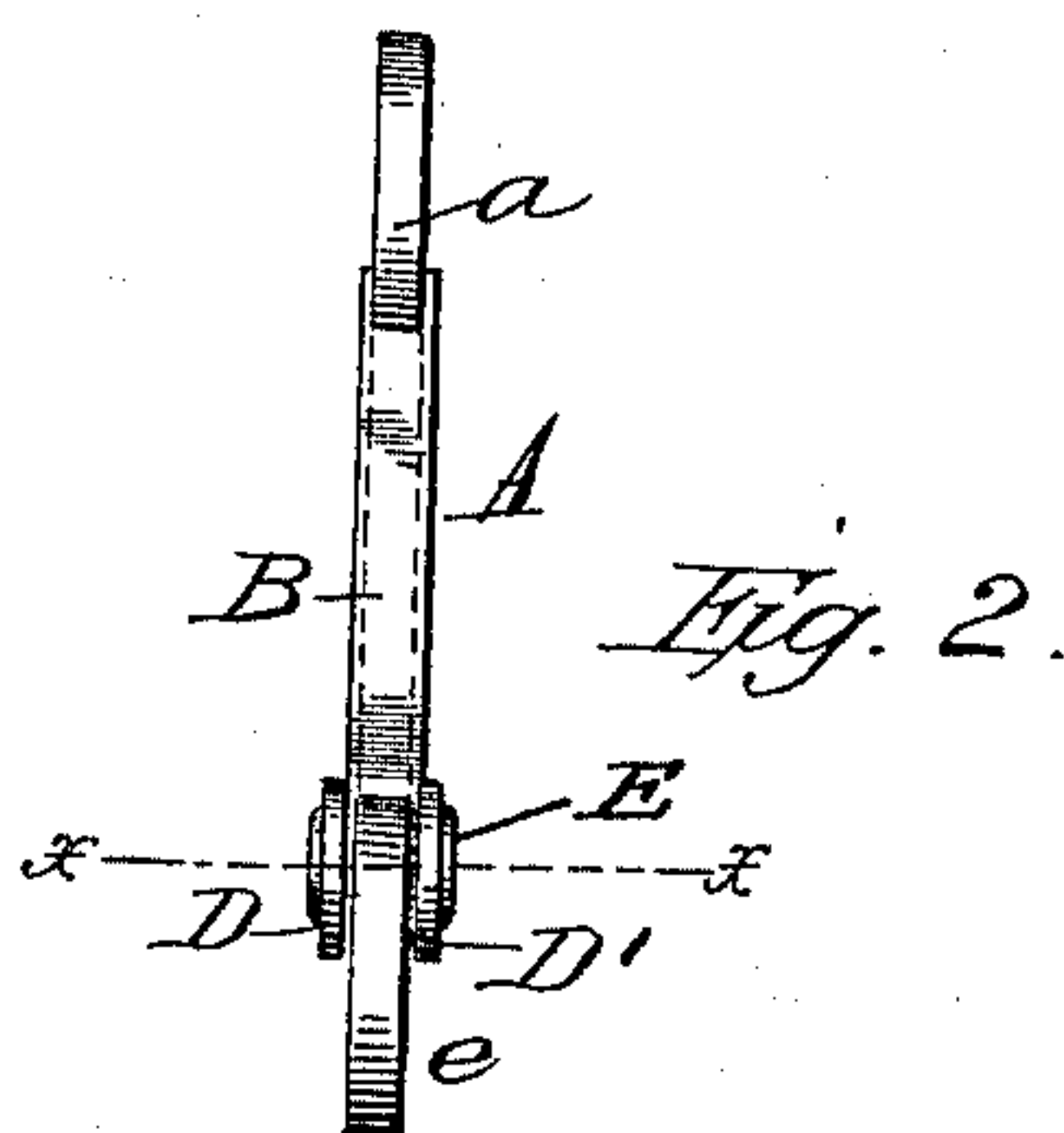
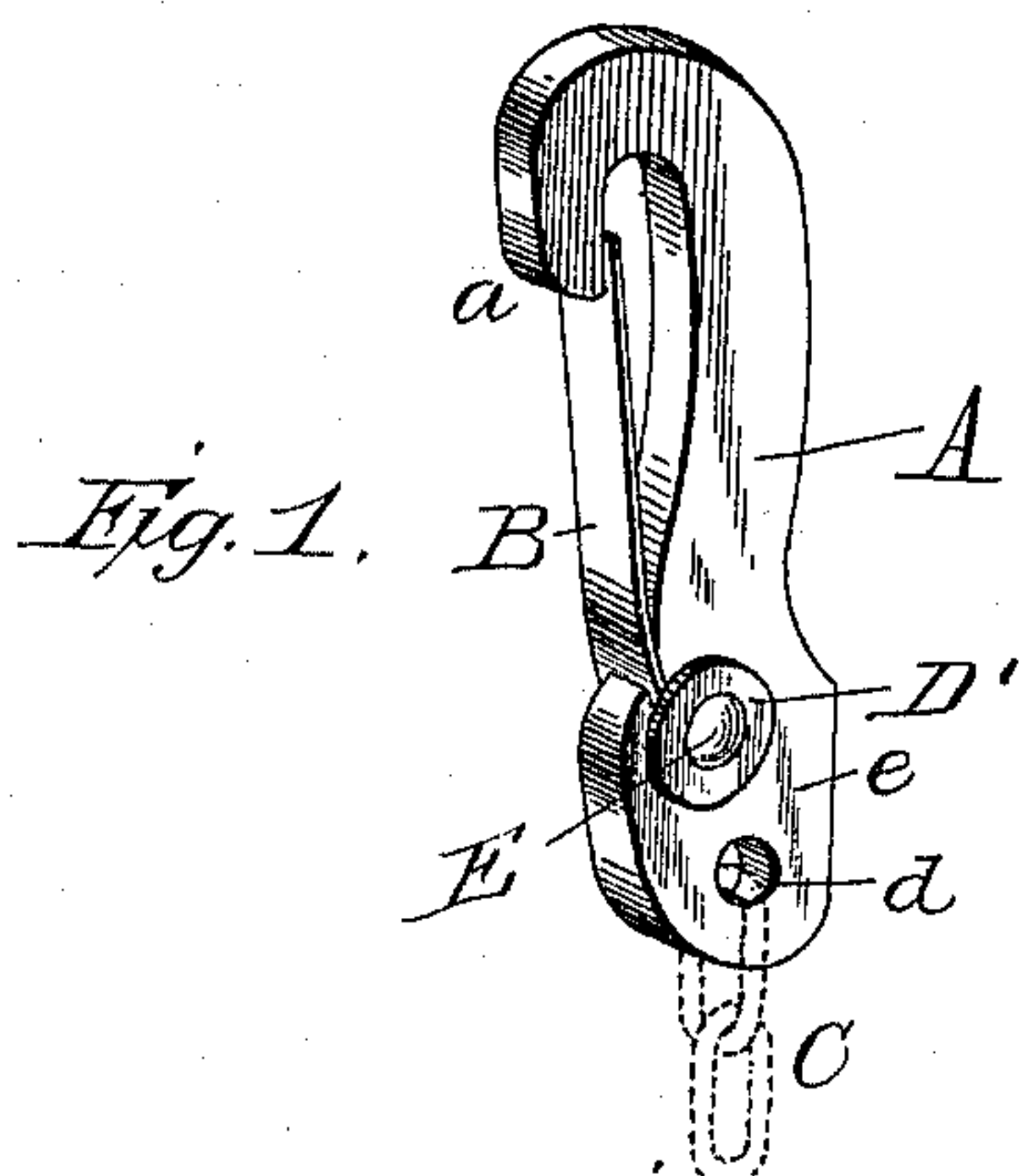


Fig. 3.

Fig. 4.

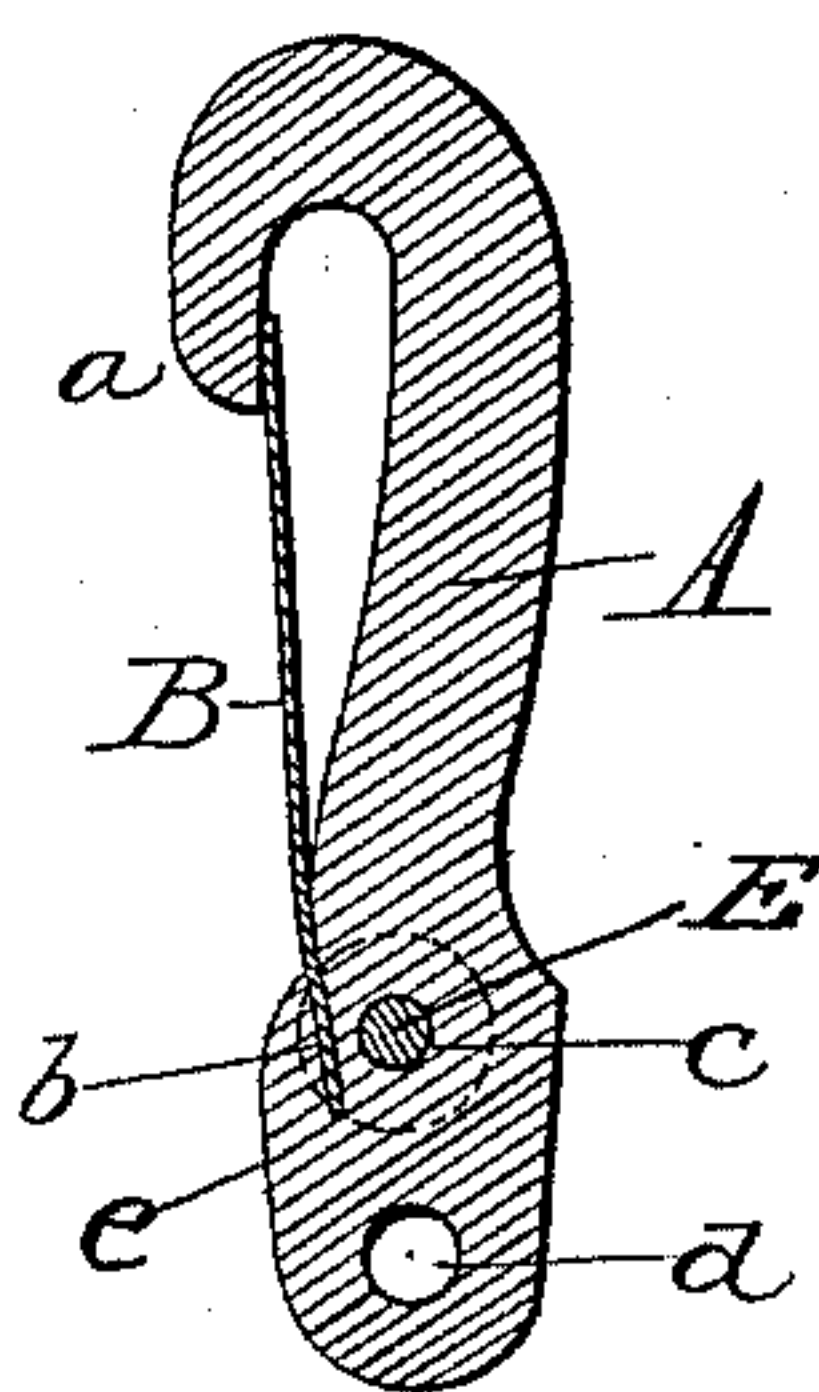
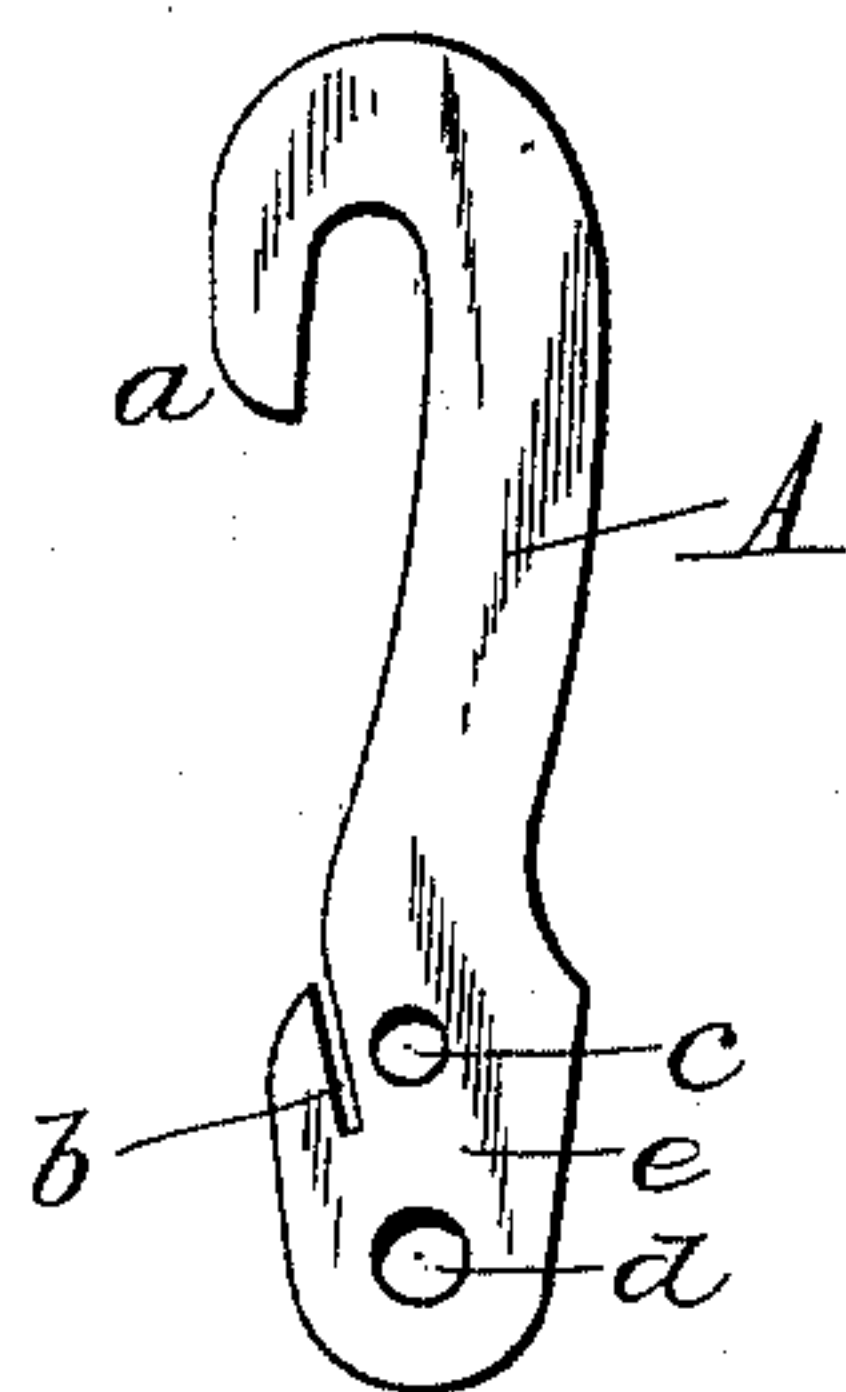
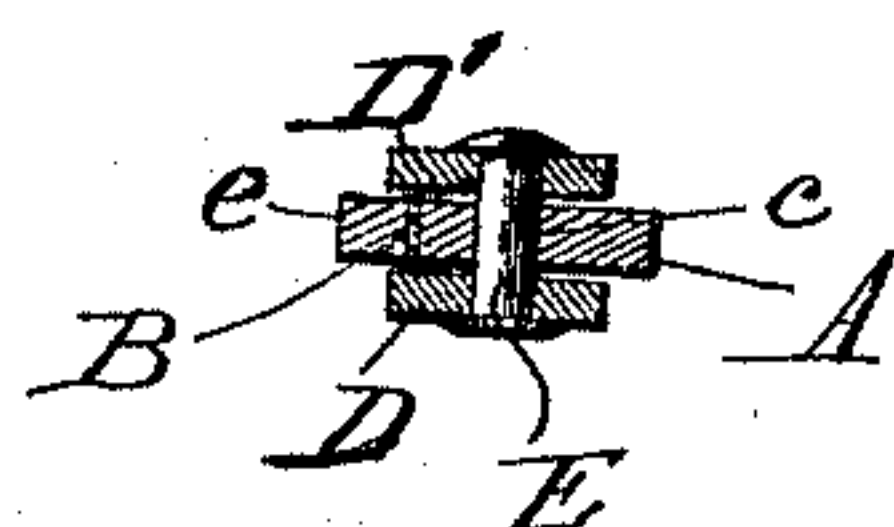


Fig. 5.



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# UNITED STATES PATENT OFFICE.

RICHARD A. BREUL, OF BRIDGEPORT, CONNECTICUT.

## SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 518,485, dated April 17, 1894.

Application filed August 25, 1893. Serial No. 484,030. (No model.)

*To all whom it may concern:*

Be it known that I, RICHARD A. BREUL, a citizen of the United States, and a resident of Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Snap-Hooks; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved snap-hook. Fig. 2 is a front view of the same. Fig. 3 is a side view of the hook, with the spring and cheeks or clamping-nuts removed. Fig. 4 is a longitudinal sectional view through the complete device; and Fig. 5 is a cross section on line  $x-x$  in Fig. 2.

Like letters of reference designate corresponding parts in all the figures.

This invention relates to snap-hooks, and my improvement consists in the novel combination with the rigid hook of a leaf-spring and the devices for securing the same to the rigid hook body, whereby, at small expense, I produce a hook possessing superior strength, and which may be easily applied to or detached from the chain-link or loop with which it is to be used; substantially as will be hereinafter more fully described and claimed.

On the accompanying drawings, the letter A denotes the body or main part of the hook, which is preferably stamped out of sheet-metal, of proper thickness, by means of dies of suitable construction, so as to form a flat hook-shaped body of the configuration clearly illustrated in Fig. 3. This body comprises a flat hook  $a$ , terminating in an enlargement  $e$ , through which two holes,  $c$  and  $d$ , are punched or drilled; the last-named of which, nearest the bottom of the hook, is for the permanent attachment of the chain or strap, C, to which the snap-hook is fastened and of which it forms part. A slot or notch,  $b$ , is cut or sawed obliquely into the head or enlargement  $e$  for the insertion of a flat leaf-spring B, of steel

or other metal, properly tempered. The free end of this spring bears against the inner side of the hook  $a$ , and its lower end, where it is inserted into the slot  $b$ , is held firmly in place in said slots by means of the lateral pressure of two circular cheeks or nuts, D and D', fastened together on opposite sides of the flat hook body by means of a rivet E, inserted through the aperture  $c$ . The width of the spring B is slightly in excess of the width or thickness of the flat head or enlargement  $e$ , as shown in Fig. 2, so that the cheeks D D' will bind or press firmly against the edges of the spring where this is inserted into the slot, and thus hold it firmly and rigidly in place. At the same time, the spring can easily be removed and a new one inserted into the slot, simply by removing the rivet and one of the cheeks or nuts, D or D'.

From the foregoing description, taken in connection with the drawings, it will be seen that this snap-hook is exceedingly simple in construction, so that it will not readily break or get out of order. The free end of the spring B overlaps the bent end or lip of the hook  $a$  on the inside a sufficient distance to form a firm bearing against the same, so as to effectually close the hook after the insertion of the link or loop with which it is to engage or interlock.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

In a snap hook, the combination with the hook A  $a$ , provided with an aperture  $c$ , and a slot  $b$ , of the spring B, one end of which is inserted in said slot, the cheeks or nuts D, D', and the rivet E, passing through said cheeks or nuts and the aperture  $c$ , and clamping and holding said spring in the slot, substantially as specified.

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

RICHARD A. BREUL.

Witnesses:

S. LOEWITH,

L. DORMITZER.