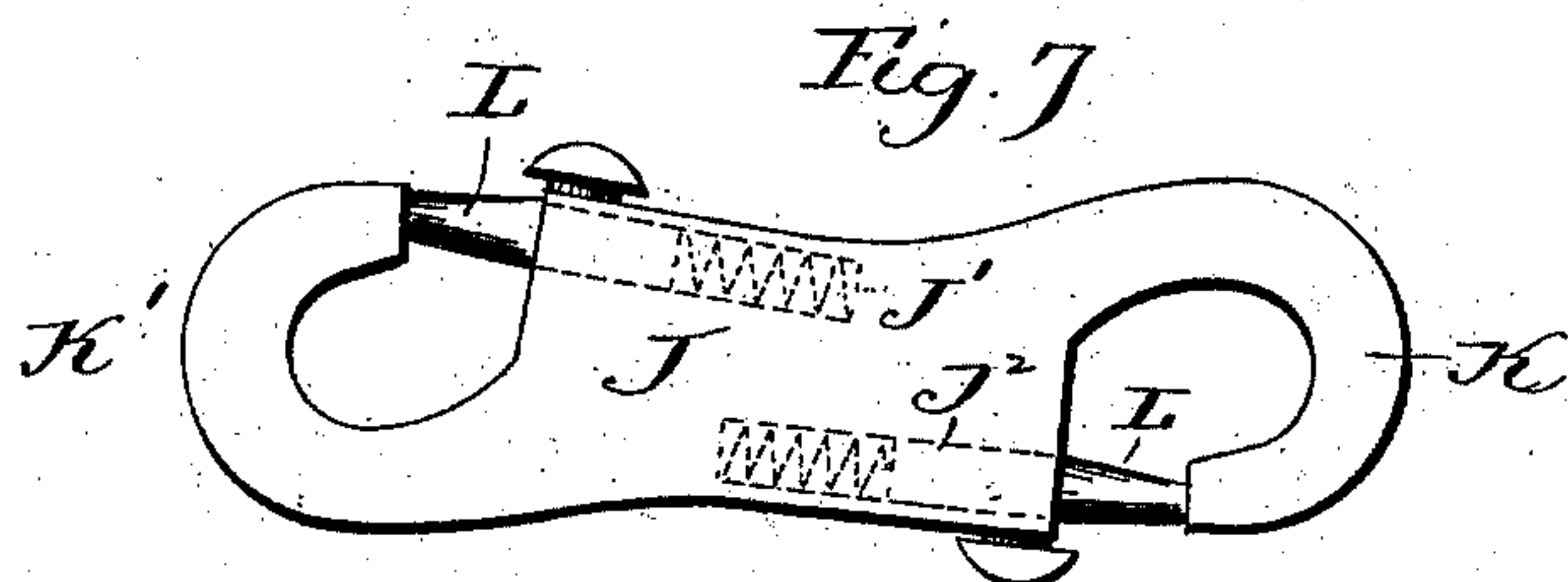
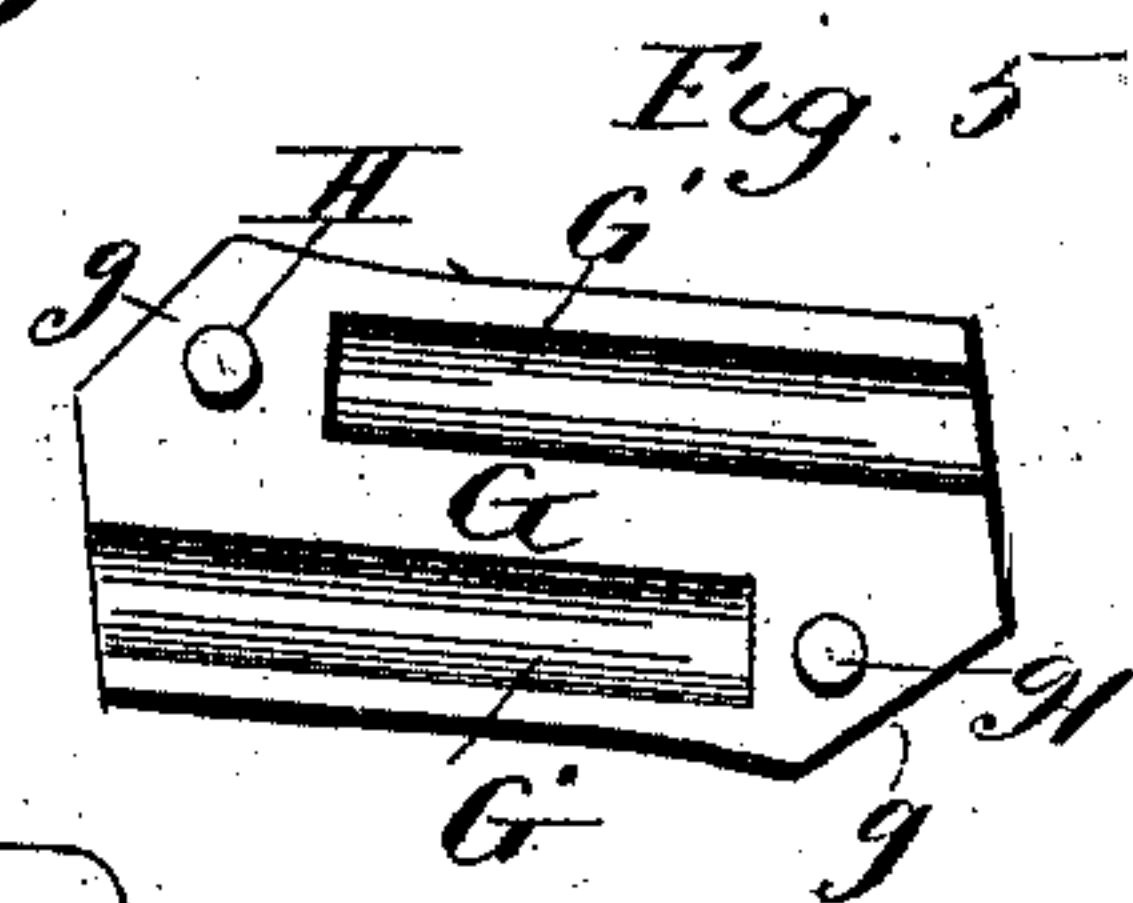
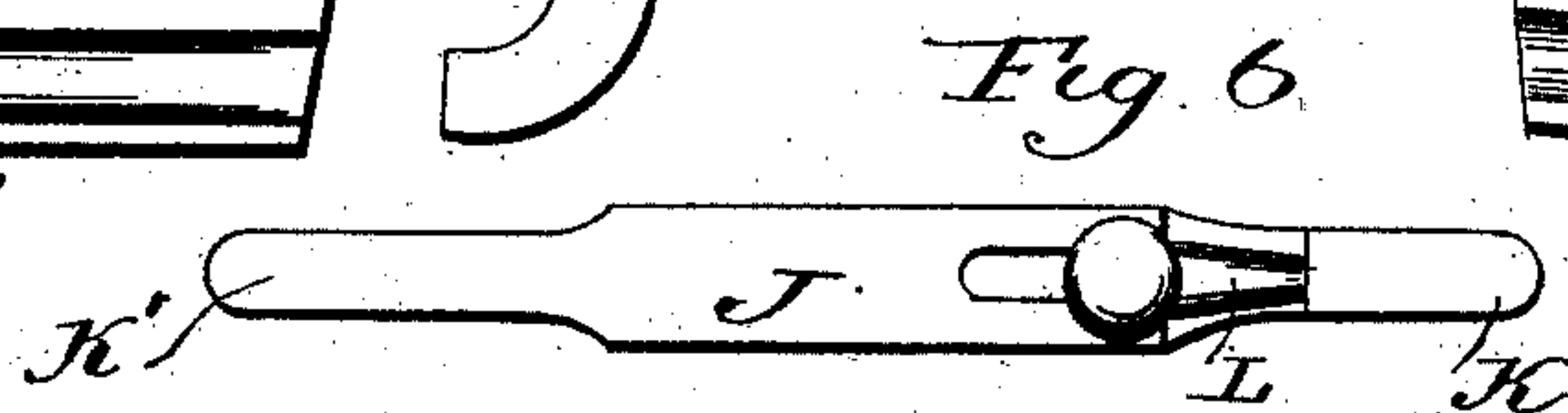
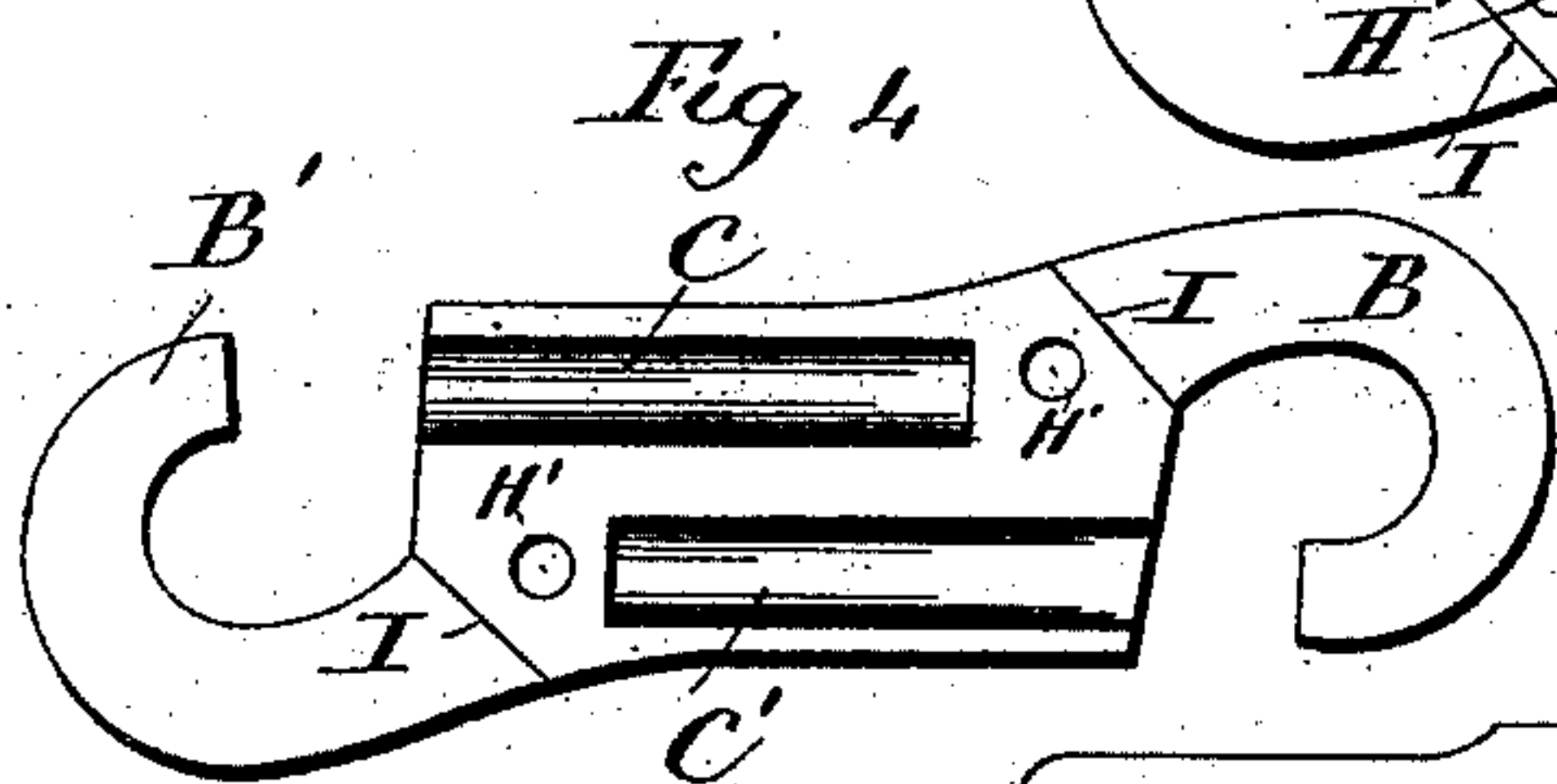
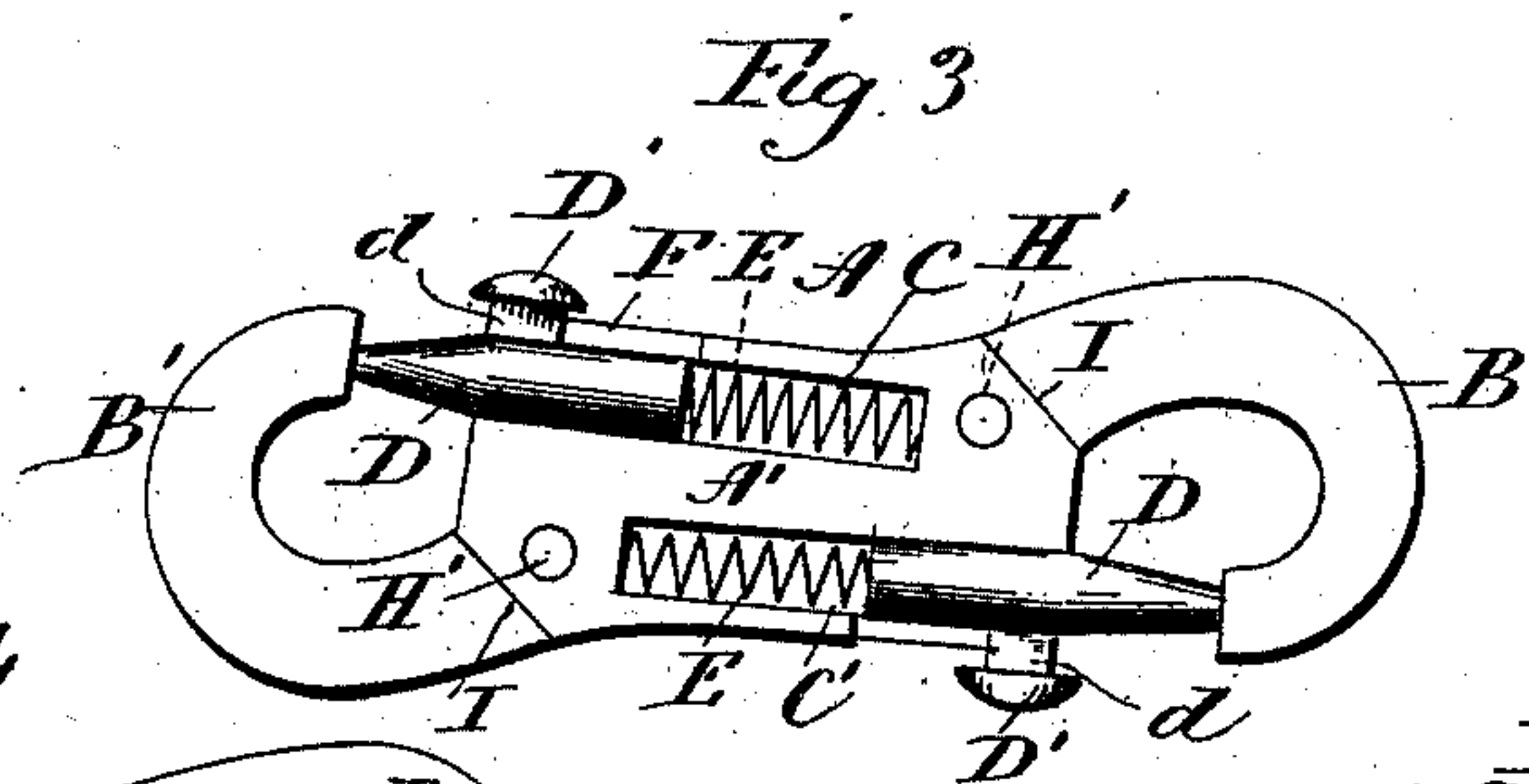
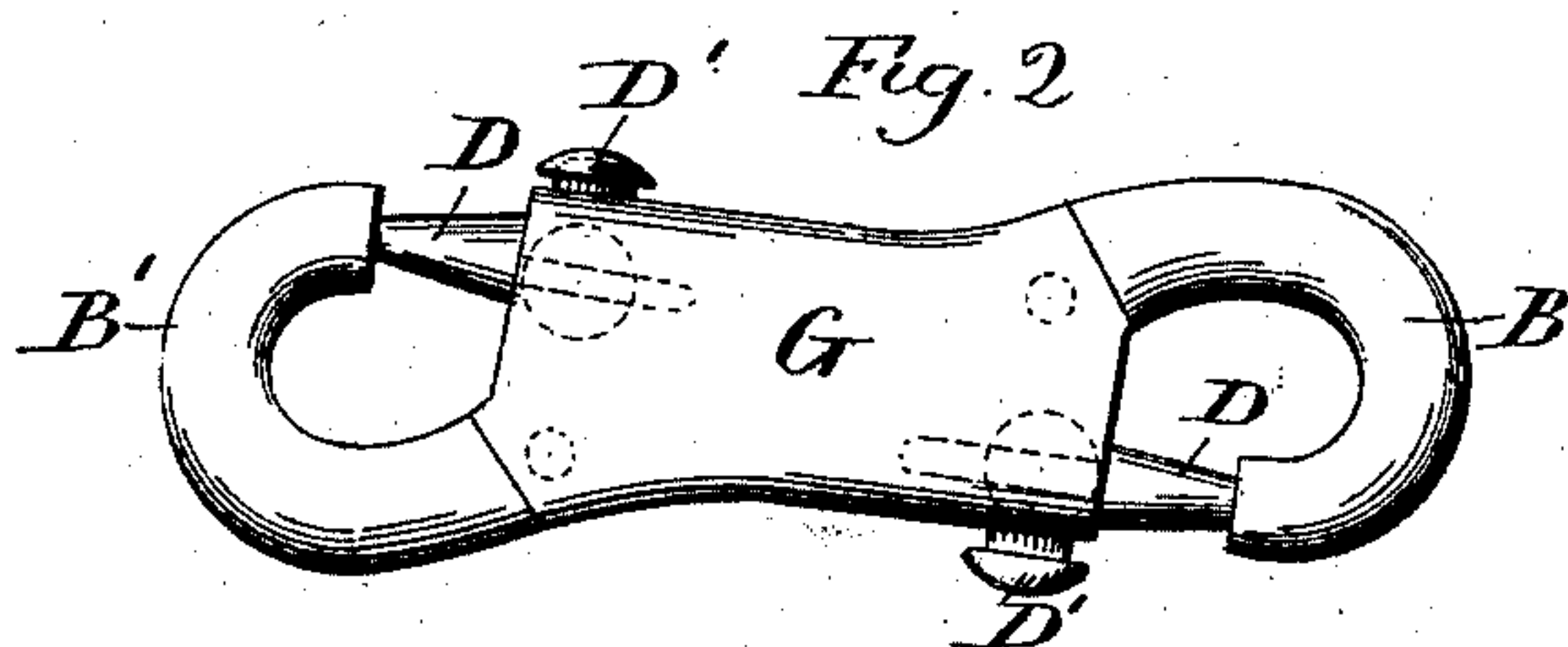
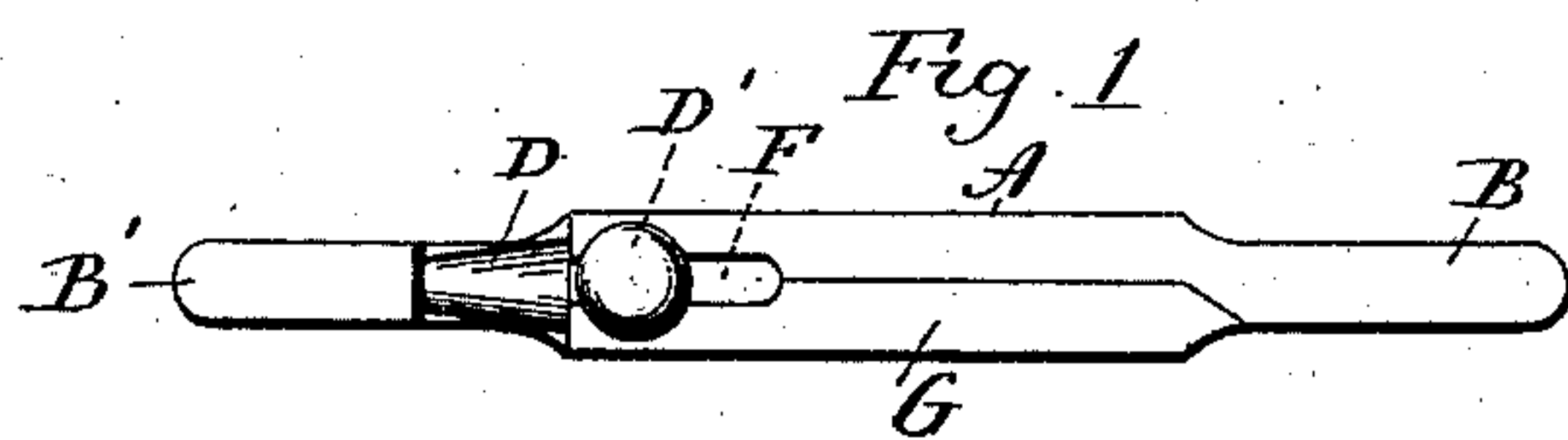


(No Model.)

C. H. SMITH.
SNAP HOOK.

No. 505,281.

Patented Sept. 19, 1893.



Witnesses
J. H. Shumway
J. W. Rea.

Charles H. Smith,
Inventor.
By Atty.
Earle Seymour

UNITED STATES PATENT OFFICE.

CHARLES H. SMITH, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO THE
O. B. NORTH & COMPANY, OF SAME PLACE.

SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 505,281, dated September 19, 1893.

Application filed May 22, 1893. Serial No. 475,082. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. SMITH, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Snap-Hooks; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a plan view of one form which a double snap-hook constructed in accordance with my invention may assume; Fig. 2, a view thereof in side elevation; Fig. 3, a view thereof, in side elevation with the cap removed; Fig. 4, a similar view with the cap and the bolts and spring removed; Fig. 5, a detached view of the cap in side elevation; Fig. 6, a plan view of one of the modified forms which my improved article may assume; Fig. 7, a view thereof in side elevation.

My invention relates to an improvement in double snap-hooks, the object being to produce a simple, strong and convenient device at a low cost for manufacture.

With these ends in view, my invention consists in a snap-hook having its hooks opening in opposite directions, and provided with two spring-actuated bolts which are independent of each other.

My invention further consists in a double-snap-hook consisting of a laterally recessed body-portion provided at its respective ends with hooks opening in opposite directions, a cap applied to the said body-portion, and two spring-actuated bolts located in the body-portion and arranged independently of each other.

My invention further consists in certain details of construction as will be hereinafter described and pointed out in the claims.

In carrying out my invention, as shown by Figs. 1 to 5 inclusive of the drawings, the body-portion A, and the hooks B and B' which are located at the opposite ends of the same, are cast in one piece with the hooks in the plane of the body-portion and opening in opposite directions, and with a lateral recess A' formed in, and virtually occupying one face of the body-portion. By forming the hooks

and body-portion as thus described, it is not necessary to bend the hooks after they are cast, for the purpose of getting them into place, whereby I avoid the deterioration of the article that follows bending the hooks in that way. The said recess A' of the body-portion contains two longitudinal parallel, semicircular grooves C and C', separated from each other, and having their outer ends arranged in line with the ends of the respective hooks B and B'. The said grooves receive the bolts D D, and the spiral springs E E thereof, the said springs being interposed between the inner ends of the bolts and the transverse walls formed at the inner ends of the grooves. The bolts are provided in the usual manner with finger-pieces or buttons D' D', the shanks d d whereof play in longitudinal slots F F, formed in part in the opposite ends of the opposite edges of the body-portion, and in part in the opposite ends of the opposite edges of the cap G, as seen in Figs. 1 and 2 of the drawings. The said cap G, conforms upon its outer face to the shape of the plain face of the body-portion, and is adapted to fit into and fill the lateral recess formed in the opposite face thereof. The inner face of the cap has formed in it two parallel, semi-circular grooves G' and G', corresponding to the grooves C and C' formed in the body-portion. The cap is also provided with two inwardly projecting pins H H, arranged to pass through holes H' H' formed in the body-portion adjacent to the inner ends of the respective grooves therein, the pins serving to secure the cap to the body-portion. The cap is further held in place by inclined shoulders I I, formed at the bases of the hooks B B, the cap having its edges correspondingly cut away, as at g g, to fit between the said shoulders.

Instead of having the finger-pieces or buttons D' D' projecting from the opposite edges of the device as shown in full lines by Figs. 1, 2 and 3 of the drawings, they may be arranged to project laterally through the cap, as indicated by broken lines in Fig. 2 of the drawings.

By arranging the hooks to open in opposite directions, I secure a device which in use I have found to be much more convenient than

devices having their hooks arranged otherwise. I have found two independent bolts better than one double bolt, which, if it becomes broken or deranged, destroys the usefulness of the device.

In the modified form of my improved device shown in Figs. 6 and 7 of the drawings, no cap is used, but the body-portion J, and the hooks K' K' are cast in one piece with the hooks out of position, to enable chambers J' and J² to be cored in the opposite ends of the body-portion in alignment with the ends of the hooks, to receive the independent spring-actuated bolts L L. In this construction therefore, I am obliged to bend the hooks into place after the casting has been made, but the device retains in common with the other device described, the advantage of having hooks opening in opposite directions and two independent bolts. I would therefore have it understood that I do not limit myself to the exact construction herein shown and described, but hold myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of my invention. I do not, however, broadly claim a snap-hook having two hooks and bolts therefor, that being old. I do not, however, broadly claim a snap-hook having two hooks located at oppo-

site ends of its body and opening in opposite directions, that construction being old.

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

1. A double snap-hook having its two hooks located at the opposite ends of its body-portion and opening in opposite directions, and provided with two independent bolts, co-operating respectively with the hooks, the independency of the bolts enabling one to be actuated irrespective of the other, substantially as described.

2. A double snap-hook having its body-portion laterally recessed and its two hooks located at its opposite ends and opening in opposite directions, a cap adapted to fit into the recess of the said body-portion, and two spring-actuated bolts arranged between the cap and body-portion independently of each other, and held in place by the cap, substantially as described.

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

CHARLES H. SMITH.

Witnesses:

FRED C. EARLE,
J. H. SHUMWAY.