

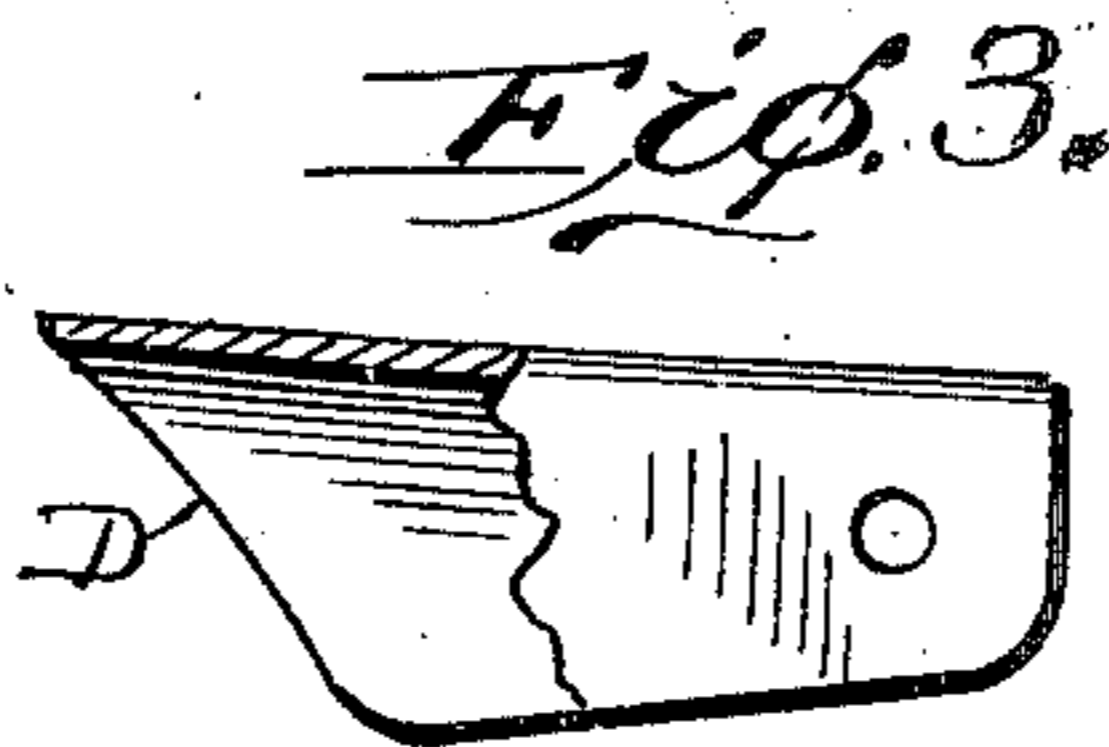
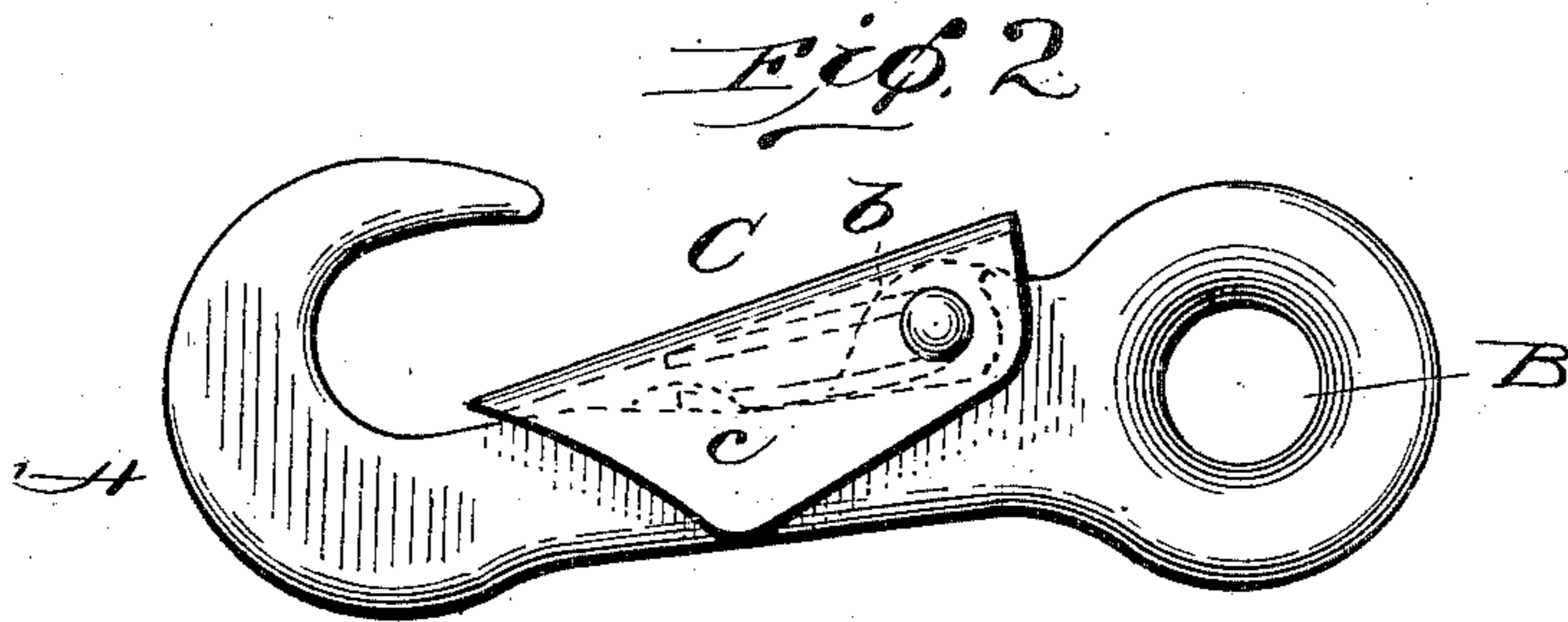
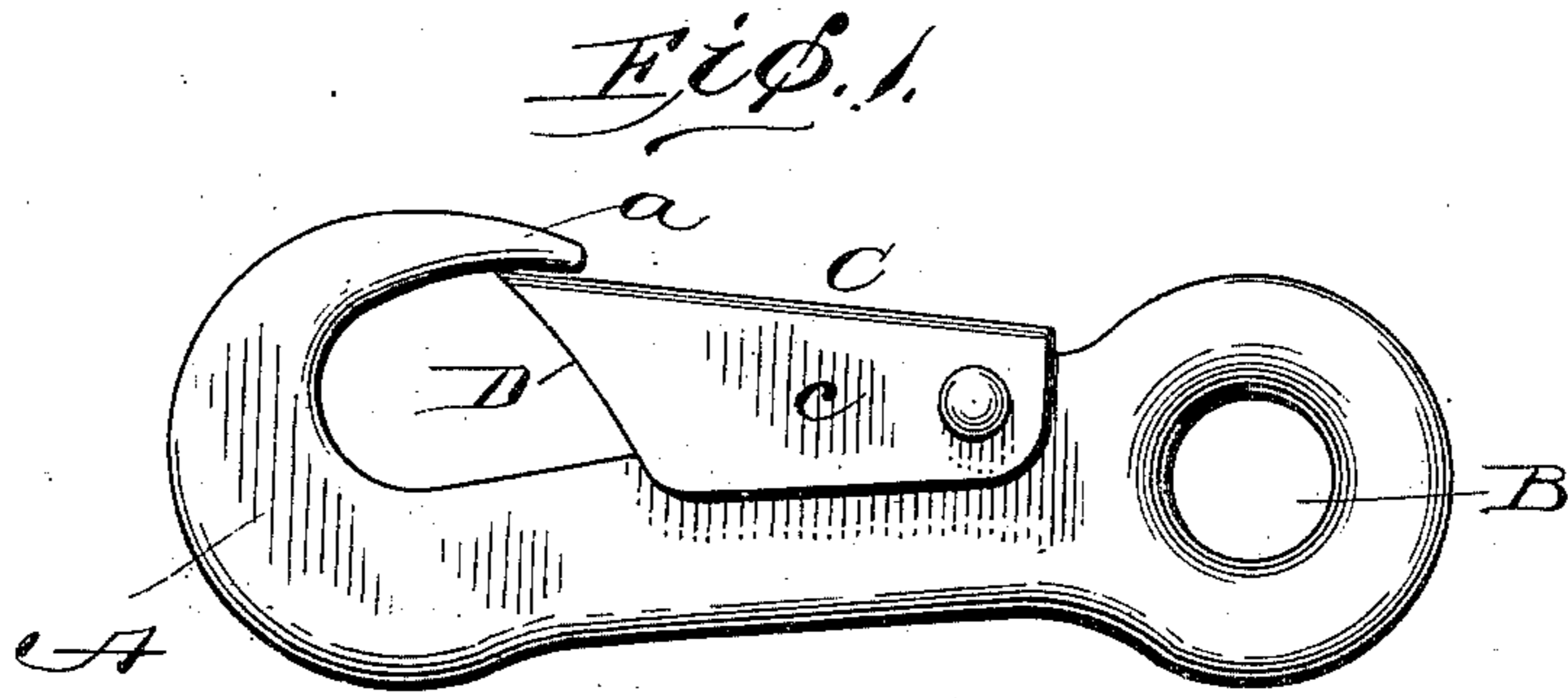
No. 701,332.

Patented June 3, 1902.

J. GRIGG.
SNAP HOOK.

(Application filed Dec. 30, 1901.)

(No Model.)



witnesses:
J. M. Fowler Jr.
Geo. J. May Jr.

Inventor
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UNITED STATES PATENT OFFICE.

JOSEPH GRIGG, OF COLONIE, NEW YORK, ASSIGNOR TO COVERT MANUFACTURING COMPANY, OF WATERVLIET, NEW YORK, A CORPORATION OF NEW YORK.

SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 701,332, dated June 3, 1902.

Application filed December 30, 1901. Serial No. 87,767. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH GRIGG, a citizen of the United States, residing at Colonie, in the county of Albany and State of New York, have invented certain new and useful Improvements in Snap-Hooks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it ap-

10 pertains to make and use the same. This invention relates to an improvement in snap-hooks; and it is embodied in the construction and arrangement of parts presently to be described and defined in the claim.

15 The invention relates more particularly to "spring-tongue" snap-hooks, and especially to that type or class of spring-tongue snap-hooks wherein a hollow keeper or shell is employed for a tongue. Such a construction is shown in Letters Patent No. 646,519, dated

20 April 3, 1900. In constructions heretofore suggested, including that shown in the aforesaid patent, there are many valuable qualities and features, and from large experience it has been found that when the shell type of tongue is employed with the usual straight forward edge and grooved under edge that the practical constant vibration of the ring or link

30 when secured in the space between the hook proper and the keeper edge will batter the edge of the keeper to the extent that it is impossible to shove the same down to liberate the confined ring or link. In fact, it is often the case that the constant impact of the ring or link against the straight edge of the keeper will so batter the same as to practically destroy the utility of the snap-hook, and when the keeper is formed with the grooves in its

40 lower edge to make, in effect, ears at the forward portion thereof these ears not being backed up by suitable reinforcements or flanges are bent out and distorted to a considerable extent.

45 The object of my invention is to overcome the objections heretofore existing; and to this end it consists, essentially, in forming the forward edges of the hollow keeper or tongue inclined backwardly and downward, the inclination starting at the extreme forward up-

per edge and terminating at a point in the rear of the plane of the end of the bill of the hook.

A further object of the invention is to provide a hook with the hollow keeper so fashioned and pivoted that when completely depressed there will be no portion thereof which will project below the shank of the hook proper, so as to strike the thumb or finger of the operator in the downward movement, and thereby arrest the movement of the tongue.

In the accompanying drawings I have shown a form embodying the invention; but slight changes in the general construction may be made without departing from the nature or principle of the invention.

In said drawings, Figure 1 is a side elevation. Fig. 2 is a side elevation showing the tongue or keeper depressed. Fig. 3 is an elevation showing a portion of the keeper in section.

A designates the hook proper, having a point *a*, the same being of the well-known construction. The hook proper has conveniently the eye B at one end, and on the upper portion of the shank proper is an extended ear *b*, having a perforation therein.

C designates the keeper, which is in the form of a shell, having parallel sides *c* closely embracing the sides of the shank of the hook having an unbroken or continuous lower edge. The keeper is pivoted to the extension or ear *b* at a point substantially the center of its rear end, thus carrying the lower edge thereof well up on the shank of the hook, so that the tongue or keeper can be depressed without bringing the lower edge thereof below the lower edge of the shank. The forward end of the keeper is carried below the point *a* of the hook, and the sides of the shell or keeper are from the extreme point cut away obliquely downward and rearward, as at D, the inclined edges terminating at the extreme lower edge of the keeper. This construction of the forward edge of the keeper forms an acute angle relative to the upper edge of the shank of the hook, and by cutting away the forward edge of the keeper the lower forward corner or end of the lower edge is brought sufficiently toward the rear as to prevent the

same from coming below the lower edge of the shank. In practice when the ring or link is confined the vibration will be received on the inclined surfaces of the forward edges of the keeper and will then be deflected onto the rigid shank portion. In this connection the impact is such as to necessarily tend to drive the keeper upward, owing to the inclination and the resistance of the shank, and I have found it necessary to continue the side of the keeper up directly to the point or end thereof, so as to prevent the breaking down or bending of the upper end under the nose or point of the hook.

While keepers for snap-hooks have been suggested with an inclined forward edge, as far as I am aware I am the first to provide a hollow keeper with such inclined edges and with continuous sides, whereby the general form of the keeper is not destroyed or changed materially by the vibration of the confined

ring or link, and, further, I believe I am the first to so construct the keeper and locate its pivot so that the edge thereof cannot be projected below the shank of the hook.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

A snap-hook of the character described comprising a hook portion, and a keeper portion pivoted thereto formed with continuous unbroken depending sides embracing the shank of the hook, and having continuous downwardly and rearwardly inclined forward edges extending from the extreme upper forward end thereof, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH GRIGG.

Witnesses:

WILLIAM COLVIN, Jr.,
ALBERT E. DAVIS.