

(No Model.)

2 Sheets—Sheet 1.

H. P. RICHARDS.  
SNAP HOOK.

No. 489,502.

Patented Jan. 10, 1893.

Fig. 1.

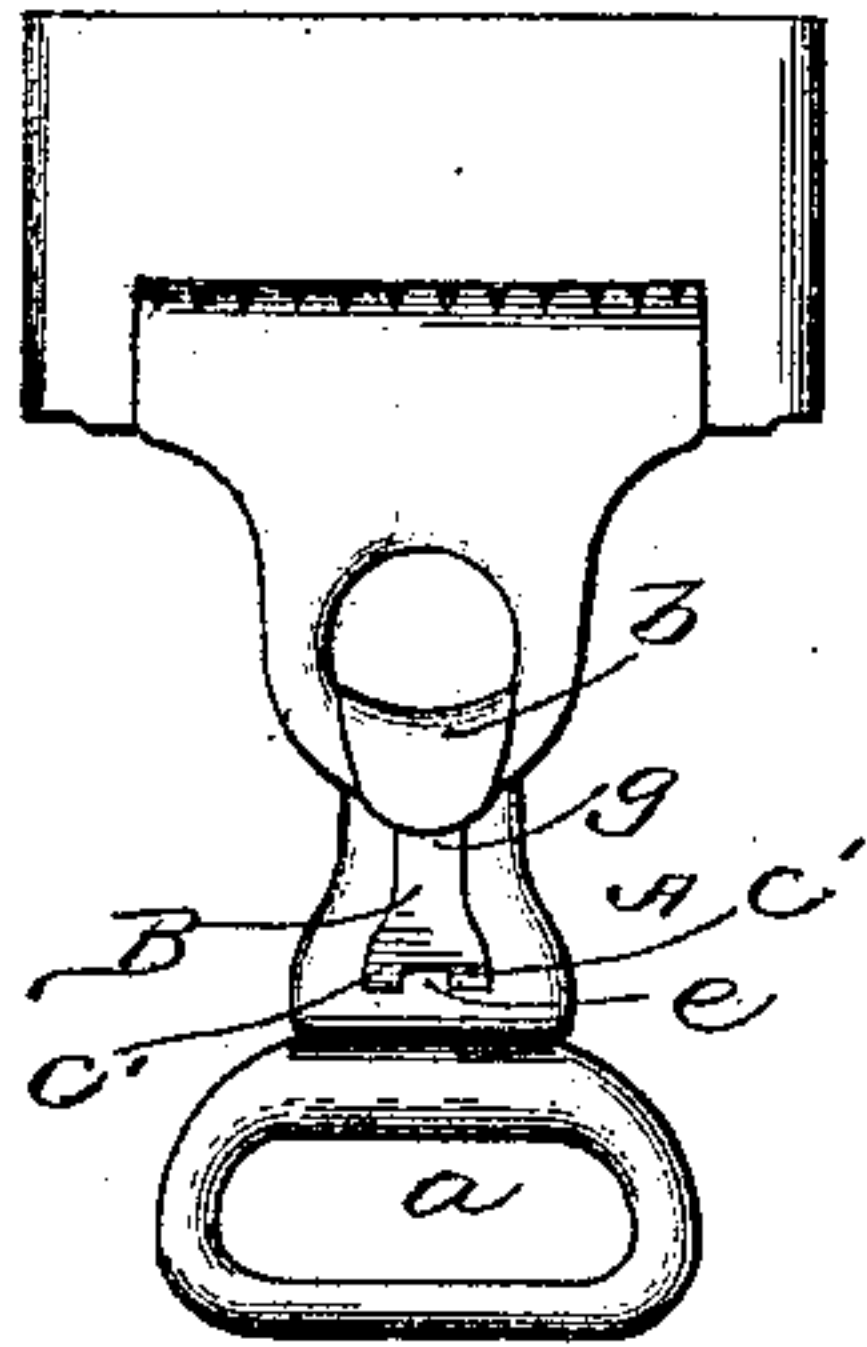


Fig. 2.

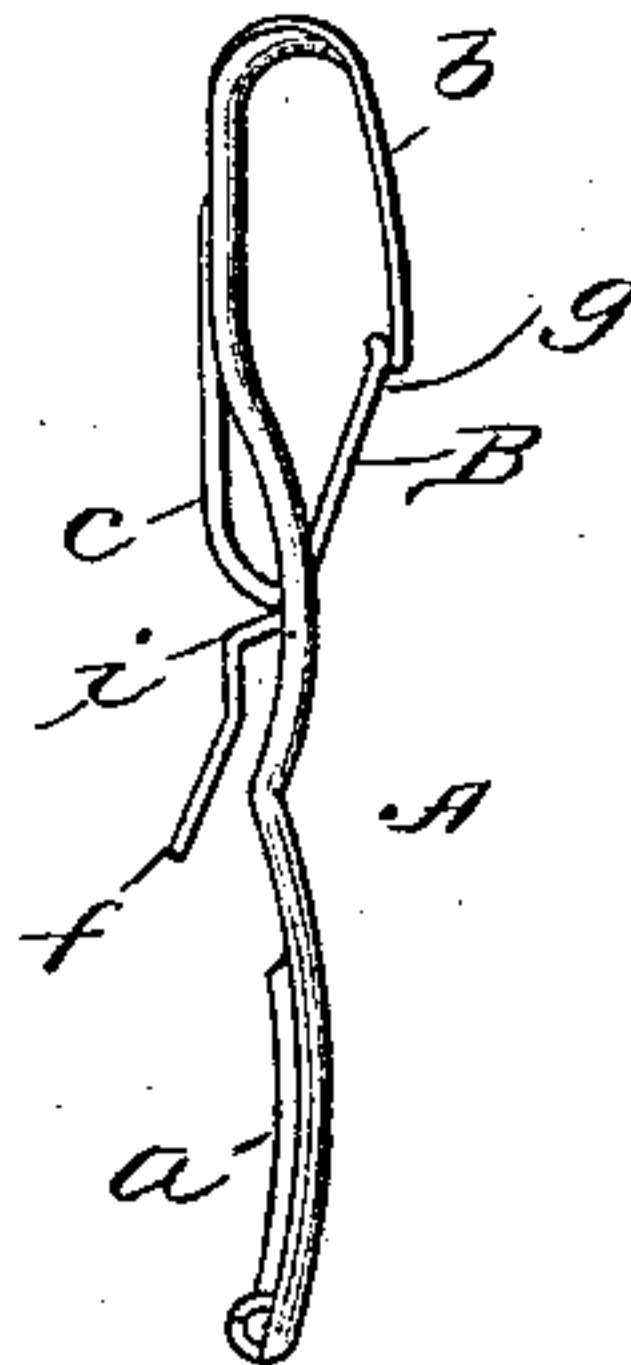


Fig. 3.

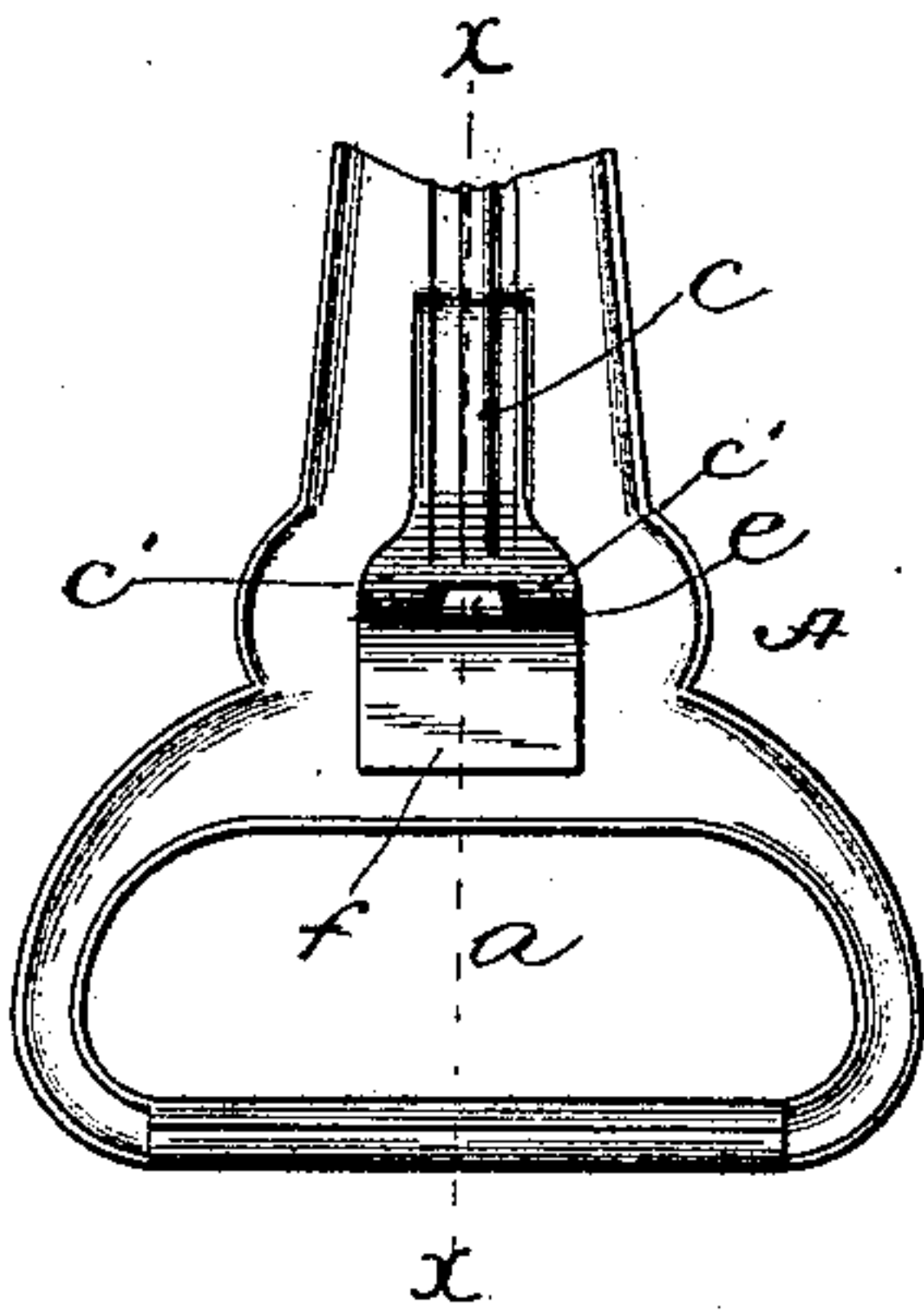


Fig. 4.

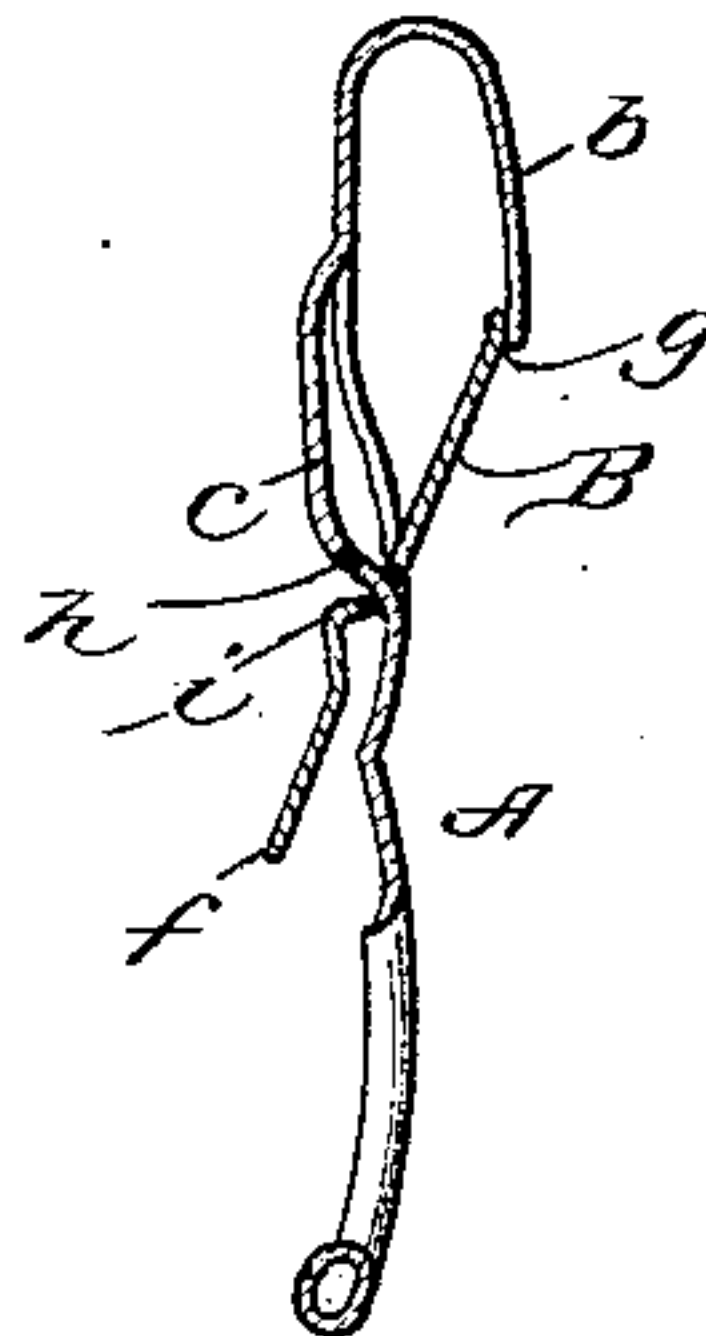
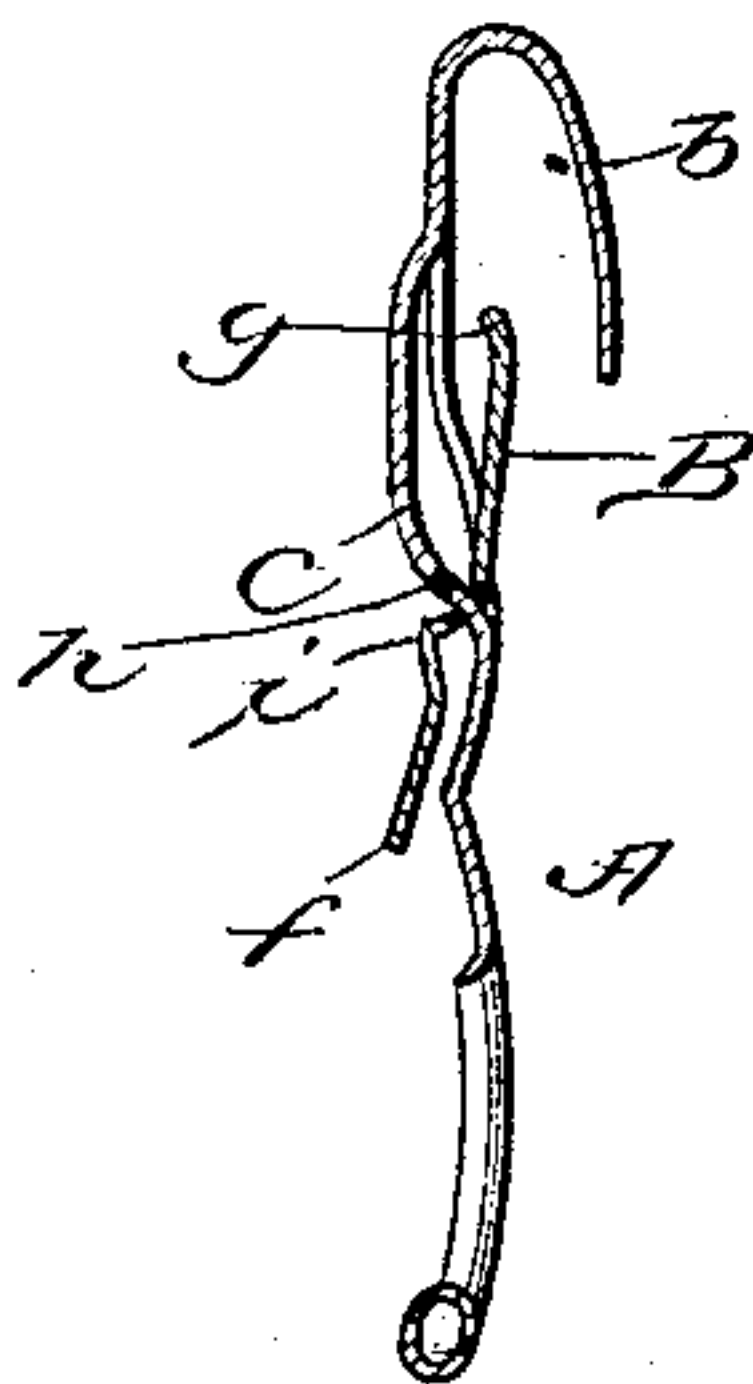


Fig. 5.



witnesses:

Harry S. Rohrer.  
Wallace Mundock

Inventor:

Hubert P. Richards

By *Chase & Chase*  
Attorneys.

(No Model.)

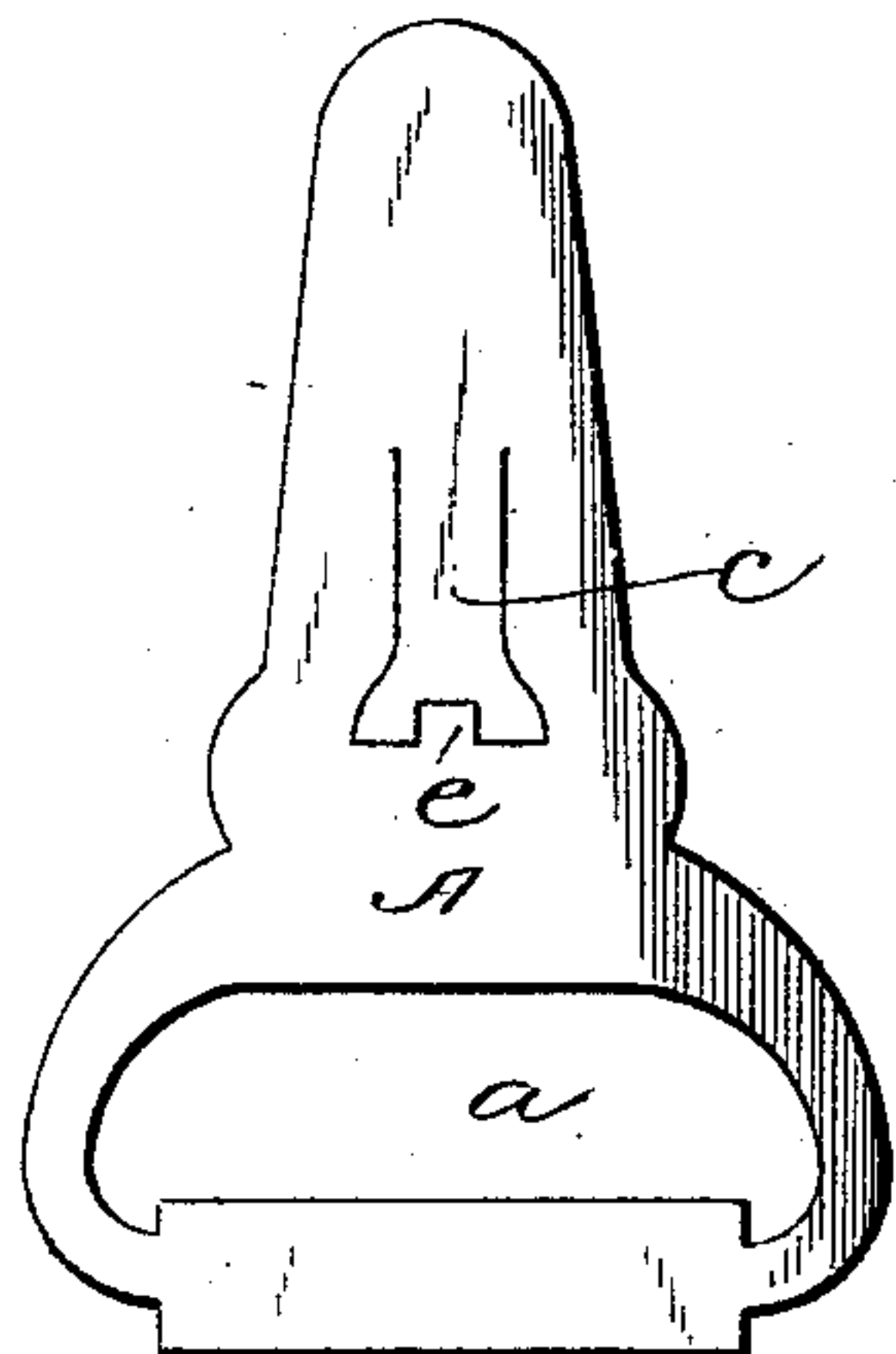
2 Sheets—Sheet 2.

H. P. RICHARDS.  
SNAP HOOK.

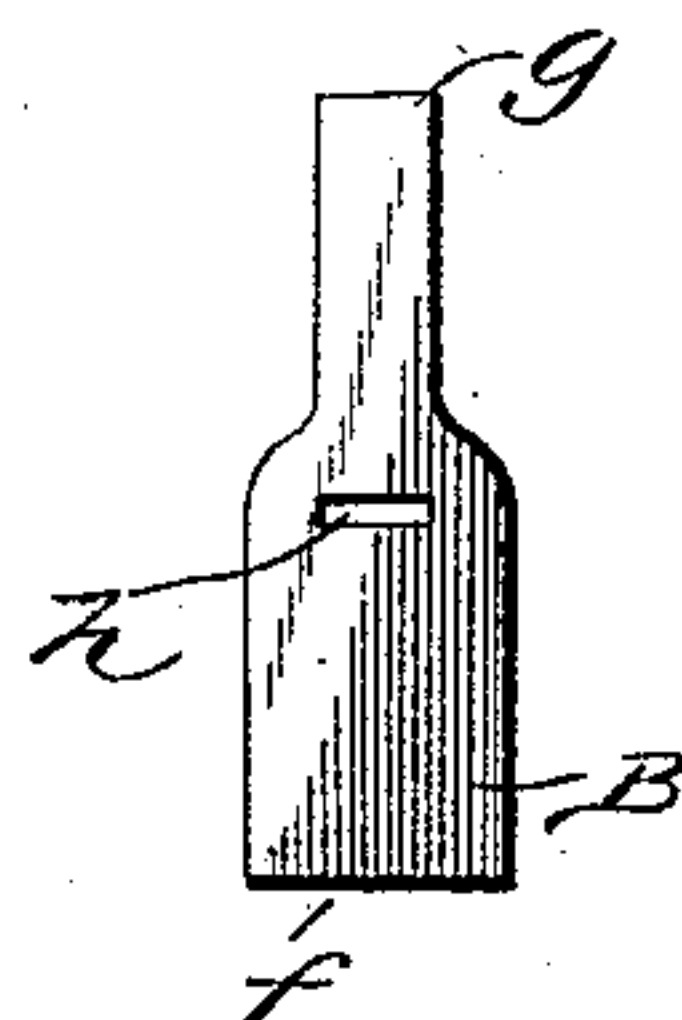
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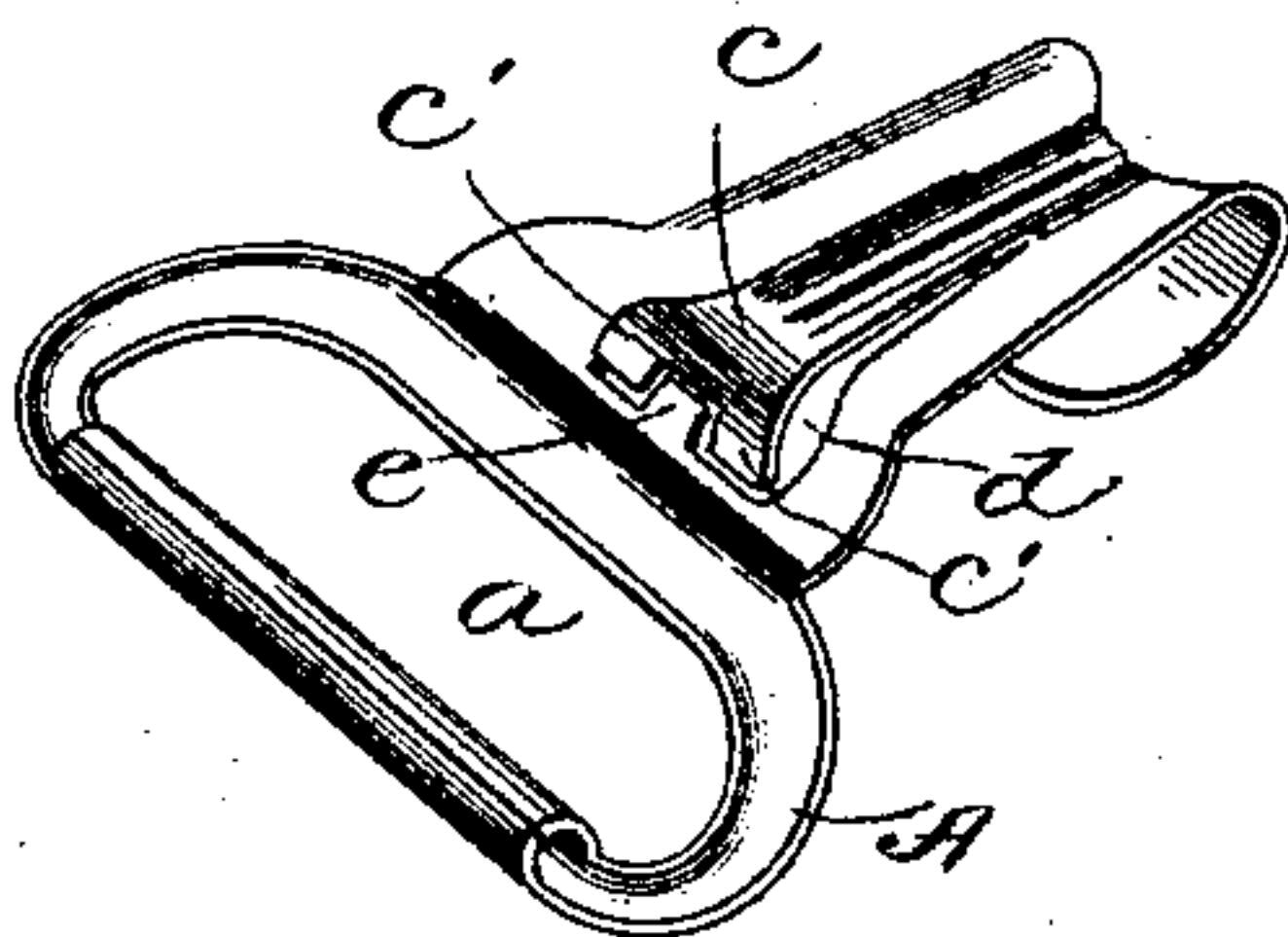
*Fig. 6.*



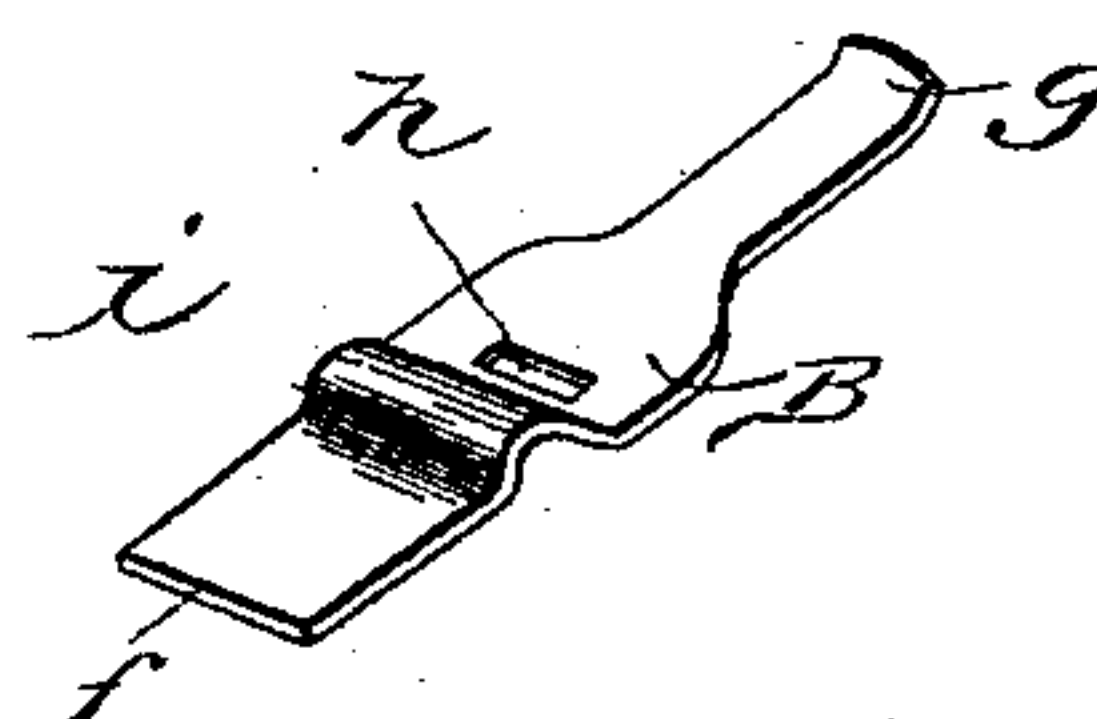
*Fig. 7.*



*Fig. 8.*



*Fig. 9.*



*witnesses:*

*Harry S. Rohrer.*  
*Wallace Muddock*

*Inventor:*

*Herbert P. Richards*

*By Charles F. Church*  
*Attorneys.*



# UNITED STATES PATENT OFFICE.

HUBERT P. RICHARDS, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE  
TRAUT & HINE MANUFACTURING COMPANY, OF SAME PLACE.

## SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 489,502, dated January 10, 1893.

Application filed September 16, 1892. Serial No. 446,047. (No model.)

*To all whom it may concern:*

Be it known that I, HUBERT P. RICHARDS, of New Britain, in the county of Hartford and State of Connecticut, have invented certain  
5 new and useful Improvements in Snap-Hooks; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying  
10 drawings, forming a part of this specification, and to the letters of reference marked thereon.

My invention has for its object to provide a snap hook of novel construction which shall be particularly adapted for use as a cast off  
15 for suspenders.

In the accompanying drawings, Figure 1 represents a front view of my improved snap hook applied to the loop of the locking tongue of a  
20 suspender buckle. Fig. 2 is an edge view of the snap hook detached, the device being shown somewhat enlarged. Fig. 3 is a rear view of the same. Fig. 4 a longitudinal sectional view taken on the line  $x-x$ , Fig. 3. Fig. 5 a similar  
25 view with the locking tongue moved away from the point of the hook. Fig. 6 is a view of the blank from which the body of the snap hook is constructed. Fig. 7 is a view of the blank from which the locking tongue is formed. Fig. 8 is a perspective view showing  
30 the form which the blank shown in Fig. 6 assumes after being subjected to the action of the dies, and Fig. 9 is a similar view of the completed locking tongue.

Similar letters denote the same parts.

35 The main body of the device is formed from a single piece of metal A and comprises a loop  $a$  for the attachment of the suspender ends, an opposite elongated portion turned back on itself to form a hook  $b$  for engaging the ring  
40 or eye of the suspender buckle, a spring tongue  $c$  struck out from the body of the metal and adapted to act upon the locking tongue, as will be presently described, a slot or opening  
45  $d$  formed by striking out the spring tongue  $c$ , and a short projection  $e$  which serves as the fulcrum of the locking tongue B. The locking tongue B is preferably made broad at its rear end  $f$  to constitute a convenient finger  
50 piece for operating it while its outer end  $g$ , which is adapted to co-operate with the point

of the hook  $b$ , is narrowed and shaped so as to fit within the slot or opening  $d$  in the main plate when the tongue is pressed fully back as, shown in Fig. 5, and thus permit the ring  
or eye of the buckle to pass over the hook 55 without obstruction. An aperture  $h$  is formed in the tongue for receiving the short projection  $e$  of the main plate A, as shown in Figs. 4, 7 and 8.

In assembling the parts, the spring tongue 60  $c$ , (shown best in Fig. 8) is slightly raised so as to permit the narrowed end  $g$  of the locking tongue to be inserted from the rear through the slot or opening until the aperture in the locking tongue comes opposite the  
65 short projection  $e$ , whereupon the said projection is fitted into said aperture, after which the spring tongue is caused to assume its operative position so that it will bear with pressure upon the locking tongue above its hing- 70  
ing point and force the end  $g$ , outwardly against the point of the hook. The end portions  $c' c'$  of the spring tongue  $c$ , shown particularly in Fig. 8, are preferably turned inwardly and bear upon the locking tongue just 75  
in front of a shoulder  $i$ , formed upon the said locking tongue. By this construction the spring is enabled to act effectively and the locking tongue is prevented from working off the projection  $e$  by any possibility. 80

The snap hook described is particularly adapted for use as a cast off for suspenders though it is of course susceptible of other uses. The finger piece or outer end of the  
locking tongue occupies a position where it is 85 most natural for the finger to rest when grasping the device and hence the locking tongue is released almost unconsciously by the wearer when the device is grasped to unlock it.

Having thus described my invention what 90 I claim as new is:

1. In a snap such as described, the combination with the body struck up from sheet metal with the hook and loop at opposite ends the internal spring tongue and a central open- 95  
ing, of the locking tongue passing through the central opening co-operating with the spring tongue and with its forward end engaging the end of the hook and the rear end forming a finger piece, and the lug or projec- 100

tion extending into the central opening and pivotally uniting the tongue and body of the hook; substantially as described.

2. In a snap hook, such as described, the  
5 combination with the body provided with the hook, the spring tongue and the oppositely arranged short projection struck up from the body of the hook forming the central opening, of the locking tongue passing through  
10 said central opening and provided with an aperture for the reception of the short projection; substantially as described.

3. In a snap hook, such as described, the combination with the body provided with the

hook, the spring tongue having the inturned 15  
bifurcated end and the short projection struck up from the body of the hook forming the central opening, of the locking tongue passing through the central opening and provided with the aperture for receiving the short pro- 20  
jection and co-operating with the bifurcated ends of the spring tongue; substantially as described.

HUBERT P. RICHARDS.

Witnesses:

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A. J. SLAPERY.