

(No Model.)

J. W. GRANTLAND.  
HOOK.

No. 486,641.

Patented Nov. 22, 1892.

Fig. 1.

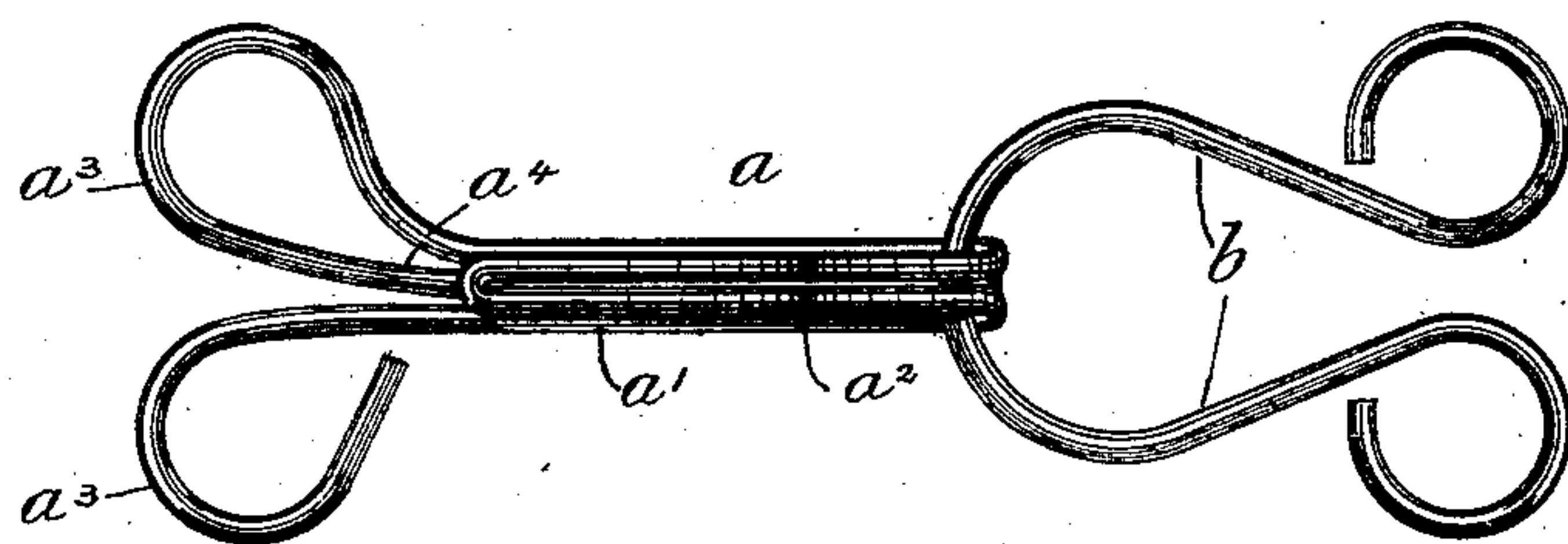


Fig. 2.

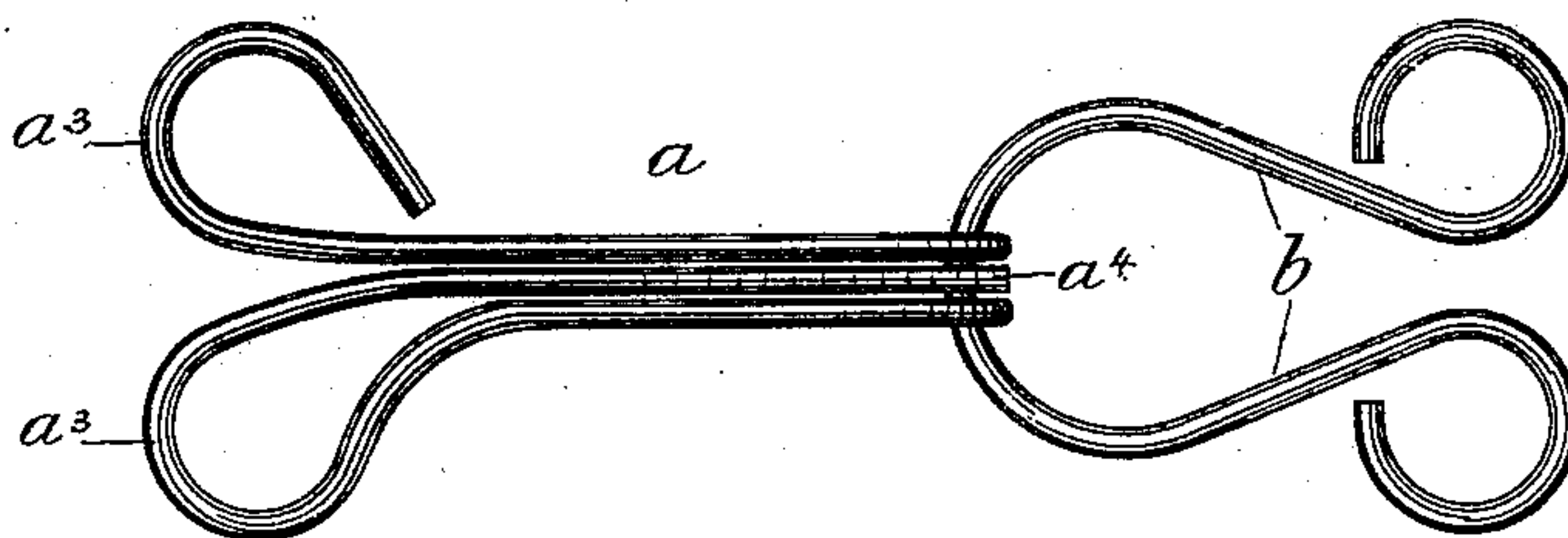
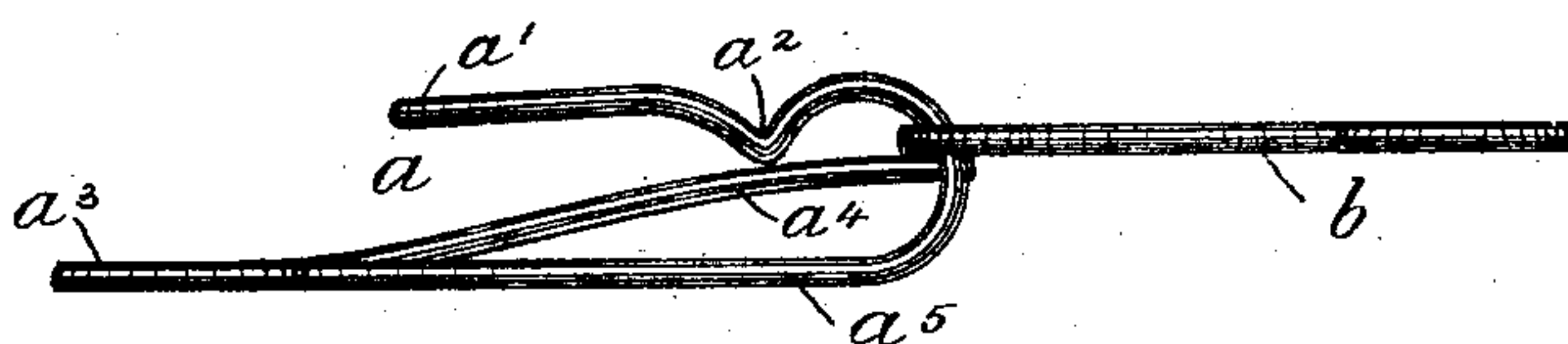


Fig. 3.



WITNESSES:  
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ATT'Y.

# UNITED STATES PATENT OFFICE.

JOHN W. GRANTLAND, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF  
ONE-HALF TO W. HARRY MATTSON, OF SAME PLACE.

## HOOK.

SPECIFICATION forming part of Letters Patent No. 486,641, dated November 22, 1892.

Application filed July 2, 1892. Serial No. 438,748. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN W. GRANTLAND, a citizen of the United States, residing at the city of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Hooks, of which the following is a specification.

My invention relates in general to hooks that are employed in connection with eyes for fastening garments and other like articles; and it relates more particularly to that class of such hooks which are provided with means for preventing the accidental detachment of the eyes therefrom and which are commonly designated "safety-hooks."

The principal objects of my invention are, first, to provide a simple, durable, efficient, and comparatively-inexpensive hook; second, to construct and arrange the parts of a hook for operation in such manner that the hook is "self-contained," meaning by that term that the eye may be attached and detached without causing any of the parts of the hook to project beyond the general outline thereof, and, third, to provide a safety-hook that is not rendered inoperative by the accidental bending of the point of the bill, which frequently occurs in practice.

My invention consists of the improvements hereinafter described and claimed.

The nature, scope, and characteristic features of the invention will be more fully understood from the following description, taken in connection with the accompanying drawings, forming part hereof, and in which—

Figure 1 is a top or plan view of a hook, embodying features of my invention and illustrating the same in connection with an ordinary eye. Fig. 2 is a similar view of the under side of the hook; and Fig. 3 is a side elevation of the hook and eye illustrated in Figs. 1 and 2, showing the bill provided upon the under side thereof with a rampart or projection, and also showing a tongue carried by the shank and adapted to co-operate with the rampart or projection.

In the drawings,  $a$  is a hook comprising a doubled wire, having the doubled portion thereof curved to form a bill  $a'$ , provided with a downwardly-projecting rampart  $a^2$ , and

having the doubled portion thereof also curved to form eyes  $a^3$  for the reception of the thread, by means of which the hook is commonly attached to place. One extremity of the doubled wire after forming a thread-eye extends forward and forms a straight tongue or latch  $a^4$ , that is adapted to co-operate with the rampart or projection  $a^2$  in the manner hereinafter explained. In use the eye  $b$  may be inserted beneath the point of the bill  $a'$  and then drawn forward past the rampart or projection  $a^2$  into the position illustrated in the drawings. During this operation the tongue or latch  $a^4$  yields slightly in a downward direction, thus permitting the eye  $b$  to pass the rampart or projection  $a^2$ , and then returns to place in contact with the projection or rampart  $a^2$ , in order to prevent accidental detachment from the hook and eye. The eye  $b$  may be readily detached from the hook whenever it becomes necessary or desirable so to do by the simple operation of pushing the eye  $b$  in a reverse direction between the rampart or projection  $a^2$  and its complementary latch or tongue  $a^4$ .

Among the many obvious advantages possessed by a hook constructed in the manner hereinabove described the following may be particularly mentioned: First, the tongue or latch  $a^4$  does not project beyond the general outline of the hook, even during the operation of inserting the eye  $b$  therein, so that the hook is self-contained; second, the bill  $a'$  may be bent upward or away from its shank  $a^5$ , as frequently occurs in practice, without interfering with or injuriously effecting the efficiency of the devices for preventing accidental detachment of the eye, because the resiliency of the tongue or latch  $a^4$  causes the same to follow up and co-operate with the projection or rampart  $a^2$  in its new position; third, the doubled-wire bill  $a'$  presents a smooth extremity that does not tend to cut or otherwise injure the article to which the hook is applied; and, fourth, the two wires forming the rampart or projection  $a^2$  are brought close together in the manner illustrated in Fig. 1 and form by reason of their cylindrical or approximately-cylindrical shape a concave seat, against which normally engages the intermediate portion of the tongue



or latch  $a^4$ , in order that the same may be maintained against sidewise or lateral displacement.

5 Having thus described the nature and objects of my invention, what I claim as new, and desire to secure by Letters Patent, is—

10 A hook comprising a doubled-wire bill provided intermediate of its point and curved neck with an inwardly-projecting bend having the two wires thereof brought together to form a concave seat and separated from each other at the curved-neck portion and a shank provided with thread-eyes and an integral straight tongue extending obliquely

upward and forward from the thread-eyes 15 and having its free extremity working in the opening between the wires of the curved neck portion of the bill and having its intermediate portion normally engaging said seat, substantially as and for the purposes set forth. 20

In testimony whereof I have hereunto set my signature in the presence of two subscribing witnesses.

JOHN W. GRANTLAND.

Witnesses:

THOMAS M. SMITH,  
RICHARD C. MAXWELL.