

No. 687,016.

Patented Nov. 19, 1901.

J. W. GRANGER.  
GARMENT HOOK.

(Application filed June 18, 1901.)

(No Model.)

Fig. 1.

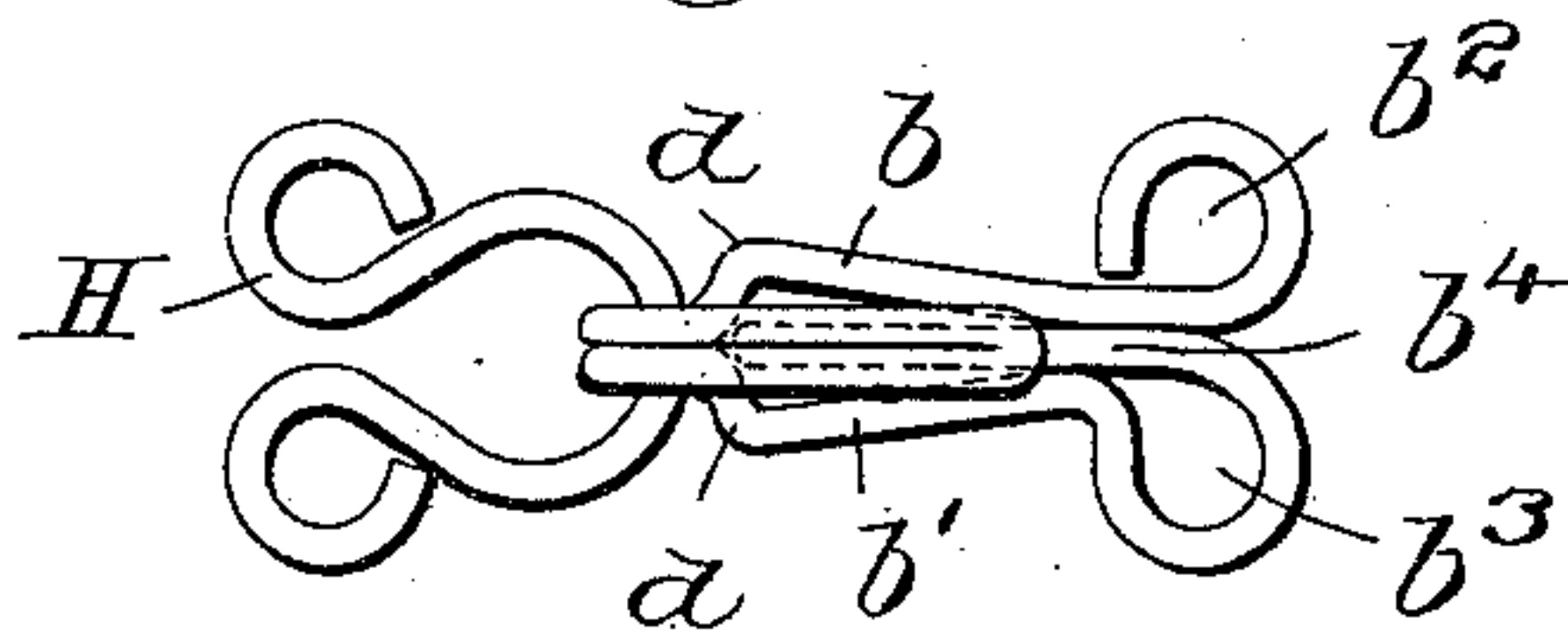


Fig. 2.

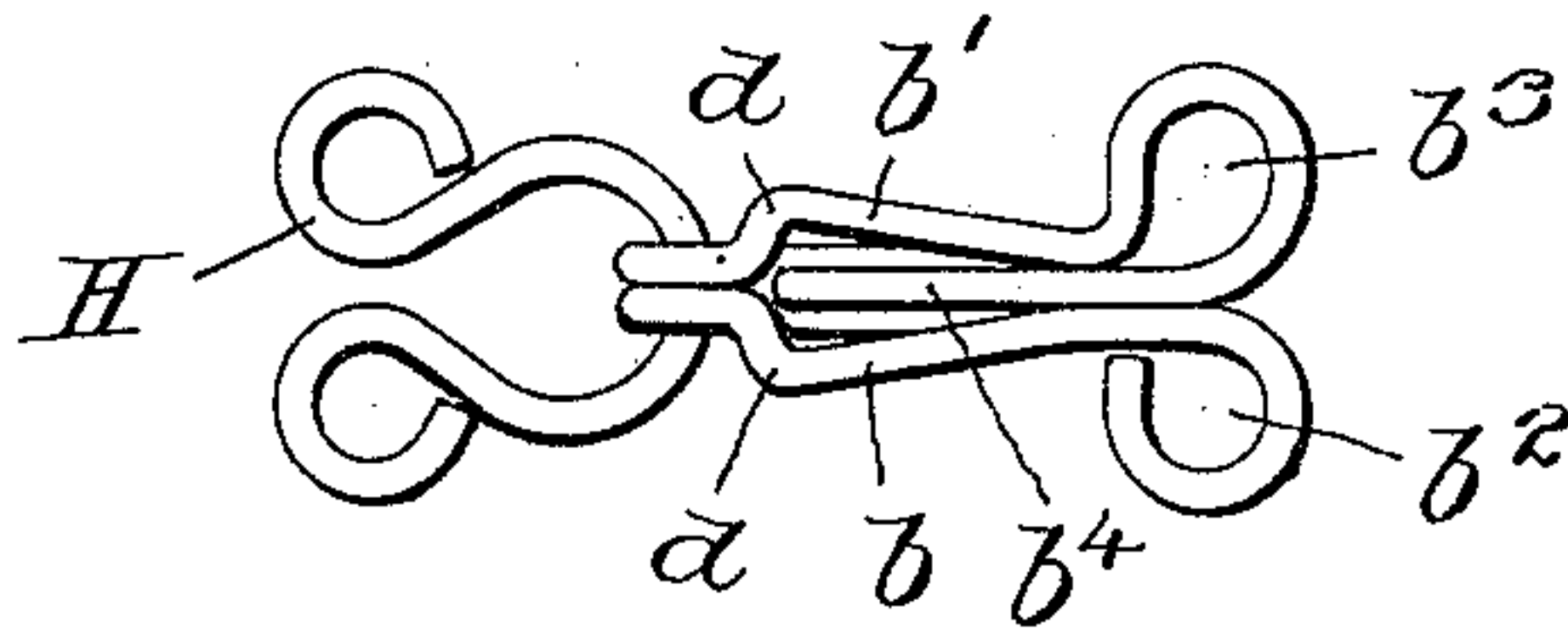


Fig. 3.

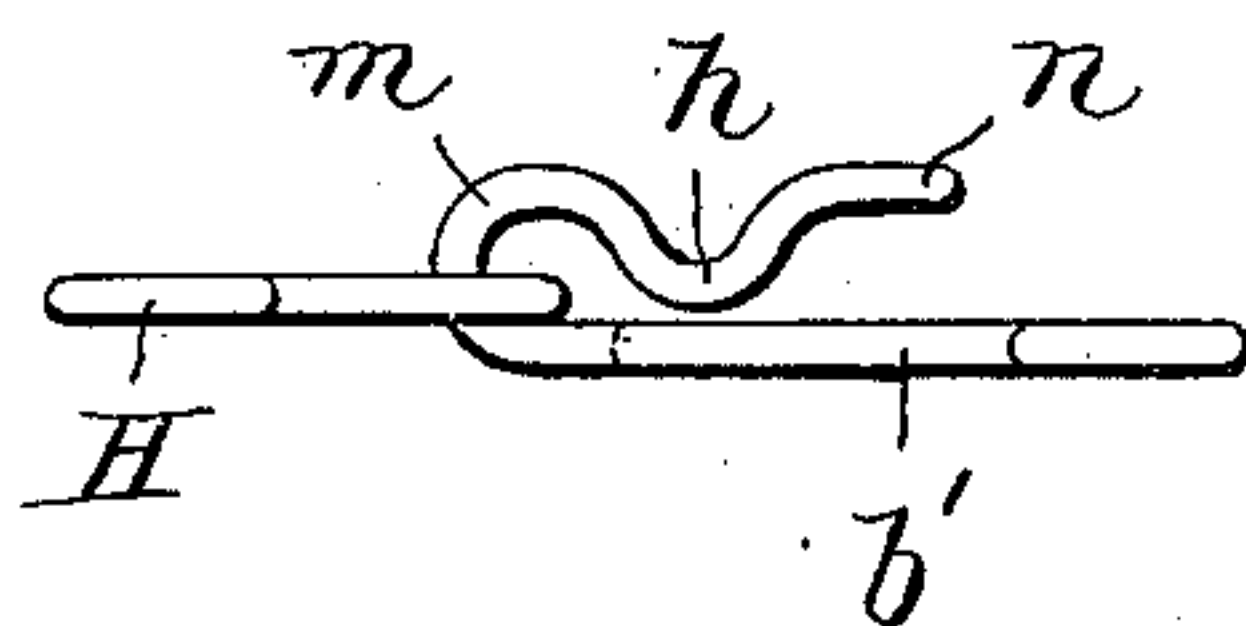
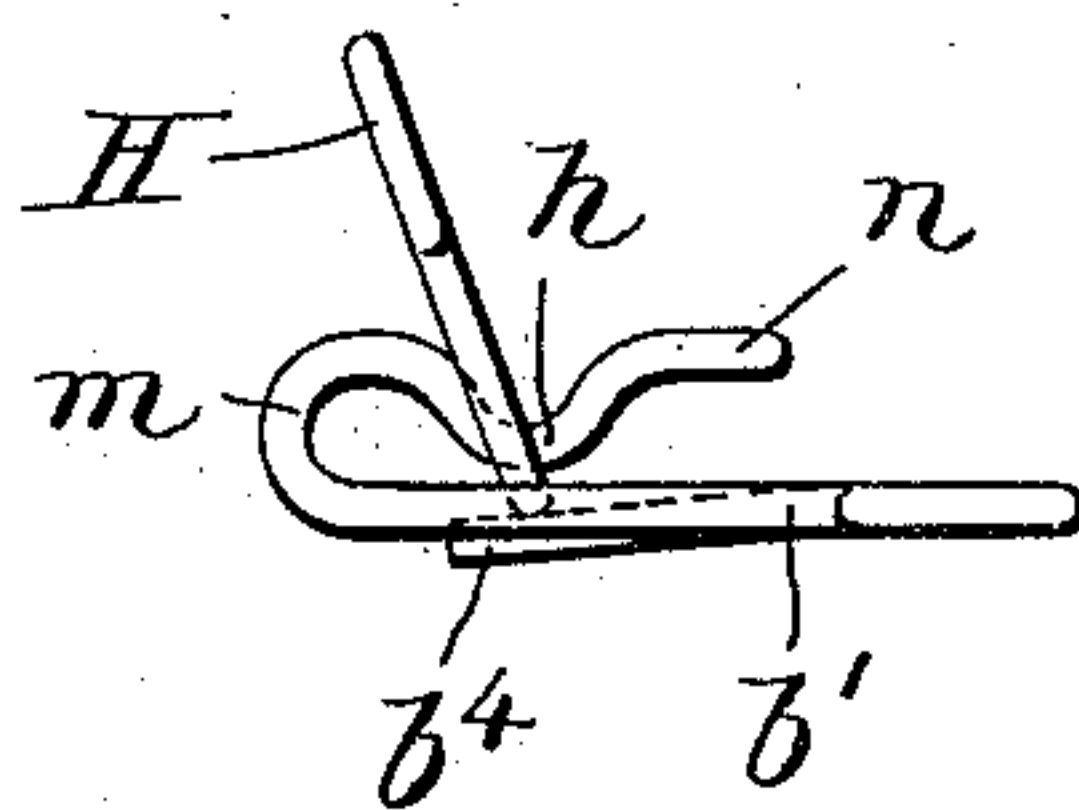


Fig. 4.



WITNESSES:

A. V. Group  
C. E. Parker

INVENTOR

John W. Granger

BY

H. H. Hutton

ATTORNEY



# UNITED STATES PATENT OFFICE.

JOHN W. GRANGER, OF PHILADELPHIA, PENNSYLVANIA.

## GARMENT-HOOK.

SPECIFICATION forming part of Letters Patent No. 687,016, dated November 19, 1901.

Application filed June 18, 1901. Serial No. 64,977. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN W. GRANGER, a citizen of the United States, residing at the city of Philadelphia, State of Pennsylvania, have invented certain new and useful Improvements in Garment-Hooks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to garment-hooks of the class employed with detached hook-eyes, and specifically to that type of garment-hook which is provided with an intermediate wire forming a spring-tongue, the latter being centrally bent to form a hump or loop, whereby the spring-tongue is depressed when the eye is inserted or withdrawn. My invention in that type of garment-hook has for its object to improve the hook in the following particulars, namely: to dispense with the loop or hump on the intermediate spring-tongue, leaving it perfectly straight, while at the same time employing it as a part of the eye-retaining element of the hook, and forming the bill of the hook with a centrally-formed loop projecting downwardly. Incidental to my method of construction I avoid bringing the free end of the spring-tongue between the two wires forming the bill, and the shoulders formed on the shank of the hook enable the latter to be sewed to the garment at the corners formed by said shoulders. Hence such stitches will not be pulled over the shank when the eye is detached from the hook. These two features are not, however, of the essence of the invention, but merely incident thereto. In all prior garment-hooks of this class the eye-retaining element consisted of such a centrally-looped spring-tongue, the loop of which operated when the inserted eye was brought into contact with it to depress the spring-tongue, the loop and the spring being integral. My invention, however, is constructed and it operates on the principle of forming the spring-actuating hump or loop on the fixed bill of the hook, (instead of making it integral with the spring-tongue, as before,) leaving the spring-tongue horizontal and perfectly straight and forming it with a free flat end, said tongue lying immediately beneath and in the same vertical plane with the loop on the fixed bill, another

feature of importance and value being in spacing the shank-wires and bringing the free-ended and flat spring-tongue to lie in said space; and, finally, my invention comprises the features stated, when the spaced shank-wires are bent at the forward end to form shoulders, as hereinafter described.

In order to enable others skilled in the art to make and use my improvement, I will proceed to describe the best embodiment of it by reference to the accompanying drawings, in which—

Figure 1 is a plan view from the top with an eye in place therein; Fig. 2, a like view of the under side; Fig. 3, a side elevation, and Fig. 4 a like side elevation showing the spring-tongue partly depressed by the contact of the eye when in removing it from the hook it is drawn under the loop of the bill.

The shank of the hook consists of the portions  $b b'$ , the wire  $b$  being bent to form the eye  $b^2$ , while the wire  $b'$  is first bent to form the eye  $b^3$  and then carried forward between the wires  $b b'$  of the shank to form the intermediate yielding spring-tongue  $b^4$ , which normally lies substantially in the same horizontal plane with the shank-wires and extends at least to the offsets or shoulders  $d d$  of the shank-wires, and preferably very slightly beyond the same, so as to be restrained from upward movement by said shoulders. The free end of the spring-tongue wire if made very slightly longer than enough to fill the space between the shank-wires will, while lying substantially in a horizontal plane in said space, have its extreme point beneath said shoulders  $d d$ . Hence while being free to move downward, as shown in Fig. 4, it will be held from upward movement above the horizontal plane of the spaced shank-wires. The latter are formed by bending the wires  $b b'$  inwardly and toward each other until they are alongside of each other, and thereafter the said wires are carried forward in a curve or bend at  $m$  to form the bill or hook  $n$ ; but between the curve or bend  $m$  and the extreme straight end of the bill it is bent to form a downwardly-extending loop  $h$ . This loop is formed in the bill at a point slightly forward of its longitudinal center in order that it may lie over the spring-tongue at a point sufficiently near the free end of the latter to enable



the spring-tongue to exert its full resiliency and extends downwardly far enough relatively to the latter that the insertion or withdrawal of a hook-eye under such loop will  
 5 operate to depress the free end of the spring-tongue, the loop operating as a fulcrum for the purpose, as illustrated in Fig. 4.

In the drawings, H represents an ordinary hook-eye, such as commonly employed with  
 10 garment-hooks.

The construction of the device and the function of its combined parts need no further description. Its utility resides in economy of construction, but principally in the fact that  
 15 the separation of the loop from the spring-tongue enables the latter to be operated with greater certainty and facility without impairing in the least but rather increasing its eye-retaining function.

20 While I have described the best form, in my opinion, in which the principle of my invention may be embodied, it is obvious that the shoulders or offsets are not essential, nor that the spring-tongues should terminate there-  
 25 at, but, on the other hand, it may be carried forward between the wires of the bill-hook; nor is it essential that the hook should be made of a single piece of wire nor embody some other details shown.

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

1. A garment-hook composed of two horizontally-arranged parallel shank-wires, separated from each other to form a space between  
 35 them, a spring-tongue normally horizontal and having a free end lying wholly within said space, intermediate of the shank-wires,

and extending toward the bill of the hook, and a bill or hook proper having a centrally-  
 40 formed loop lying in the same vertical plane with and extending downwardly to or near said spring-tongue.

2. A garment-hook composed of a pair of spaced shank-wires terminating in eyes, the  
 45 wire of one of the same being bent to form an intermediate horizontal spring-tongue lying wholly in the space between said shank-wires; shoulders formed on said shank-wires, and a bill-hook consisting of said shank-wires bent  
 50 inwardly beyond the shank into closely-contiguous relation and thence curved to form a downwardly-extending loop over said spring-tongue.

3. A garment-hook consisting of securing-  
 55 eyes, a shank, a bill or hook proper and a straight spring-tongue lying intermediate of the shank-wires, all formed of a continuous wire, the said bill being provided with a  
 60 downwardly-projecting loop lying in the same vertical plane with the spring-tongue and immediately over the same, and said shank consisting of opposite wires spaced to a point in a lateral plane with the intermediate spring-  
 65 tongue, and bent inwardly thereat to form shoulders or offsets, said spring-tongue having its extreme point extending to and beneath said shoulders or offsets on the shank.

In testimony whereof I have hereunto affixed my signature this 10th day of June, A. D.  
 70 1901.

JOHN W. GRANGER.

Witnesses:

GEO. W. REED,  
 H. T. FENTON.