

(No Model.)

F. E. DE LONG.  
GARMENT HOOK.

No. 492,742.

Patented Feb. 28, 1893.

FIG. 1.

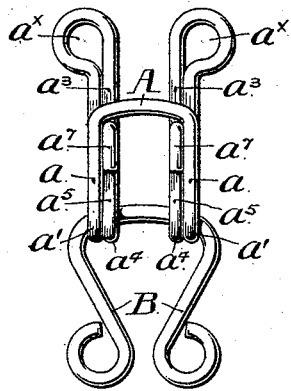


FIG. 2.

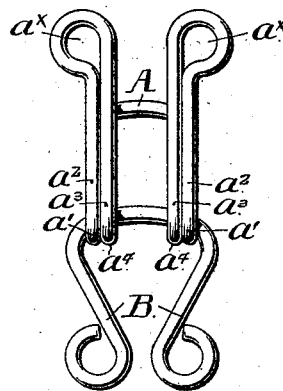


FIG. 3.

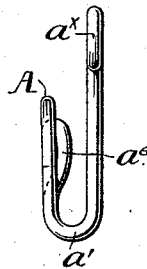


FIG. 6.

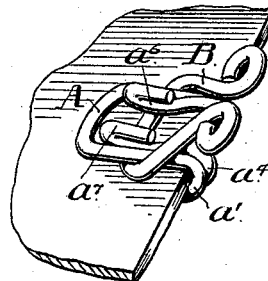


FIG. 5.

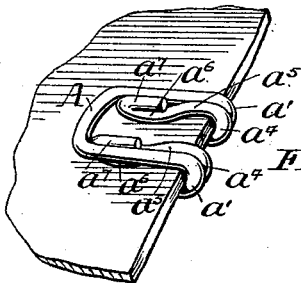
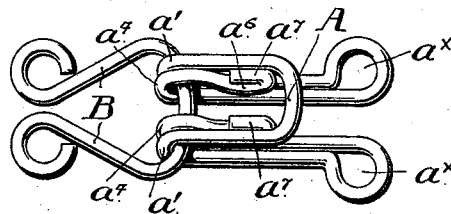


FIG. 4.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

FRANK E. DE LONG, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO  
RICHARDSON & DE LONG BROTHERS, OF SAME PLACE.

## GARMENT-HOOK.

SPECIFICATION forming part of Letters Patent No. 492,742, dated February 28, 1893.

Application filed December 19, 1892. Serial No. 455,577. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK E. DE LONG, a citizen of the United States, residing in the city and county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Garment-Hooks, of which the following is a specification.

My invention relates to hooks which are employed, in connection with eyes, for fastening wearing apparel, and for kindred purposes; and especially to that class of the same in which both the hook and the eye are intentionally made quite wide, so as to cause them to present a broad bearing upon or with respect to, and to prevent the puckering of, the material to which they are applied.

My invention further relates to that special class of garment hooks which are made from a single piece of wire bent to the desired form, a component of which is a spring tongue formed with a bend, bellied portion, or so-called "hump" in it, which bears such relation to the bill and shank portions as to partially close the eye-space between the bill and the shank, and to slightly obstruct the passage of the eye both in its engagement and disengagement with the hook,—a type of which is set forth in United States Letters Patent No. 411,857, granted to me October 1, 1889, and another type of which is set forth in United States Letters Patent No. 462,472, granted to me November 3, 1891.

My invention comprehends a garment hook formed of a single or continuous piece of wire, in which the two shank-side-bars which together form the shank proper are substantially parallel but preferably at such distance apart as to give the required breadth to the shank, in which the bill is formed as a continuation of said shank-side-bars and preferably possesses a corresponding breadth, and in which the wires which are correspondently and oppositely bent and carried inward to the rear of the shank-side-bars to form the thread-eyes, are then continued forward substantially in the plane of said shank-side-bars and respectively inside and alongside of them,—are then bent upward in loops or bends generally correspondent to the eye engaging bends formed in the shank-side-bars in the region where the

latter are bent upwardly or returned upon themselves to form the bill-side-bars,—and are then in the form represented carried respectively inside and alongside of said bill-side-bars backward to the region of the apex of the bill,—being intermediately of their lengths bent downward toward the shank in such manner as to form bellied portions or "humps," and being also preferably but not restrictively bent upward and backward upon themselves to form closed loops or folds.

A hook embodying a preferred form of my improvements is represented in the accompanying drawings and herein described, the particular subject matter which I claim as novel being hereinafter definitely set forth.

In the drawings, Figure 1 is a top plan view, and Fig. 2 a bottom plan view, of a hook embodying my improvements, and of an eye engaged therewith. Fig. 3 is a right hand side view of the hook as represented in Fig. 1. Fig. 4 is a view in perspective of the hook as seen from above, and of the eye in engagement therewith. Fig. 5 is a view in perspective of the hook as seen from above, and shown as applied to the edge of a fabric in the ordinary mode of applying the hook to a garment. Fig. 6 is a view similar to Fig. 5, representing the position which the parts occupy during the operation of engaging or disengaging the eye.

Similar letters of reference indicate corresponding parts.

The bill of the hook is formed of a single piece of wire, continuous, as the bill-side-bars  $a$ , in each direction from its apex or point, A, conveniently in the form shown, to the eye-engaging bends  $a'$   $a'$ , where upon each side it returns upon itself, so to speak, and passes back to form the shank-side-bars  $a^2$   $a^2$ , which together constitute the shank portion of the hook, and which at the rear are respectively bent around, preferably first outward and then inward as shown, to form the thread-eyes  $a^x$ , from which the wires are then carried outward or forward between said shank-side-bars to form those portions of the spring-tongues which I term the tongue-shank-bars  $a^3$   $a^3$ , which are carried forward and then respectively bent to form loops  $a^4$   $a^4$

generally correspondent with the eye-engaging bends  $a'$  formed in the shank-side bars in the region where the latter bend upwardly or return upon themselves to form the bill,—  
 5 and which are then carried backward inside and alongside of the bill-side-bars to form those portions  $a^5 a^5$  of the tongues which for a portion of their lengths are bellied or bent downward toward the shank to form "humps,"  
 10  $a^6 a^6$ , and which are then preferably bent upward and backward upon themselves to form the folds  $a^7 a^7$ .

B is the eye.

Such being a description of a hook made  
 15 from a single piece of wire and embodying my improvements, it will be apparent that its special characteristics, and those which distinguish it from prior hooks of the same general class, are not only that it is a hook which,  
 20 by virtue of possessing four pieces or lengths of straight wire lying substantially in the same plane and together in effect constituting the shank portion, possesses considerable breadth of bearing,—but also that it is one which is  
 25 provided with a pair of spring-tongues which lie between the shank and bill-bars, incidentally serve to broaden the shank and bill, are respectively provided with "humps" or bellied portions which face the shank proper and  
 30 in the engagement and disengagement of the eye move from and toward said shank, and are preferably provided with return bends or folds.

The breadth of the hook as an entirety is,  
 35 of course, dependent upon the distance which the side-bars of the shank are apart, and may be varied according to the lateral extent or breadth of bearing which it is desired that

the hook shall possess. Thus, the distance may be less or greater than that represented 40 in the drawings, and the hook yet embody the feature of a broad base and a broad hook-bearing for the eye, and of double spring-tongues portions of which are formed with "humps" facing the shank portion and dis- 45 posed between the bill-side-bars.

Having thus described my invention, I claim and desire to secure by Letters Patent—

1. A hook formed of a single piece of wire 50 bent to form a bill, a shank, and thread-eyes, and provided between the lateral members of the shank and bill with two spring-tongues generally correspondent to the form and disposition of said members, but in the region 55 of the bill formed with downwardly-projecting "humps" or bellied portions which face the shank, substantially as set forth.

2. A hook formed of a single piece of wire bent to form a bill, a shank, and thread-eyes, 60 and provided between the lateral members of the shank and bill with two spring-tongues generally correspondent to the form and disposition of said members, but in the region of the bill formed with downwardly-projecting "humps" or bellied portions which face 65 the shank, and provided with return bends or folds, substantially as set forth.

In testimony that I claim the foregoing as my invention I have hereunto signed my name 70 this 15th day of December, A. D. 1892.

FRANK E. DE LONG.

In presence of—

J. BONSALE TAYLOR,  
 F. NORMAN DIXON.