

F. E. DE LONG.  
GARMENT HOOK.  
APPLICATION FILED MAR. 22, 1909.

947,771.

Patented Jan. 25, 1910.

FIG. I.

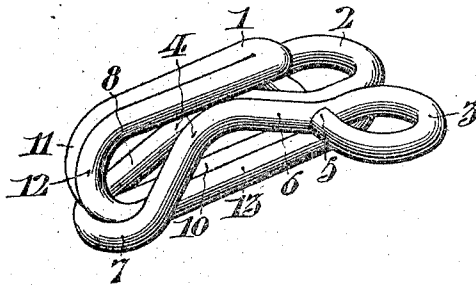


FIG. II.

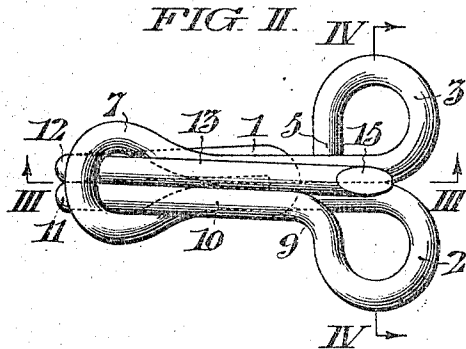


FIG. III.

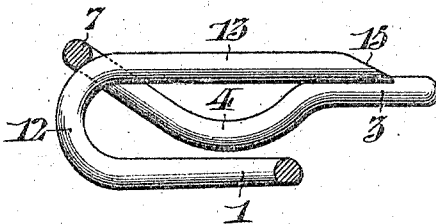
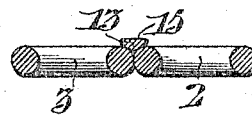


FIG. IV.



WITNESSES

*John C. Bergner*  
*James H. Bell*

INVENTOR

*Frank E. DeLong*

BY

*M. J. Paul*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

FRANK E. DE LONG, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF  
TO THOMAS DE Q. RICHARDSON, OF GERMANTOWN, PHILADELPHIA, PENNSYLVANIA.

## GARMENT-HOOK.

947,771.

Specification of Letters Patent.

Patented Jan. 25, 1910.

Application filed March 22, 1909. Serial No. 484,938.

*To all whom it may concern:*

Be it known that I, FRANK E. DE LONG, of the city of Philadelphia and county of Philadelphia and State of Pennsylvania, have invented a certain new and useful Improvement in Garment-Hooks, of which the following is a specification, reference being had to the accompanying drawings.

My present invention is an improvement upon that set forth in Letters Patent No. 864,231, granted to me under date of August 27th, 1907, and has for its object the disposition of the ends of the wire, from which hooks of this character are formed in such manner as to present no protruding part which would be objectionable under the conditions of use.

Hooks of the general type described in my said former patent are usually employed in connection with loop eyes of wire, but since these are in common use and may be of any character, I have not deemed it necessary to illustrate the same.

In the accompanying drawings, Figure I, represents a perspective view of a hook embodying my invention. Fig. II, is a view of the rear or underside thereof. Fig. III, is a longitudinal section on the line III, of Fig. II, and Fig. IV, is a transverse section on the line IV, IV, of Fig. II.

The general type of the hook is of the well-known character, comprising a bill 1, thread eyes 2, and 3, respectively, and a shank composed of the parallel members 10, and 13. Combined with these features is a raised element 4, (sometimes called a "hump") and located between the shank and the bill in such relation as to permit the passage of the loop eye under definite and positive pressure, directed lengthwise with the shank, but to prevent accidental disengagement of the loop eye under ordinary circumstances. These features being well understood need not be further described.

In forming hooks of this character from a single piece of wire, it is found that serious objections may arise from exposure of the free end of the wire, particularly with relation to the raised element or hump. Any projection of such end in certain regions is liable to catch in different objects, such as the loop eye itself, or portions of the garment or threads, and the tendency is to exaggerate the projection so that it may be-

come very objectionable. The purpose of the present invention is to obviate the difficulty just referred to.

In order to indicate the exact character of the structure, it is most convenient to trace the course of the wire, commencing at one thread eye, which comprises one terminal point of the wire. The wire commences at 5, in the inner region of one thread eye 3, (in this instance the one indicated at 3) and after being bent around to form said eye, it is projected downwardly and raised as shown at 6, to form one portion of the hump 4. It then descends and is bent to form the loop 7, which embraces the lower extremity of the shank, returning upon the opposite side in a raised portion 8, which constitutes the other half of the hump 4. It then descends toward the general plane of the shank, and is bent to form the thread eye 2, at whose extremity it is bent abruptly as indicated at 9, and prolonged as shown at 10, to form one half portion of the shank of the hook. After passing through the loop 7, the wire is bent to form the bight at 11, thence extends upward and is returned, forming the bill 1, and is bent rearwardly in correspondence with the bend at 11, to form the other portion 12 of the bight. It then is prolonged as shown at 13, to form the other portion of the shank, parallel to the part 10.

It will be noted that the parts 10, and 13, are inclined slightly with relation to what may be termed the median line of the hook, so that the free end 15, of the wire lies practically in said median line, instead of to one side thereof, being located under the line of contact between the two thread eyes, and this free end 15, is preferably beveled as shown in the drawings. By this construction the back of the shank may be made practically flat, the extremity of the wire of the thread eye 3, lying, however, slightly out of plane of the shank proper, in order that said free end may abut against the side of the wire at the commencement of the rise 6.

Having thus described my invention, I claim:

A garment hook formed of a single continuous piece of wire, comprising thread eyes; a bill; a shank having a lateral inclination with respect to the median line of the bill; a raised portion intermediate between the shank and the bill having a loop

which embraces the lower portion of the shank; one of the terminals of said wire being arranged at a thread eye, the other terminal of said wire lying in a plane beneath the thread eyes and symmetrically with relation to the line of contact between them.

In testimony whereof, I have hereunto signed my name, at Philadelphia, Pennsylvania, this nineteenth day of March 1909.

FRANK E. DE LONG.

Witnesses:

JAMES H. BELL,  
E. L. FULLERTON.