

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

947,770.

Patented Jan. 25, 1910.

FIG. I.

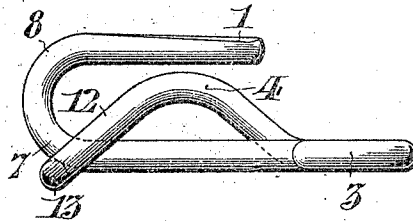


FIG. II.

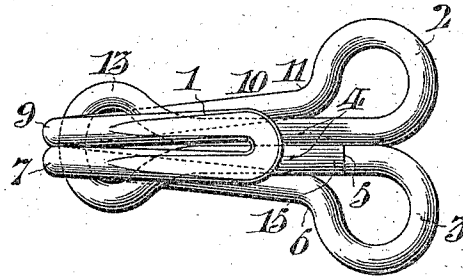
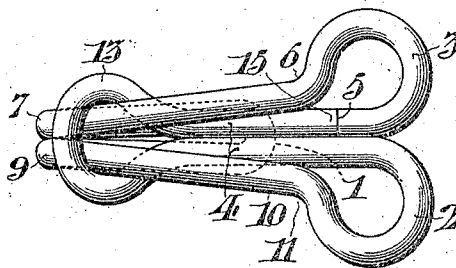


FIG. III.



WITNESSES

John C. Beugner.
James H. Bell

INVENTOR

Frank E. DeLong,

BY

Kelly & 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.

947,770.

Specification of Letters Patent.

Patented Jan. 25, 1910.

Application filed March 22, 1909. Serial No. 484,937.

To all whom it may concern:

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

My present invention is an improvement
10 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
15 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
20 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 side elevation of a hook embodying my invention. Fig. II, is a front
25 plan view of the hook. Fig. III, is a rear plan view thereof, the positions of various parts being indicated by dotted lines.

The general type of the hook is that commercially known as a "swan bill", that is to say, the engaging bill of the hook is somewhat flattened, and the shank is provided
30 with two thread eyes 2, and 3, respectively. Combined with these features is a raised element 4, (sometimes called a "hump"), located between the shank and the bill, in such
35 relation as to permit the passage of the loop eye under definite and positive pressure directed lengthwise with the shank, but to
40 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
45 single piece of wire, it is found that serious objections may arise from exposure of the free end of the wire with relation particularly to the raised element or hump. Any
projection or exposure of an end of wire in
50 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 become very objectionable.

The purpose of the present invention is 55 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
60 thread eye, which usually constitutes one terminal point, but which in the present instance comprises the terminal points of both ends of the wire. The wire commences at 5,
in the inner region of the thread eye 3, and after forming said thread eye is bent at the
65 point 6, where the shank commences. From this point it extends at an incline to the median line of the hook, to the point 7, where it is bent forward to form the bight 8, and
thence extends parallel to the shank and returns forming the flattened bill 1. At the
70 point 9, it is again bent coincidentally with the bend at 7, so as to form the other portion of the bight, and then returns with an
outward incline, as shown at 10, to the point
75 11, where it is bent abruptly outward to form the second thread eye 2. From the inner region of said thread eye 2, the wire
extends down between the wires of the shank, which, at the upper region thereof, 80
afford an interspace owing to the inclination of the shank wires, and then rises to form one part of the hump 4. Said raised portion
then descends as indicated at 12, and is bent outwardly and rearwardly into a loop 13, 85
which embraces the lower extremity of the shank just above the bight of the hook, and which then returns within the bill, and is raised to form the other half of the hump 4,
90 descending again to the point 15, where the end of the wire abuts squarely and firmly against the end 5, so as to make a very close joint therewith, the portion of the wire immediately adjacent to the extremity 15, lying
95 in the general plane of the shank, so that the joint between the parts 5, and 15, is substantially at right angles to the plane of the shank. By this disposition of the wires will be noted that there is no protruding part
thereof, in the bill or bight of the hook, or 100

in the hump portion thereof, and hence the danger of entanglement above referred to is avoided.

Having thus described my invention, I
5 claim:—

A garment hook formed of a single continuous piece of wire, comprising thread eyes; a shank formed of two inclined members converging from the thread eyes toward
10 the bight; a bill; a raised portion intermediate between the shank and the bill and having a loop which embraces the lower por-

tion of the shank; the two terminals of the wire abutting directly against one another at the region where one of said thread eyes
15 merges into the shank, whereby both ends of the wire are protected against protrusion.

In testimony whereof, I have hereunto signed my name, at Philadelphia, Pennsylvania, this nineteenth day of March 1909. 20

FRANK E. DE LONG.

Witnesses:

JAMES H. BELL,
E. L. FULLERTON.