

(No Model.)

E. F. & F. A. SMITH.
SELF LOCKING GARMENT HOOK.

No. 563,625.

Patented July 7, 1896.

Fig. 1.

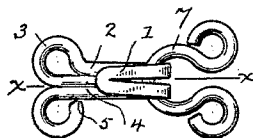


Fig. 2.

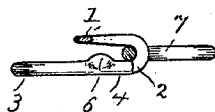
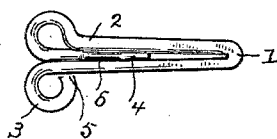


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

EDWIN F. SMITH AND FRANK A. SMITH, OF UNION CITY, CONNECTICUT.

SELF-LOCKING GARMENT-HOOK.

SPECIFICATION forming part of Letters Patent No. 563,625, dated July 7, 1896.

Application filed January 27, 1896. Serial No. 576,993. (No model.)

To all whom it may concern:

Be it known that we, EDWIN F. SMITH and FRANK A. SMITH, citizens of the United States, residing at Union City, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Self-Locking Garment-Hooks; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to the class of garment-hooks in which a tongue of metal lies between the sides of the base and is provided with means for retaining the eye in engagement with the bill, and has for its object to produce a hook of this class which may be made with a short bill, which adds greatly to the strength of the hook, in which the tongue shall be straight, which greatly increases its resiliency and permits the bill to be low, that is, to be bent down closer to the base than has been possible with ordinary tongued hooks, and which may be made from considerably less wire than is required to make any of the tongued hooks now upon the market, thereby effecting a great saving in cost, owing to the enormous quantity of hooks that are made and sold every day.

With these ends in view we have devised the novel hook of which the following description, in connection with the accompanying drawings, is a specification, numbers being used to designate the several parts.

Figure 1 is a plan view of our novel hook in connection with an eye; Fig. 2, a section on the line *xx* in Fig. 1, and Fig. 3 is a plan view of the partly-formed hook before the bill is curved to shape.

1 denotes the bill of the hook; 2, the base; 3, the attaching eyes, and 4 the tongue. The bill and base are made by doubling the blank of wire upon itself in the usual manner, the bill being preferably flattened, as shown in the drawings, and one strand of the blank being made longer than the other.

One of the attaching eyes is formed from the short strand of the blank, the end lying against the outer side of the shank, as at 5. The other attaching eye is formed from the

long strand of the blank, which after forming the eye is turned inward between the sides of the base to form the tongue 4.

The novel feature of the tongue consists in a knob 6, which is formed near its free end by swaging or forcing up a portion, approximately one-half, of the diameter of the tongue, that is to say, the tongue is left straight and full size on the under side and the knob is raised above the upper surface of the tongue so as to partially fill the space between the base and the bill by displacing metal of the upper half of the diameter of the tongue.

Our novel hook is shown as engaged by an eye of ordinary construction, which we have indicated by 7.

The special advantages of our novel construction of hook are that we do not weaken the tongue at this point, which is the place where strength is required and as would be the case if the metal in the whole diameter of the tongue was displaced, nor do we stiffen the tongue, as is the case where the tongue itself is bent or curved. It is very important in the manufacture of articles of this class that the construction be such that they can be formed easily and rapidly by simple machinery, and that the amount of stock used be reduced to the minimum. The requirements of the trade are that the entire hook be as short as possible, and especially that the bill be short, that the hook be flat, that is, that the bill and the base lie as close together as possible, and furthermore that means be provided for locking the eye within the bill of the hook which will hold the eye firmly under all ordinary circumstances, it being, however, especially desirable that the spring quality of the tongue shall not be impaired, so that the eye may be readily disengaged from the hook at any time. It is a serious objection to many of the tongued hooks upon the market that the lock is too secure. In other words, the eye is locked in the hook so securely as to render it difficult to detach the eye. This results from the stiffness of the tongue, which is produced by bending the metal from which the tongue is formed.

By making the tongue in our novel hook straight we are enabled to make the bill

shorter than is possible where the tongue is bent to form a locking device. The hook is thereby increased in strength in proportion as the bill is shortened. In brief, our novel construction enables us to make the hook flatter and shorter and therefore stronger and more rigid, while on the other hand the spring quality of the locking device is greatly increased.

10 Having thus described our invention, we claim—

1. A garment-hook provided between the sides of the base with a straight spring-tongue having near its free end a knob formed by
15 raising a portion of the metal of the body of the tongue near its free end, so that the bill

may be short and low, and the eye will be retained in engagement therewith.

2. A garment-hook provided between the sides of the base with a straight spring-tongue 20 having near its free end a knob formed by displacing the metal of the upper side of the tongue which is left straight and full size on the under side as and for the purpose set forth.

In testimony whereof we affix our signatures in presence of two witnesses. 25

EDWIN F. SMITH.
FRANK A. SMITH.

Witnesses:

JOHN M. SWEENEY,
PETER J. MCNERNEY.