





# UNITED STATES PATENT OFFICE.

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## HOLDER FOR LACING-HOOKS.

No. 807,516.

Specification of Letters Patent.

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*To all whom it may concern:*

Be it known that I, JOHN C. TELFER, a citizen of the United States, residing at St. Louis, State of Missouri, have invented certain new and useful Improvements in Holders for Lacing-Hooks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements in holders for lacing-hooks and similar articles; and it consists in the novel construction of holder more fully set forth in the specification and pointed out in the claims.

In the drawings, Figure 1 is a perspective of the holder inserted into the socket of the raceway carried by the machine which secures the lacing-hooks to the stock. Fig. 2 is a perspective of one end of the holder in a slightly-tilted position. Fig. 3 is a cross-section on line 3 3 of Fig. 5. Fig. 4 is a cross-section on line 4 4 of Fig. 5. Fig. 5 is a top plan of the holder shown coupled to the raceway. Fig. 6 is a middle vertical longitudinal section thereof and of the adjacent end of the raceway. Fig. 7 is an outer end view of the holder. Fig. 8 is a plan of the original blank from which the holder is folded into shape. Fig. 9 is a top plan showing a modified form of opening in the shape of a series of sight-openings. Fig. 10 is a top plan of a holder completely closed on top, and Fig. 11 is a side elevation with walls partly broken to show the disposition of the lacing-hooks within the holder.

In feeding lacing-hooks to stock (for example, shoe-uppers) it is customary to introduce into the machine by which the fastening of the hooks is accomplished a "gang lacing device," such as shown and described in United States Letters Patent issued to me under date of March 11, 1902, No. 695,012, the machine being equipped with mechanism for severing the individual hooks before the latter are fastened to the stock. This gang or integral strip has the advantage in that it facilitates not only the japanning of the cluster of hooks composing it, but permits the latter to be shipped without danger of rubbing off the coat of japan. To eliminate the severing attachment from the stock-fastening machine, whereby the individual hooks may be fed to the machine, some provision must be made whereby such individual hooks may be shipped and packed without danger of abrading the coating of japan. I have therefore constructed the present holder, which not only serves as

a shipping-tube for the detached hooks, but is designed for attachment to the permanent raceway with which such machines are provided for feeding the hooks to the stock to which they are fastened, (for example, shoe-uppers.) The object of the present holder, therefore, is to form a shipping-case for the lacing-hooks, thereby making it possible to eliminate the severing mechanism from the main lace-hook-fastening machine, said holder being adapted at the same time to be temporarily coupled to the raceway of such machine.

In detail the device may be described as follows:

Referring to the drawings, H represents the holder, the same being in the form of a tube substantially hexagonal in cross-section and formed from a single piece of sheet metal. The top wall in the preferred form shown in Figs. 1 to 7, inclusive, is composed of the inwardly-deflected flanges 2 2, separated by a longitudinal slit 3, through which the contents may be readily inspected and the operator can readily detect when the said contents is exhausted. The outer terminal wall 4 is in the nature of an upwardly-deflected lip, as shown. One (or both) of the flanges 2 at the opposite end of the tube is severed for a suitable distance from its adjacent side wall 5, forming a normally upwardly deflected resilient tongue 6, which is crimped at an intermediate point, so as to form an abrupt shoulder 7, which arrests the escape of the lacing-hooks from that end of the tube. The holder or tube is approximately eighteen inches in length, and any number of such tubes filled with lacing-hooks can be crated and shipped without danger to the hooks or danger of abrasion of the enamel covering the same.

While the holder thus serves as an original package which may be conveniently shipped with its contents, it is subsequently used as a temporary adjunct to the permanent raceway of the machine, the outer socket S of the raceway R being passed over the lower end of the tube. In inserting the tube into the socket the normally upward-inclined free end of the tongue 6 slips over the wall of the socket, being thus automatically opened sufficiently to disengage the shoulder 7 from the path of the lacing-hooks, leaving the latter to freely and uninterruptedly slide down the raceway into the machine, there to be further operated on as circumstances require. As previously stated, the holder is made from a single sheet of metal which is substantially the form of



the blank shown in Fig. 8. The blank is folded along the dotted lines *a a*, thus forming the flanges 2 2, then along the lines *b b*, forming the vertical side walls 5 5 and inclined sides 5' 5' of the holder, and finally along the lines *c c*, forming the reduced bottom wall 1 of the holder. The outer end wall 4 is then turned up along the line *d*, when the holder is complete, with the exception of the crimping of the tongue 6. In practice, of course, the holder may be formed with two operations, one stamping the required blank and the other folding it into proper shape, suitable dies being provided for the purpose.

In lieu of the flanges 2 2 being separated by a slit 3, they may, as seen in the modification in Fig. 9, be brought together, the meeting edges being provided with sight-openings 3' for inspecting the contents of the tube, or, as seen in the modification shown in Fig. 10, the flanges may be brought together so as to leave no opening at all. Obviously, too, the present holder may be formed in a variety of ways different from those outlined herein and may be altered more or less in detail without departing from the spirit of my invention. The cross-section thereof should always be of a contour as to permit the lace-hooks to run out of the open end of the tube in direct lines and without lateral displacement. Thus in the present holder the inclination of the sides 5' 5', together with the reduced width of the bottom wall 1, which accurately accommodates the prongs and terminal hook of the lace-hook *h*, resting upon it, Fig. 4, serves to accurately guide the lace-hook in its passage down the tube, causing the article to slip down in a line parallel to its length and without lateral displacement, so that the danger of clogging or

jamming of the articles is eliminated. In inserting the articles into the holder the tongue 6, Fig. 2, may be raised sufficiently to admit them, or they may be inserted from the opposite end by folding down the terminal lip 4.

Having described my invention, what I claim is—

1. A holder composed of a single sheet of metal and having vertical and inclined sides, a bottom wall connecting the inclined sides, inwardly-deflected flanges at the upper edges of the vertical sides, a terminal lip at one end, and a resilient tongue formed in either of the flanges at the opposite end, said tongue having an inwardly-formed shoulder for normally intercepting the discharge of the articles at the adjacent end, and an outwardly-inclined terminal, substantially as set forth.

2. A holder for lacing-hooks composed of a single sheet of metal and having parallel side walls and inclined side walls, and a bottom wall connecting said inclined walls, inwardly-deflected flanges at the upper edges of the parallel side walls, said flanges being separated by a suitable longitudinal sight-slit, a terminal lip deflected from the bottom wall for closing one end of the tube thus formed, and a resilient tongue cut from the opposite end of one of the flanges and having an inwardly-formed shoulder for arresting the discharge of the lacing-hooks from said end of the tube, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN C. TELFER.

Witnesses:

EMIL STAREK,  
G. L. BELFRY.