No. 785,743. PATENTED MAR. 28, 1905.

A. D. LOCKE.

CLAMPING DEVICE.

APPLICATION FILED AUG. 20, 1901.

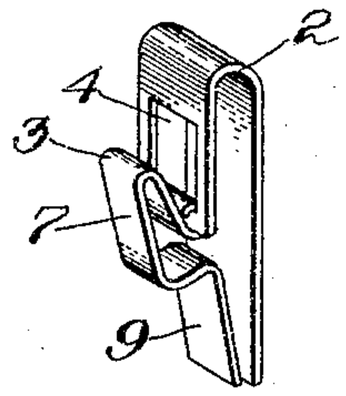

Fig. 1.

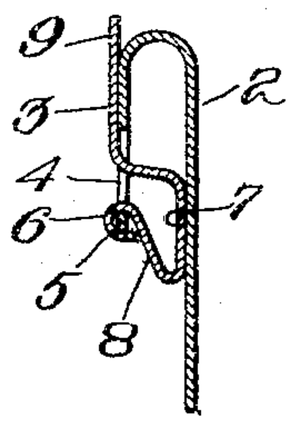

Fig. 2.

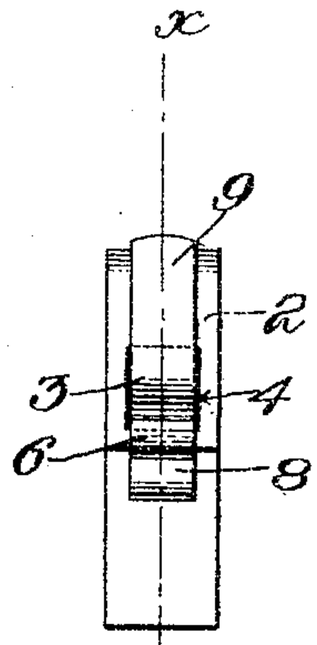

Fig. 3.

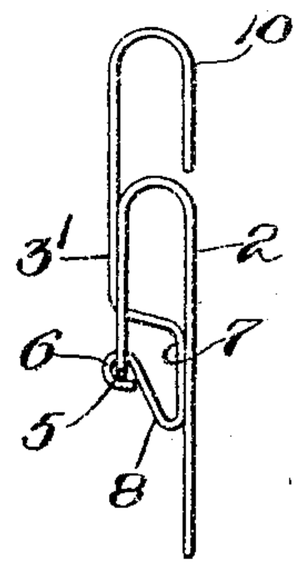

Fig. 4.

Witnesses:

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No. 785,743. Patented March 28, 1905.

UNITED STATES PATENT OFFICE.

ALBERT D. LOCKE, OF NEWTON, MASSACHUSETTS.

CLAMPING DEVICE.

SPECIFICATION forming part of Letters Patent No. 785,743, dated March 28, 1905.

Application filed August 20, 1901. Serial No. 72,642.

To all whom it may concern:

Be it known that I, ALBERT D. LOCKE, a citizen of the United States, residing at Newton, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Clamping Devices, of which the following is a specification.

A preferred form of my clamping device is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view showing the device in the open position. Fig. 2 is a central longitudinal section taken on the line *x x* in Fig. 3. Fig. 3 is a face view of the device in its closed position. Fig. 4 is an edge view of a slightly-modified form of device in its closed position.

The clamp shown in the drawings comprises two parts 2 and 3, preferably made of spring metal, of which the part 2 is so bent as to give it a U shape, one of the arms of the U being provided with a perforation 4, leaving a narrow strip 5 at its lower end. The part 3 is hinged to the part 2, preferably by bending one end, 6, of the former part around the strip 5, as shown, said part 3 being composed of a portion 7, which provides the clamping-surface of this part, a portion 8, connecting the end 6 with said portion 7 and making a somewhat acute angle with the latter, and a free end portion 9, which is offset from the portion 7 by means of a double bend, as shown, the parts being so proportioned that normally or when the clamp is in its closed position the portion 7 will be held against the unperforated arm of the part 2 by the spring action exerted by the other arm of said part 2 with the free end 9 of the part 3 extending outward through the opening 4 and projecting slightly beyond the bend in the part 2, where it can be readily engaged in opening the clamp. The perforation 4 is made large enough to permit the portions 7 and 8 of the part 3 to pass through it in opening and closing the clamp, and the object to be clamped is held between said portion 7 and the opposed arm of the part 2 in a manner which will be readily understood. In opening the clamp the perforated arm of the part 2 is pressed away from the other arm of said part and the spring action thereof is brought into play to a greater or less extent, according to the angle made by the portions 7 and 8 of the part 3 with each other, so that when the clamp is closed it will have a tendency to remain closed.

The clamping device above described is particularly adapted and intended to be used for temporarily securing covers or "hoods" to the top portion of the uppers of shoes to keep them clean during the processes of manufacture and has the advantage that when applied it tends to press the upper lining downward, and thus prevents it from wrinkling or bunching at the top of the upper, as has been found to occur in the use for the same purpose of certain prior clamps in which the clamping member when the clamp is being closed is moved upward or in the opposite direction to that in which the part 3 of my clamp is moved. The portion 7, acting in connection with the opposing arm of the U-shaped portion, provides a flat clamping-surface of considerable area, which serves to hold the hood firmly against the upper without indenting or disfiguring the same. My clamp has also the further advantage that it presents the free end of the part 3 at the top of the shoe-upper when the clamp is closed, where it will be conveniently accessible for opening the clamp and also that any pull tending to withdraw the clamp from the top of the upper will also tend to increase the force of the clamping action and to hold the clamp closed all the more tightly, whereas in the prior clamp above referred to the tendency in such case is to open the clamp and release the hood and upper.

In Fig. 4 I have shown a slight modification in which the free end of the part 3′ is bent over to form a hook 10, this form of my clamp being particularly intended to be used for suspending small articles from a rod or wire, which is accomplished by means of said hook. By reason of the location of this hook in substantial alinement with the clamp itself an article suspended by the clamp will hang practically vertical, and inasmuch as the free end of the hook terminates at a point adjacent to the bend in the U-shaped member said hook forms a nearly-closed loop adapted to prevent the accidental displacement of the

device from the rod or the like on which it is suspended. The construction of the clamp shown in Fig. 4 is in other respects like that shown in the other figures of the drawings.

It will be evident that the specific construction of clamping device above described may be variously modified without departing from the substantial features of my invention.

I claim as my invention—

1. A clamp composed of a resilient U-shaped member and a clamping member, the latter consisting of a portion 7 adapted to provide a flat clamping-surface, a connecting portion 8 making an acute angle therewith and hinged at its free end to one end of the U-shaped member, with the vertex of said angle normally pointing away from the bend of said U-shaped member, and a free end portion 9 normally located adjacent to said bend, all substantially as described.

2. A spring-clamp composed of a U-shaped member provided with a perforation, and a clamping member hinged thereto and comprising the parts 7, 8 and 9 substantially as described, the free end of said clamping member being bent over toward said U-shaped member and terminating adjacent to the bend in the same, thereby forming in connection with said bend a nearly-closed hook located in alinement with said member.

In testimony whereof I have hereunto subscribed my name this 16th day of August, 1901.

ALBERT D. LOCKE.

Witnesses:

JOSEPH T. BRENNAN,

E. D. CHADWICK.