(No Model.)

# F. H. RICHARDS.

## SUSPENDER BUCKLE.

No. 435,450. Patented Sept. 2, 1890.

Fig. 1

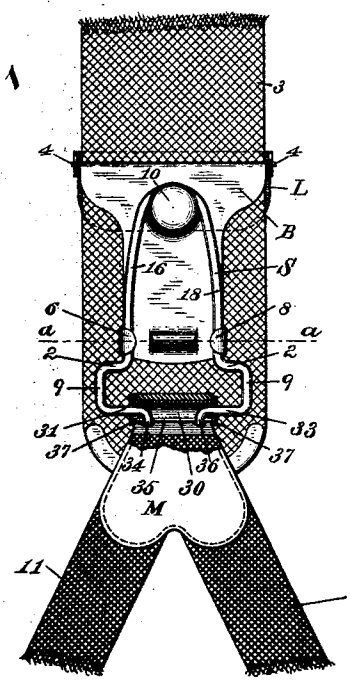



Fig. 2

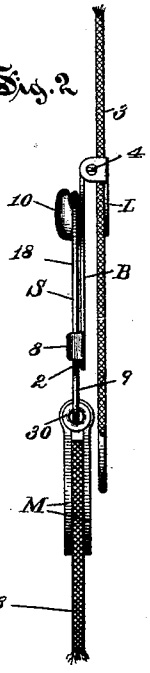



Fig. 3

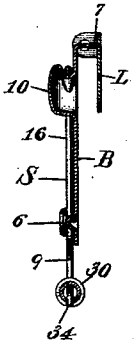



Fig. 4

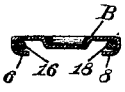



Fig. 5

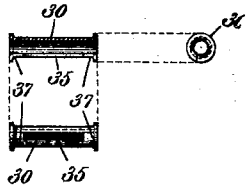



Fig. 6

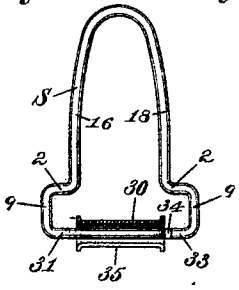



Fig. 7

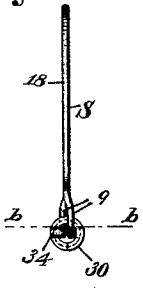
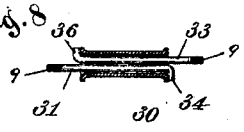



Fig. 8




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# UNITED STATES PATENT OFFICE.

FRANCIS H. RICHARDS, OF HARTFORD, ASSIGNOR TO THE TRAUT & HINE MANUFACTURING COMPANY, OF NEW BRITAIN, CONNECTICUT.

## SUSPENDER-BUCKLE.

SPECIFICATION forming part of Letters Patent No. 435,450, dated September 2, 1890.

Application filed May 1, 1890. Serial No. 350,233. (No model.)

*To all whom it may concern:*

Be it known that I, FRANCIS H. RICHARDS, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Suspender-Buckles, of which the following is a specification.

This invention relates to buckles for suspenders, and to that class of suspender-buckles having "cast-offs," the object being to provide a buckle of that class which shall be simple in construction, cheaply manufactured, and readily operated. The invention is in the nature of a modification or improvement on the buckle described and claimed in my application, Serial No. 350,232, filed May 1, 1890.

In the drawings accompanying and forming a part of this specification, Figure 1 is a front or side view of a buckle embodying my present improvements. Fig. 2 is an edge view of the same drawn in projection with Fig. 1. Fig. 3 is a longitudinal section through the middle of the buckle. Fig. 4 is a cross-sectional view of the buckle in line *a a*, Fig. 1. Fig. 5 shows three views in projection with each other of the strap-carrying tube or thimble. Fig. 6 is a view similar to a part of Fig. 1, showing a modification of the hanger and thimble. Fig. 7 is an edge view of the parts shown in Fig. 6. Fig. 8 is a sectional view in line *b b*, Fig. 7.

Similar characters designate like parts in all the figures.

The buckle-plate B is provided with the usual holding-teeth, as 7, Fig. 3, for engaging the web 3 of the suspender, with means—as the lever L, carried on pivots 4 4 formed on the plate—for clamping the web 3 in engagement with said teeth to secure the plate to said web, and with means for carrying the elastic hanger S, said means consisting in a suspension-hook, as 10, and oppositely-disposed side catches 6 and 8 engaging the two sides 16 and 18, respectively, of said hanger S.

For carrying the usual straps, as 11 and 13, I provide the tube or thimble 30, to which the straps may be attached in any convenient manner—as, for instance, by inclosing said thimble by the leather coupling-piece M, secured to the straps in a well-known manner. Said thimble 30 is carried by the inwardly-projecting lower ends 31 and 33 of the sides 16 and 18, respectively, of the hanger. The ends 31 33 fit freely in the said thimble, so that by grasping the said hanger on the outer edges thereof, it may be closed by sliding said ends toward each other for the purpose of unhooking the hanger sides 16 and 18 from the aforesaid catches 6 and 8.

For the purpose of locking the hanger in place, I form in each side thereof the abrupt bend 2 close underneath said catches 6 and 8, as fully described and claimed in my aforesaid application, Serial No. 350,232, filed May 1, 1890. Between said bends 2 and the aforesaid ends 31 33, engaging the thimble 30, I form a short portion of the hanger S, to serve as thumb-pieces 9 9, conveniently arranged to be grasped when the hanger is to be removed. Each of the ends 31 33 is provided with a stop 34 36, respectively, for limiting the outward movement of the sides 16 and 18 when the hanger is removed from the plate B. In the preferred form of the buckle shown in Figs. 1, 2, and 3, the said stops stand within the slot 35, which is formed in the lower side of the thimble, the closed ends 37, Fig. 5, forming the abutment for said stops. The hanger S is or may be made of suitable spring-wire and in practice of about the proportions shown in the drawings. The thimble 40 may be made of tubing or of suitable sheet metal.

When the "cast-off" feature of the buckle is to be used, the user grasps the hanger by the bends 9 9, and closes together the sides thereof until said sides disengage from the catches 6 and 8, when the lower end of the hanger may be drawn forward of said catches, and the hanger then lifted off the hook 10, thereby completing the separation of the two principal parts of the buckle.

Having thus described my invention, I claim—

1. In a buckle, the combination, with the buckle-plate having a suspension-hook and side catches, of the hanger engaging and carried by said hook and catches and having the inwardly-projecting lower ends, and the strap-supporting thimble carried on said ends, said ends being adapted to slide within said thim-

ble on the closing toward each other of the sides of the hanger to unhook the same, substantially as set forth.

2. In a buckle, the combination, with the buckle-plate B, of the hanger S, carried on said plate, substantially as described, and having the oppositely-disposed lower ends with stops thereon, of the thimble 30, engaging said ends, and the stops thereon, all substantially as described.

3. In a buckle, the combination, with the buckle-plate B, of the hanger carried on said plate, substantially as described, and having the ends 31 and 33 each furnished with a stop, and the thimble 30, inclosing said ends and having the slot engaging said stops, substantially as described.

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