

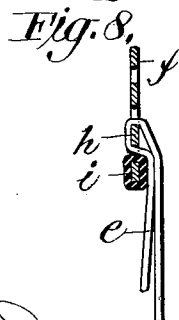
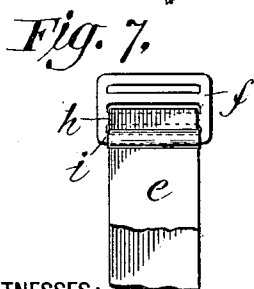
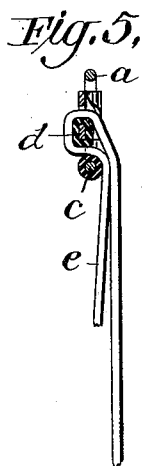
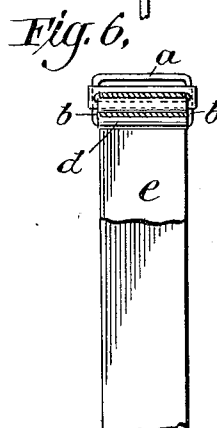
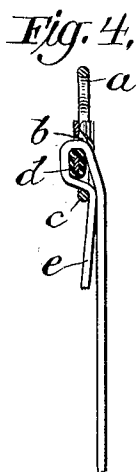
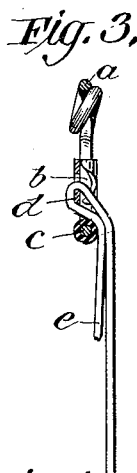
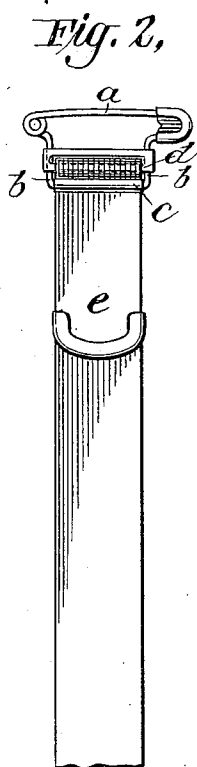
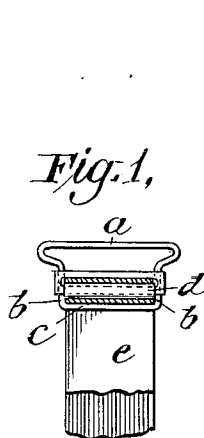
No. 650,785.

Patented May 29, 1900.

DE VER H. WARNER.
CLAMP PLATE FOR GARMENT SUPPORTERS.

(Application filed Mar. 21, 1900.)

(No Model.)



WITNESSES:

D. H. Mayhew
Ina P. Osborn

INVENTOR

De Ver H. Warner
BY
Seabury C. Mastick
his ATTORNEY

UNITED STATES PATENT OFFICE.

DE VER H. WARNER, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO THE
WARNER BROTHERS COMPANY, OF SAME PLACE.

CLAMP-PLATE FOR GARMENT-SUPPORTERS.

SPECIFICATION forming part of Letters Patent No. 650,785, dated May 29, 1900.

Application filed March 21, 1900. Serial No. 9,546. (No model.)

To all whom it may concern:

Be it known that I, DE VER H. WARNER, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Clamp-Plates for Garment-Supporters, of which the following is a full, clear, and exact specification.

My invention relates to improvements in clamps for garment-supporters wherein the garment to be supported is held to the clamp by tension.

There are numerous objections to the old style of clamps, the chief of which is that they permit the article clamped to slip and gradually loosen, or if the bars are in such close relationship as to prevent the slipping then the garment becomes torn or unduly strained at the bearing-points. These objections are present whether the bars of the clamp be of round or flat shape, as when both are round there is not sufficient friction to hold and when either is flat the garment is cut or torn by means of the tension pressing it against the sharp edge.

The object of my invention is to overcome these undesirable features and to produce an article more perfect in action and more desirable for use. I attain this object by the means illustrated in the drawings, in which—

Figures 1, 2, 6, and 7 show, respectively, front elevations of my improved clamp with clamp-frames of different styles and shapes and with the garment or strap supporting the garment in place. Figs. 4, 5, 8, and 3 show the clamps of Figs. 1, 2, 7, and 6, respectively, in side elevation, partly in cross-section and partly broken away.

Similar letters refer to similar parts throughout the several views.

a is a frame, of any desirable shape, having side arms *b b*, a fixed cross-bar *c*, and a movable bar *d*, parallel to bar *c*.

e is the garment to be clamped. In Fig. 2 it is a supporting-tape, while in Figs. 1, 6, and 7 it is a strap or webbing of any desirable material adapted for use as a belt or supporter. The movable bar *d* slides upon the side arms *b b*. The garment or tape to be clamped is drawn around bar *d* and over bar *c* in such manner that when tension is

put upon the garment or strap the bar *d* is pulled toward the bar *c*, clamping the garment or strap between said bars. This feature is clearly illustrated in Figs. 3, 4, and 5. In Figs. 7 and 8 the clamp-frame *f* is of a different style, there being no moving parts. In this case the strap or webbing *e* is passed over bars *h* and *i*, as is clearly shown in Fig. 8.

It will be readily appreciated that if either bars *c*, *d*, *h*, or *i* be of rectangular cross-section having a sharp edge the tension will cause the sharp edge to cut whatever may be between the bars and that if all are of round cross-section there will not be sufficient friction between the parts to withstand the tension. To cure these defects, I cover either bar *c* or bar *d*, or both, or bar *h* or bar *i*, or both, with an elastic yielding material, such as rubber, so that while the friction and frictional surface are both increased the sharp edges of the bars are protected and will not cut. Should all the bars of the clamp be round, the yielding friction and the greater frictional surface keep the garment from slipping. By this means I produce an article which gives the greatest security of support and is more economical in use than any heretofore produced.

It is obvious that different yielding materials and different shapes or styles of frames may be used without departing from the spirit of my invention. My invention is particularly adapted for use with garment-supporters of different kinds—belts, shoulder-braces, &c.—whether the garment itself is to be inserted in the clamp or whether elastic or non-elastic webbings are to be used as a medium of connection between the clamp and the garment to be supported.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. A clamp-plate for garment-supporters having a plurality of cross-bars, the engaging face of one of said bars being of yielding material, substantially as specified.

2. A clamp-plate for garment-supporters having a plurality of cross-bars, the engaging faces of a plurality of said bars being of yielding material, substantially as specified.

3. A clamp-plate for garment-supporters having a plurality of cross-bars, one of said

bars being provided with a face of yielding material, substantially as specified.

4. A clamp-plate for garment-supporters having a plurality of cross-bars, a plurality of said bars being provided each with a face of yielding material, substantially as specified.

5. A clamp for garment-supporters having a stationary and a movable member, the engaging face of the stationary member being of yielding material, substantially as specified.

6. A clamp for garment-supporters having a stationary and a movable member, the engaging face of the movable member being of yielding material, substantially as specified.

7. A clamp for garment-supporters having a stationary and a movable member, the stationary member being provided with a face of yielding material, substantially as specified.

8. A clamp for garment-supporters having a stationary and a movable member, the movable member being provided with a face of yielding material, substantially as specified. 25

9. A clamp for garment-supporters having a stationary and a movable member, the engaging faces of both of said members being of yielding material, substantially as specified. 30

10. A clamp for garment-supporters having a stationary and a movable member, both of said members being provided with a face of yielding material, substantially as specified. 35

In witness whereof I have hereunto signed my name, this 19th day of March, 1900, in the presence of two attesting witnesses.

DE VER II. WARNER.

Witnesses:

F. S. ANDREWS,
A. M. JAMIESON.