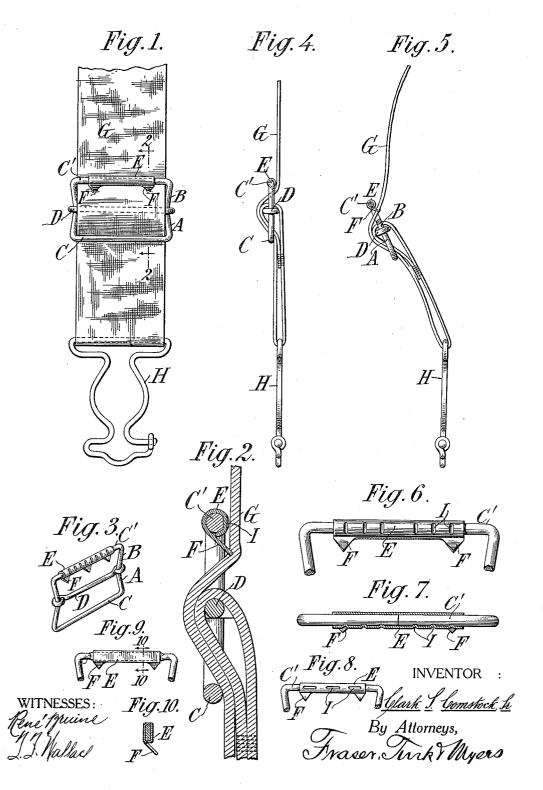
C. S. COMSTOCK, SR. BUCKLE SLIDE. APPLICATION FILED FEB. 5, 1915.

1,150,850.

Patented Aug. 24, 1915.



UNITED STATES PATENT OFFICE.

CLARK S. COMSTOCK, SR., OF EAST ORANGE, NEW JERSEY.

BUCKLE-SLIDE.

1,150,850.

Specification of Letters Patent.

Patented Aug. 24, 1915.

Application filed February 5, 1915. Serial No. 6,223.

To all whom it may concern:

Be it known that I, CLARK S. COMSTOCK, Sr., a citizen of the United States, residing in East Orange, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Buckle-Slides, of which the following is a specifi-

cation. My invention relates to a buckle slide, 10 which articles are largely used with the suspenders of men's overalls and for other similar purposes, and has for its object to provide the said slide with means whereby the same may be held in place upon the sus-15 pender when in use, at all times, whether the suspender is under strain or not. Serious objections have existed to the use of articles of this character which have heretofore been employed, due to the fact that such 20 slides would not remain in position. Customarily, these slides are provided with three bars, and the web is passed in and out around these bars, and its end, after being passed through a button loop, is brought 25 back and attached to the middle bar. The slide, when it is under strain, as when the wearer of the overalls is standing upright, will remain in position. When, however, the wearer bends forward, the strain is re-30 moved from the suspender and from the slide, and unless means are provided to hold the slide in place, it will drop a little, and it is a common experience for wearers of such devices to have to adjust their slides every 35 few minutes. Particularly is this so after the overalls have been washed a few times and the starch and filling are no longer present in the web, so that the same is quite limber. Buckles have been produced where-40 in the ends of the wire of which the frame was made were bent inwardly and downwardly into prongs to engage the web. The construction of such articles from wire and the fact that the teeth are required to be sharp, necessitates the construction of rather long teeth to obtain the necessary point, and these are necessarily unsupported, except from the side bars of the

buckle. Frequently these buckles are made

plied to the teeth the frame is very apt to be

50 of considerable width, over two inches, in fact, and in such a buckle when strain is ap-

bent, and it frequently happens that the teeth will tear the material of which the web is formed. Efforts have been made to 55 produce a buckle stamped out of sheet metal, having prongs formed integral with an end bar, but the production of such buckle slide from the heavy material necessary in the case of a buckle of considerable width, in 60 order that it shall possess the necessary strength, makes it so costly, by reason of the large amount of waste, that it is impractical.

My invention relates, therefore, to the production of a slide which will engage the 65 web so that the slide will be retained in position at all times, will not tear the web, and which may be produced without any objectionable increase in cost of production. In the production of such means I use the 70 ferrule with which wire buckle slides are usually provided and which surrounds the ends of the wire where the same come together in an end bar of the buckle. These ferrules are necessary, for without them the 75 end bars would fly apart and would, furthermore, possess insufficient rigidity.

A desirable form in which my invention may be embodied is illustrated in the ac-

companying drawings, wherein,—
Figure 1 illustrates a view of a buckle 80 slide having my invention applied thereto in position upon a web. Fig. 2 is a longitudinal section through one of the web engaging teeth, on an enlarged scale. Fig. 3 is a per- 85 spective view of a slide having my invention applied thereto, removed from the web. Fig. 4 is a side view of the construction illustrated in Fig. 1. Fig. 5 is a similar view partly in section, illustrating the position 90 of the parts when the wearer stoops forward. Figs. 6 and 7 are detail views partly in section, illustrating one manner of securing the ferrule in place upon the end bar. Fig. 8 illustrates another manner. Figs. 9 95 and 10 are similar views illustrating a still further manner.

According to my invention, I provide a ferrule which clasps the ends of the wire firmly together, so that the same possesses 100 the necessary rigidity. At some portion of this ferrule I form the same into projections which are roughened or sharpened on their outer edge, and these projections are in the

direction of the web, so that they will engage in the material of which the web is composed, sufficiently to hold the slide in position upon the web when the strain is off the web, and to prevent the slide from dropping downward on the web. In order that the web engaging means may at all times be in proper position, I secure the ferrule in position upon the wire frame so that its teeth will be always ready to perform their function.

The form in which I prefer to make my invention is illustrated in the accompanying drawings where, in Fig. 3, I have illustrated 15 my invention as applied to a buckle slide of desirable form. This buckle slide which as a whole I designate A, has a frame which is formed of a single piece of wire bent into side bars B and end bars C, C¹. A cross 20 bar D is looped around the two side bars and holds them together. The construction of the slide just described is the usual construction.

According to my invention I place upon 25 the end bar C1, which is the end bar containing the ends of the wire, a ferrule E which is preferably formed of a thin sheet metal having stiffness, and for this purpose sheet steel is well adapted. Upon a suit-30 able part of the ferrule E, I form web engaging means, and these means preferably take the shape of prongs or teeth F, of which any suitable number may be employed, and which are desirably formed 35 upon an edge of the ferrule E. These teeth are quite short and sharp. It is not intended that they shall pass entirely through the material of which the web is composed. As illustrated in the drawing, this material is 40 attached as follows: The web G passes over the shoulder of the wearer and behind the end bar C1, then outwardly and in front of the cross bar D, then downwardly and be-

hind the end bar C. It is then formed into a loop which receives any convenient form of button loop, such as illustrated at H, and the web is then passed up and around the cross bar D and attached to itself. It will therefore be seen that the direction of the prongs illustrated in Fig. 2 causes them to

pass substantially across the direction of the web, and the teeth are sharp enough to enter into the material of the web so as to hold the slide in place against falling, without passing entirely through the said material to any substantial extent, which would be apt to damage the clothing of the wearer.

The device requires that some means shall be provided to hold the ferrule in substan60 tially the position illustrated so that its web engaging means may always be in operative position. I have shown several desirable ways in which such holding may be accomplished, and others may suggest themselves to a skilled mechanic. It is preferable that

such holding means should be provided when the device is assembled. In Figs. 6 and 7 I have shown the use of cross indentations or crimps I caused by indenting the ferrule and the wire beneath it with a tool, 70 so that the material of the ferrule will be pressed into the indentations of the wire and prevent relative movement of the ferrule. Longitudinal indentations or depressions are shown for the same purpose in Fig. 8. In Figs. 9 and 10 the ferrule is flattened and rests snugly against a flattened part of the end bar.

I have, in the accompanying drawings, illustrated the best manner of carrying my invention into effect, now known to me. I do not, however, conceive that it is the only way in which the invention could be employed, as equivalents will possibly suggest themselves to the skilled mechanic. But such equivalents within the limits of the appended claims are within the scope of my invention.

The teeth F have no other duty than that of supporting the weight of the slide when 90 the suspender or web G is not under strain, and preventing the slide from dropping. When the web is under strain the teeth F are not necessary to keep the slide in position, and are not then under strain, for the 95 reason that the two ends of the web are pulling against each other.

What I claim is:—
1. A buckle slide formed of wire, the ends of the said wire bent to form an end bar, a 100 ferrule surrounding said end bar and connecting the ends of the wire, said ferrule having web engaging means and being fixed on said end bar against turning.

2. A buckle slide formed of wire bent to 105 form side bars and end bars, the ends of said wire located in one of the end bars, a sheet metal ferrule surrounding the end bar in which are located the ends of the wire and connecting said ends, integral prongs 110 on said ferrule adapted to engage a web, and said ferrule being fixed on said end bar against turning, and a cross bar connecting said side bars.

3. A buckle slide formed of wire having 115 an end bar in which the ends of the wire are located and which is provided with depressions, a sheet metal ferrule surrounding said end bar and connecting the ends of the wire, said ferrule having projecting portions adapted to engage a web, and also having depressed portions fitting snugly to the depressions in said end bar, whereby said ferrule is held on said end bar against turning.

4. A buckle slide formed of wire, the ends of the wire located in an end bar of said buckle, a cross bar secured to the side bars, a sheet metal ferrule surrounding the said end bar and securing the ends of the wire 130

in place, said ferrule formed with prongs in one of its edges which project rearwardly and in the direction of the web, and having indentations fitting snugly to corresponding indentations in said end bar, whereby said ferrule is held on said end bar against turning.

In witness whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

CLARK S. COMSTOCK, SR.

Witnesses:

HENRY M. TURK, THOMAS F. WALLACE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents Washington, D. C."