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J. M. CLARK

1,908,405

SUSPENDER ADJUSTING DEVICE

Filed Feb. 23, 1932

Fig. 1.

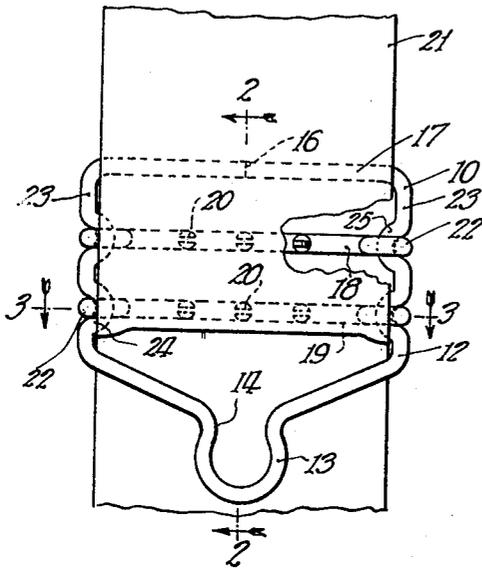


Fig. 2.

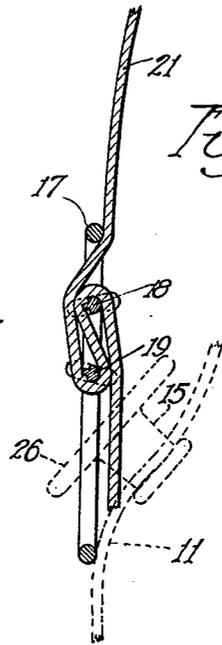


Fig. 3.

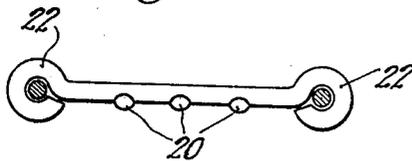
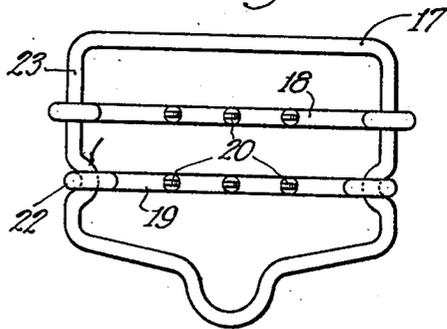


Fig. 4.



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SUSPENDER ADJUSTING DEVICE

Application filed February 23, 1932. Serial No. 594,483.

This invention relates to suspender adjusting devices, and among other objects aims to provide a device of this character which may be readily manufactured at low cost.

5 The nature of the invention may be understood by reference to one illustrative construction embodying the invention and shown in the accompanying drawing.

In said drawing:

10 Fig. 1 is an elevation of the device through which a suspended strap has been threaded;

Fig. 2 is a vertical section taken on the plane 2—2 of Fig. 1;

15 Fig. 3 is a plan section taken on the plane 3—3 of Fig. 1; and

Fig. 4 is a fragmentary elevation similar to Fig. 1 showing a device embodying different details.

20 The illustrative device combines in one unit 10 the functions of a so-called suspender slide and a suspender loop by which the suspender may be releasably connected to the garment as, for example, the bib 11 of an overall. The combined slide and loop is advantageously 25 made of wire from which it may be made of unusual strength and durability and without the production of waste or scrap.

30 The combined unit in this instance comprises a frame member 12 made of wire bent into generally rectangular shape and formed at its lower side with a loop 13 to receive a button by which it may be connected to the garment. As here shown the loop has a narrow neck 14 of slightly less width than the 35 diameter of the collet 15 of the button, and yieldable to permit the collet to pass into and out of the loop. The ends of the wire blank forming the frame member are brought together at 16 and there welded or otherwise 40 appropriately joined.

45 The suspended adjusting elements of the unit comprise three bars 17, 18, and 19, the upper one of which constitutes the upper transverse member of the frame. The bars 45 are provided with gripping or suspender engaging teeth 20, in this case formed by pinching out integral portions of the metal of the bar. The teeth are so located along the bar 50 that they will engage the suspender strap 21 when it is threaded around the bars as indi-

cated in Fig. 2. Bars 18 and 19 are provided at their ends with eyes 22 which embrace the sides 23 of the frame and which are of somewhat larger internal diameter than that of the side members 21 to permit a slight axial 55 rotation or adjustment relative to the side members under tension of the suspender strap to enable the teeth 20 to secure the most advantageous grip on the suspender strap.

60 The lower bar 19 about which the suspender strap first passes and which assumes a substantial portion of the strain, is held in place by offsetting (inwardly in this case) portions of the side members of the frame as at 24. The eyes of the bar embrace the offset 65 portions which hold the bar against substantial displacement and yet do not prevent some axial rotation by which the bar adjusts itself into efficient gripping relation with the suspender strap. As shown in Fig. 1, the intermediate bar 18 is likewise held against 70 substantial displacement while permitting slight rotative movement. The intermediate bar, however, may be free to move up and down along the slide as shown in Fig. 4 merely by 75 omitting the inwardly offset portions 25 for the upper bar. Thus free, the intermediate bar may be moved up to provide a large space to facilitate threading the suspender strap, and under the tension of the strap 80 may move down closely to the lower bar to increase the frictional grip on the suspender.

85 The button loop may advantageously be located sufficiently close to the lower bar of the slide so that the latter may cooperate to some extent to prevent inadvertent detachment of the loop from the button. In that case the button is inserted into the loop by tilting it as indicated at 26 in Fig. 2 until 90 the upper edge of the button clears the bottom of the slide and the suspender strap passing around it. To detach the button it is similarly tilted and withdrawn from the loop. Where the lower bar cooperates to hold the 95 button in place the restricted neck 14 of the loop may advantageously be omitted.

100 By making the device from wire the production of scrap and waste are not only eliminated but it is possible to attach the transverse bars in a manner which permits some

rotative adjustment to the suspender strap while preventing displacement of the lower bar under the stress applied thereto by the suspender strap.

5 Obviously the invention is not limited to the details of the illustrative construction since these may be variously modified. Moreover, it is not indispensable that all features of the invention be used conjointly since various features may be used to advantage in different combinations and subcombinations.

10 Having described my invention, I claim:

1. A suspender adjusting device of the character described comprising in combination a closed wire frame having parallel sides and having its lower end bent into the form of a button engaging loop, said frame having a pair of parallel bars extending across the same and having eyes embracing the sides of said frame, said bars and the top of said frame providing three transversely extending members adapted to receive a suspender strap, the lower bar being located adjacent said loop to cooperate in preventing accidental detachment of the button in said loop, and means on said frame for preventing substantial displacement of said lower bar in said frame.

2. A combined suspender slide and loop comprising in combination a wire frame having its lower side bent into a button engaging loop, a pair of transverse bars having eyes at their ends embracing the sides of said frame, said bars having suspenders engaging teeth formed therein, the sides of said frame being offset at the points embraced by the eyes of said lower bar to prevent substantial displacement of the latter in the frame.

3. A combined suspender slide and loop comprising in combination a wire frame having its lower side bent into a button engaging loop, a pair of transverse bars having eyes at their ends and loosely embracing the sides of said frame so that said bars are free to rotate slightly, said bars having suspender engaging teeth formed therein, and means engaging the lower bar to prevent its substantial displacement in said frame.

45 In witness of the foregoing I affix my signature.

50 JOHN M. CLARK.

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