Feb. 21, 1939. P. P. DOSBERG 2,148,152

ADJUSTABLE APRON

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Fig. 1.

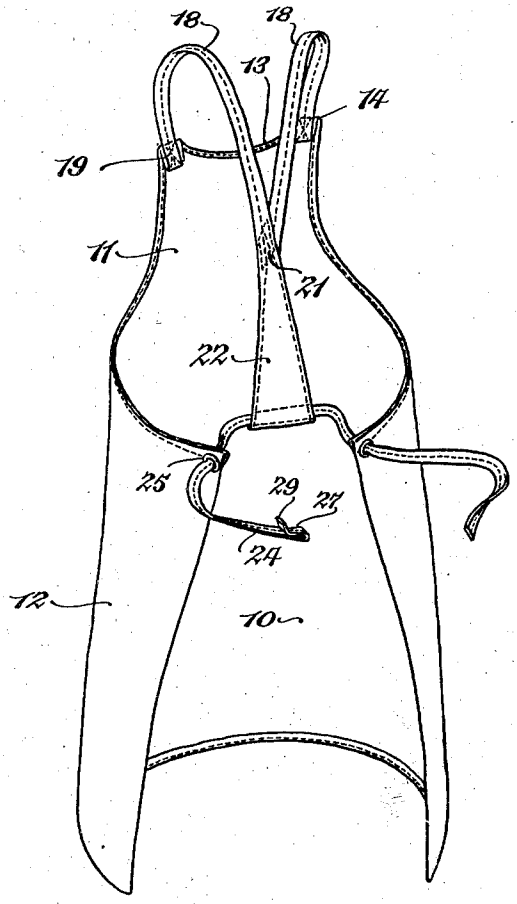
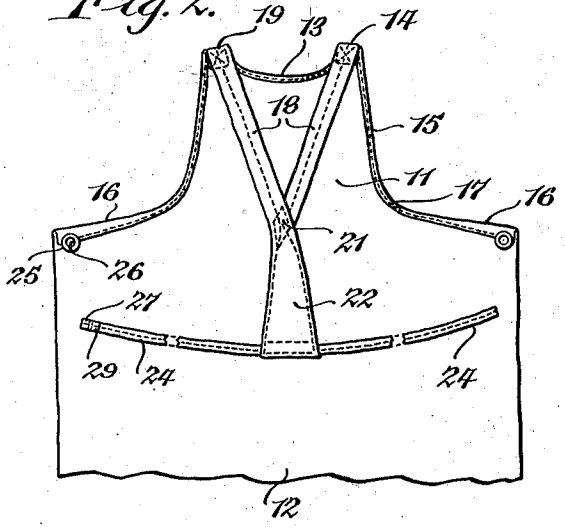


Fig. 2.



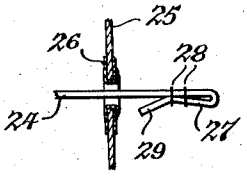


Fig. 3.

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Fig. 4.

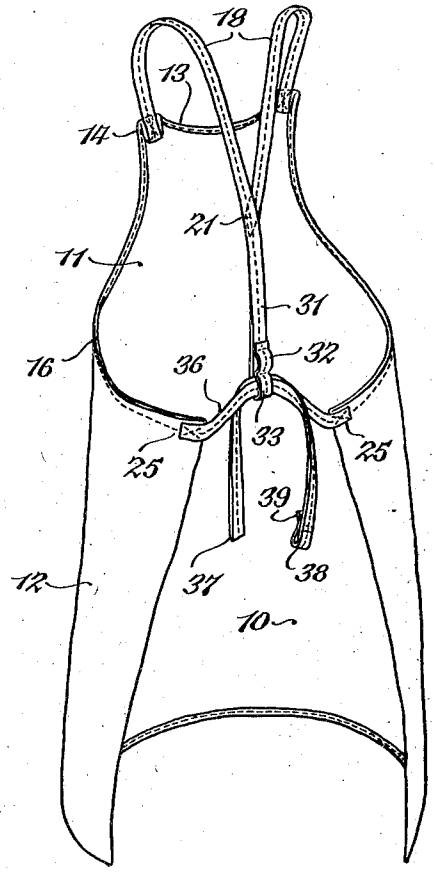
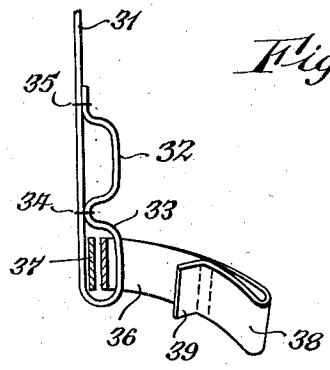


Fig. 5.



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ADJUSTABLE APRON

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Application February 13, 1937, Serial No. 125,613

3 Claims. (Cl. 2—52)

This invention relates to adjustable aprons suitable for use by workmen, and it has particular reference to aprons which are readily cleaned or laundered and are physically resistant to the processes of cleaning normally used, and which may withal be readily adjusted to fit the bodies of persons of different stature.

The present invention is occasioned by problems arising from the use of protective aprons by industrial workers. Due to a number of factors, workmen, while recognizing the desirability of an apron to be worn while engaged in their industrial tasks, will forego such apparel if it is difficult to clean, does not have a long life, and is not readily adjustable into a comfortable protective position. The cost of maintenance of such aprons must also be low, because of the economic burden which otherwise might be imposed. Aprons with which I am familiar have failed to meet satisfactorily all of these criteria. Some have lacked adjustability. Others were so constructed as to be caught in the customary laundering machinery, and therefore were lacking in life or entailed high maintenance charges.

In answer to the present problem, I have devised industrial aprons, two specific forms of which are hereinafter discussed, but which, as it will appear, have a number of common features. Such aprons have been found from experience to be satisfactory and to meet the requirements outlined above.

In the drawings illustrating the invention,

Fig. 1 is a perspective view of one embodiment;

Fig. 2 is a fragmentary plan of the apron shown in Fig. 1, drawn on an enlarged scale and with the shoulder straps laid flat on the body of the apron;

Fig. 3 is a fragmentary detail showing how the tie strap may be secured in the associated eyelet;

Fig. 4 is a perspective view of a second embodiment of the invention; and,

Fig. 5 is a fragmentary detail showing the tie strap positioning loops and the mode of securing the tie strap therein.

The apron illustrated in Figs. 1 and 2 comprises a fabric body **10** having an upper or chest portion **11** merging into a lower portion **12** adapted to cover the legs of the wearer and encircle the waist. The upper margin is cut to form a neck portion **13** defined at either side by tab portions **14**, which are contiguous with the side margins **15** of the chest portion, which in turn merge into the upper margins of the waist portion **16**. These various marginal portions may be hemmed, as indicated by the numeral **17**. It will be observed that the lower portion **12**, from the waist line **16** down, is of substantially greater width than the chest portion **11**, and it will of course be understood that the views here presented are taken from the back of the apron.

Shoulder straps **18** are secured to each tab **14** adjacent the neck line, as indicated by the numeral **19**. As shown in Fig. 2, each strap **18** is of such length that, when laid flat on the body **10**, it terminates short of the waist. The opposite ends of the straps **18** are brought together and are mutually secured, as indicated by the numeral **21**, thus forming a V having a downwardly extending apex which, in use, will rest against the back of the wearer at a point between the shoulders and waist. The length of the shoulder straps is significant from the viewpoints of comfort and adjustability. If they are too short, the weight of the apron may be imposed on the neck, rather than the shoulders, while if the straps are too long it is difficult to obtain satisfactory adjustment. The relative proportions of the parts, as illustrated in Fig. 2, however, have been found satisfactory and to adapt the apron to workmen of various heights and sizes.

A triangular fabric body **22** of the general form of an isosceles triangle is connected, at its acute apex, to the apex formed by the joining of the straps **18**, thus permitting the base **23** to lie generally parallel to the waist line when the apron is worn. The body **22** may be formed continuous with one of the straps **18**, thereby adding to the strength of the member and reducing the cost. The body **22** should have a greater length than width. Secured to the base of the body is a tie strap **24** having free ends which project from either side thereof.

The upper marginal corners **25** of the lower portion **12** are each formed with an eyelet, which may be reinforced by a metal grommet **26**. It will be understood that when the apron is placed on the body, the free ends of the tie strap **24** are inserted through the eyelets **26**, and are then drawn around in the back and tied to secure the apron in place. To apply and adjust the apron, the workman places the V formed by the straps over the neck, with the chest portion **11** in front, and then reaches back to seize the tie straps and insert them through the eyelets. As the free ends of the straps are pulled up, the triangle **22**, and hence the shoulder straps **18**, are pulled down, thus bringing the neck portion **13** to a suitable position. Because of the lengths of the straps and extension member **22**, adjustability of the apron to wearers of different height, or in various positions on the same wearer, is readily secured.

As shown in Fig. 3, one free end of the tie strap **24** may be looped over on itself to provide a return bend or detent **27** secured throughout, except for the extremity **29**, flat against the main body of the tie by the stitches **28**. The

eyelet **26** is of such size that, when the tab **29** is pressed flat against the body of the strap **24**, the entire looped portion can be easily passed through the eye. When the tab **29** is not so held, however, it springs outwardly and thus engages the eye when the strap is pulled in the reverse direction. Accordingly, the looped end of the tie strap will not come out of the eyelet unless it is intentionally removed. It has been found that this is an advantageous feature, since the workman can readily apply or remove the apron with one tie strap in place, and the previous securing of the strap facilitates the positioning of the garment.

Aprons intended for industrial service must be laundered on a commercial scale, because they become quite soiled. It is not expedient, or economical, to resort to hand cleaning methods, and therefore mechanical washers and like machinery has been resorted to. Unless, however, the apron is so constructed as not to be caught or torn in the washer, it has little value, due to the destruction of the article and the expense of repair. It has been found that aprons made in accordance with the present invention can be repeatedly passed through the washing and laundering apparatus without becoming snarled or torn, thereby greatly adding to the life and practicability.

The apron shown in Figs. 4 and 5 is generally similar, with respect to its body and shoulder strap portions, to the apron just described, and repetition of such description is therefore deemed unnecessary, since like parts are designated with the same reference numerals. It will be observed, however, that a specifically different construction is employed for the piece joined to the apex of the V formed by the shoulder straps **18**.

Connected to the shoulder straps **18** at the apex thereof is an extension strap **31** of such length as to extend down the back of the wearer to a point adjacent the waist. The lower end of the extension strap is looped over to form two spaced loops **32** and **33**, one below the other, which are further defined by the stitches **34** and **35**. The bight of each loop is sufficiently large to receive the free ends of the tie straps **36** and **37**, one end of each of which is secured to the corners **25**. The tie straps may therefore be inserted through whichever loop is preferred for adjustment purposes, and thereafter tied together to secure the apron in place.

One of the tie straps **36** is looped over at its end to form a return bend or detent **38**, the extremity of which may flare outwardly, as indicated by the numeral **39**, to achieve the same purposes as those ascribed to the tab **29** shown in Fig. 3. The workman passes the strap **36** through the desired loop **32** or **33**, and, after the free end is pulled through, there remains enough free space to permit of the insertion of the strap **37**. When the apron is removed, only one tie strap is withdrawn from the loop, the other being held in place by the tab **39** until intentionally disengaged.

The apron of Figs. 4 and 5 is, like the apron of Fig. 1, readily positioned on the wearer in a comfortable and protective manner, and has been found to be durable in withstanding the effects of laundering machinery and processes.

While it is not intended to claim all modes of constructing a durable adjustable apron suited for industrial use, it will nevertheless be understood that the invention is susceptible of variations and changes from the precise forms herein illustrated, and it is intended to include within the scope of the invention all of such modifications as fall within the context of the following claims.

I claim:

1. In an industrial workman's apron having a leg covering portion and waist encircling portion and a chest covering portion of reduced width, shoulder straps secured in spaced relation to the upper part of the chest covering portion and brought together in a position at the back of the wearer affording free unhampered movement when applied, one of said straps having an integral extension downwardly from the point of juncture of the straps at the back and folded upon itself and secured in folded position to provide one or more loops, and tie strap means connected to the rear ends of the waist portion for adjustable engagement with said extension, said tie strap means being adapted to be located in the proper loop for providing the desired adjustment, said apron conforming to the body of the wearer and being adjustable to fit wearers of different height and girth and readily adaptable to laundering and flat ironing of the same.

2. In an industrial workman's apron having a leg covering portion and waist encircling portion and a chest covering portion of reduced width, shoulder straps secured in spaced relation to the upper part of the chest covering portion and brought together in a position at the back of the wearer affording free unhampered movement when applied, one of said straps having an integral extension downwardly from the point of juncture of the straps at the back and folded upon itself and secured in such folded position to provide one or more loops, and tie strap means connected to the rear ends of the waist portion for adjustable engagement with said extension, said tie strap means being adapted to be located in the proper loop for providing the desired adjustment, said apron conforming to the body of the wearer and being adjustable to fit wearers of different height and girth and readily adaptable to laundering and flat ironing of the same, said tie strap means having an end portion looped upon itself and fastened at a point inwardly from its free end to provide a detent to prevent said end from being pulled through said loop.

3. In an industrial workman's apron having a leg covering portion and waist encircling portion and a chest covering portion of reduced width, shoulder straps secured in spaced relation to the upper part of the chest covering portion and brought together in a position at the back of the wearer affording free unhampered movement when applied, one of said straps having an integral extension downwardly from the point of juncture of the straps at the back, and tie strap means connected to the lower end of the downward extension and adjustably fastening together said lower end and the rear ends of the waist portion of the apron, said tie strap means having an end portion looped upon itself and fastened at a point inwardly of its free end to provide a detent to prevent disengagement of said free end, said apron adjustably conforming to the body of the wearer and being readily adaptable to laundering and flat ironing of the same.

PAUL P. DOSBERG.