Oct. 22, 1957 W. D. GREER 2,810,216

STAIN OR SPOT REMOVING APPARATUS

Filed Sept. 12, 1955

FIG. 1.

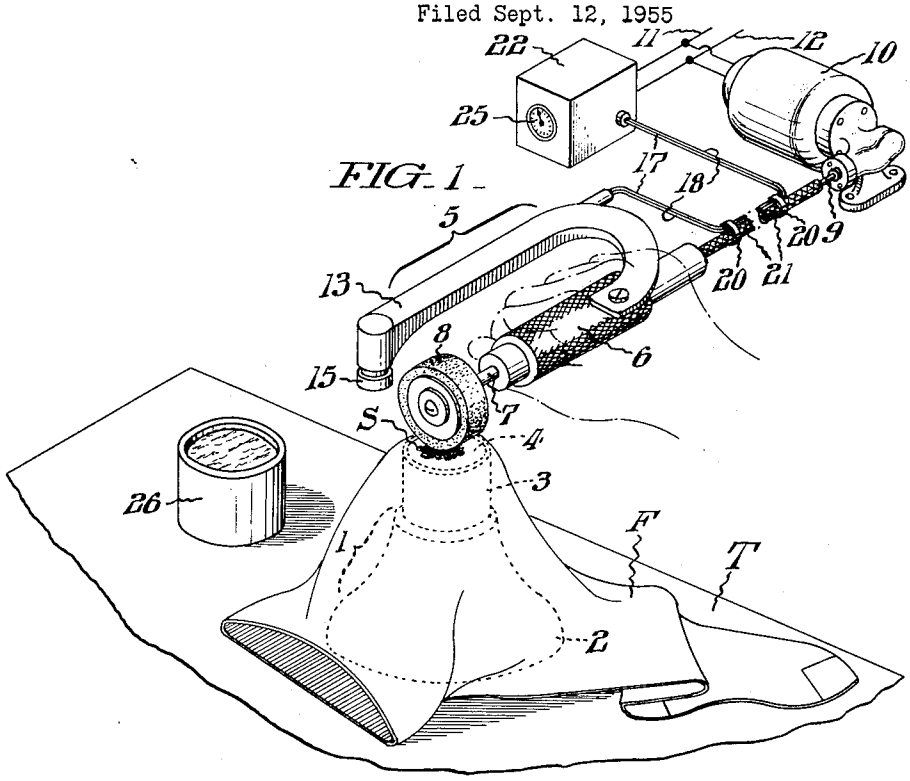


FIG. 2.

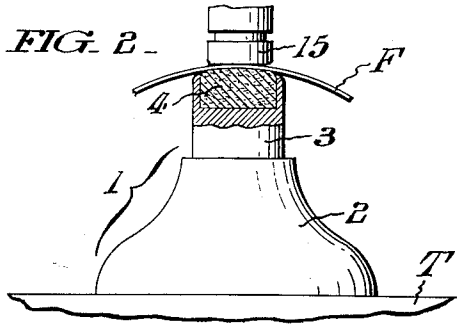
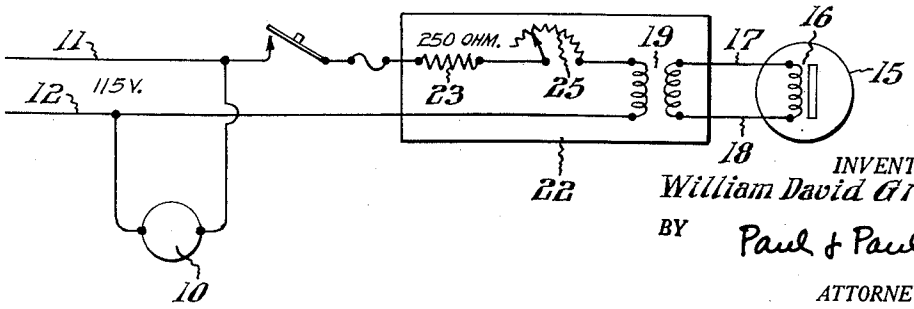


FIG. 3.



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STAIN OR SPOT REMOVING APPARATUS

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1 Claim. (Cl. 38—2)

This invention relates to stain removing apparatus, that is to say, to apparatus for removing stains or spots of grease or oil which may have been imparted to textile fabrics incident to weaving or knitting by contact with greasy or oily portions of the producing machinery or incident to the formation of the fabrics into garments upon sewing machines. The apparatus of my invention is particularly useful in removing grease or oil spots from ladies nylon stockings after they have been dyed and finally or part boarded. Heretofore in the production of ladies nylon stockings, those having objectionable grease or oil stains in this stage were returned to the dyeing process to undergo "stripping" for removal of the stains by treatment with a suitable detergent solution, after which they had to be re-dyed and re-boarded at considerable additional cost.

The aforementioned drawbacks I overcome, as hereinafter more fully disclosed, through provision of a simple reliable and inexpensive means or apparatus by which grease or oil spots can be easily and quickly removed from finished stockings or from other textile materials or garments without the necessity for stripping, re-dyeing or re-processing of any kind.

In the attached drawings:

Fig. 1 is a perspective view of a stain or spot removing apparatus conveniently embodying my invention and showing how the same is used in practice.

Fig. 2 is a view partly in side elevation and partly in vertical section of one of the components of the apparatus; and

Fig. 3 is a wiring diagram of the electrical instrumentalities embodied in the apparatus.

As herein exemplified, the stain or spot removing apparatus of my invention includes a stand **1** having a base **2** for support upon a table T, and an upward projection **3** into the upper end of which a pad **4** of felt or other absorbent material is recessed with its top surface exposed, see Fig. 2. The apparatus further includes a hand implement, generally designated **5**, comprising a grasp **6** of which the surface is roughened as shown for firm grippage. Extending axially through the grasp **6** is a rotary shaft **7** to one end of which a small replaceable wheel **8** of felt or the like is affixed. By means of a flexible prolongation **9**, the opposite end of the shaft **7** is connected

to an electric motor **10** which receives current from a power line whereof the conductors are designated **11** and **12**. Rigidly secured to and reaching forwardly from the rear end of the grasp **6** in parallel relation to the latter is an arm **13** with its distal end laterally adjacent the wheel **8**. Pendently secured in the distal end of the arm **13** is an iron or head **15** which is heated by an electric heating unit indicated at **16** in Fig. 3, said unit receiving current, through conductors **17** and **18**, from a transformer **19** whereof the primary coil is connected across the conductors **11** and **12** of the power line. As shown in Fig. 1, the conductors **17** and **18** are secured, by bands **20**, to the sheathing **21** of the flexible shaft prolongation **9** and enter a small cabinet **22** in which, see Fig. 3, are housed the transformer **19** together with a fixed resistance **23** and a variable resistance **25** for controlling the heating of the smoothing iron **15**. If the power supplied is at 115 volts, the resistance **23** may have the value of 250 ohms and the transformer **19** may have a step down ratio of 5:1.

In the use of the apparatus, the fabric F from which a spot or stain is to be removed is placed over the stand **1** and held taut with the stained area indicated by the letter S rested on the pad **4**. With this preparation, the implement **5** is manipulated to dip the wheel S into a suitable liquid solvent contained in a bowl **26** placed adjacent the stand **1** on the table T. The wetted wheel **8** is next brought into momentary contact with the stained area of the fabric resting on the pad **4** as in Fig. 1, said pad absorbing the solvent with the dislodged soil from the fabric. Finally, the heating iron **15** is brought into contact with the now cleaned arrested area of the fabric to smooth and dry it of any of the moisture which may remain.

Thus from the foregoing it will be seen that I have provided a simple, efficient and inexpensive means or apparatus whereby stains or spots are easily and quickly removed from stockings or other textile fabrics without impairment of the finish imparted to them for marketing or marring the color to which they have been dyed.

Having thus described my invention, I claim:

A combination implement, for removing stains or spots from textile fabric and for thereafter smoothing it, comprising a hand grasp; a shaft rotatively supported longitudinally in the hand grasp and having affixed at one end thereof, a wheel of felt or the like adapted to be wetted with liquid solvent and applied to the fabric overlaid upon a pad of absorbent material; a flexible connection between the other end of the shaft and a driving motor; and an arm extending forwardly from the rear end of the grasp in parallelism therewith to a point adjacent said wheel; and an electrically heated iron at the distal end of the arm adapted to be applied to the fabric to smooth it after subjection to the wiping action of the wheel.

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