The present invention relates to improvements in garment cleaning apparatus and has reference more particularly to the art of dry cleaning.

It is customary, when dry cleaning silk, wool, worsted, flannel and similar materials, to remove soiled spots by the well known "spotting" process, which embodies the local application by hand of a solvent over the soiled area.

It has been found that in carrying out such a "spotting" process, rings are formed around the spot where the solvent has been applied when the solvent drips, thus leaving a noticeable line of demarcation between the untouched area of the material and that portion of the material to which the solvent has been applied.

It is, therefore, the primary object of our invention to provide a suction means for removing the solvent and the absorbed foreign material from the material during the "spotting" operation, thereby avoiding the spreading of the foreign material and the drying of the solvent on the fabric.

A further object is to provide a solvent and foreign material extractor unit that can be readily and easily attached to one end of a spotting board, and this without necessitating any material alterations of the spotting board.

A further object is to provide a spotting board attachment that includes a means for concentrating the suction in the center of the suction chamber, to substantially reduce the suction action at the sides and ends of the chamber.

A still further object is to provide a device of the above mentioned character that can be readily and easily assembled and disassembled and due to its simplicity can be manufactured and sold inexpensively.

Other objects and advantages will become apparent from the following description when taken in conjunction with the accompanying drawings.

In the drawing forming part of this specification, and wherein like reference characters designate corresponding parts throughout the several views:

Figure 1 is a side elevation of a spotting board showing our invention attached thereto;

Figure 2 is an enlarged top plan view of the device attached, with parts shown in section;

Figure 3 is a longitudinal sectional view taken approximately on the line 3—3 of Figure 2; and

Figure 4 is a transverse vertical section taken approximately on the line 4—4 of Figure 3.

In the drawing, the numeral 1 designates a spotting board supported on the standard 2, mounted on the base 3. A glass top 4 covers the wooden board 1 and provides a smooth surface upon which the hand "spotting" operation is carried out in the usual manner.

The device is adapted to be attached at the smaller end of the spotting board and comprises an open top suction chamber or casing 5. This chamber increases gradually in depth toward its larger inner end wall 6, the outer end of this casing being rounded, as clearly illustrated in Figure 2 of the drawing.

A pair of attaching lugs or plates 7 extend from the sides of the larger inner end portion of the suction chamber 5 for disposition against the respective sides of the wooden spotting board 1. Suitable screws 8 or the like extend through these lugs for securing the attachment rigidly on the smaller end of the spotting board.

The device is attached to the end of the spotting board in such manner as to space the inner end wall 6 from the adjacent end of the spotting board and the lugs 7 are notched out as at 7' for a purpose to be presently described.

A substantially circular shaped suction nozzle 9, in the nature of a ring, is secured in the central portion of the chamber 5, the bottom of this nozzle being closed by the bottom of the casing 5 while the open top of this suction nozzle is disposed below the plane of the upper edge of the side walls of the casing or chamber 5.

An outlet opening 10 is formed in the side wall of the suction nozzle nearest the enlarged inner end of the casing and, as is clearly illustrated in Figure 4, the outlet opening is of transversely elongated design. A conduit 11 extends from the outlet opening 10 through the inner lower portion of the casing for disposition beneath the outer end portion of the spotting board 1.

A suction pipe 12 extends longitudinally beneath the spotting board 1, the rear end thereof having communication with a downwardly extending vacuum line 13 that leads to any suitable vacuum producing means (not shown).

The adjacent abutting ends of the conduit 11 and the suction pipe 12 are connected together by a suitable threaded coupling 14. By arranging the suction pipe 12 against the underface of the spotting board, it will not interfere with the placing of garments over the spotting board when carrying out the "spotting" operation or the ready removal of the garment from the spotting board.

A perforated baffle plate 15 is snugly yet removably fitted within the suction chamber, the depending rim 16 thereof engaging flat against the inner faces of the sides and ends of the chamber.
ber and being of such depth that its lower edge will contact the bottom of the chamber. This foraminous baffle plate will thus be supported in slight vertical spaced relation to the top of the suction nozzle 9 as shown in Figures 3 and 4 of the drawing. The entire area of the baffle plate is formed with a multiplicity of openings 17.

A screen 18 mounted in a flanged frame 19 fits over the open top of chamber 5 and the foraminous baffle plate 15 mounted in the suction chamber. The inner end wall of the frame 19 fits in the notches 17 of the lugs 5, so that the upper face of this screen will lie substantially flush with the upper surface of the glass top 4 of the spotting board.

A piece of absorbent cotton material 20 is disposed over the entire face of the perforated baffle plate 15 and is clamped thereover by the screen 18 and its frame 19. The purpose of this covering 20 is to absorb the chemicals used in the “spotting” operation as well as collect all foreign matter from the fabric undergoing spotting.

The screen 18 will prevent the fabric or garment from coming in contact with the filtering and absorbing material 20.

In use, after the fabric or garment has undergone the “spotting” treatment on the spotting board 1, the garment is placed on the screen 18 with the treated spot positioned directly over the suction nozzle 9. The suction created in the suction pipe, conduit, nozzle and chamber, respectively, will not only tend to draw off all of the solvent that has been applied to the garment, but will also remove the foreign material along with the solvent; and such foreign material will be caught by the layer of cloth 20. In carrying out this solvent removing action, the suction will be concentrated to the area of the spot on the garment that has been treated by reason of the ring shaped nozzle. In addition, air in the suction chamber around the nozzle will tend to dry the area of the fabric directly outside of the wetted spot. In this manner, the solvent will be entirely withdrawn from fabric or garment as will also the foreign material, thus avoiding the spreading of the foreign material and the drying of the solvent on the fabric or garment and the formation of objectionable rings.

While we have disclosed the device as constituting a separate attachment for spotting boards, it is also comprehended constructing a spotting board with our invention built into the same.

While we have shown the preferred embodiment of our invention, it is to be understood that various changes in the size, shape and arrangement of parts may be resorted to without departing from the spirit of the invention and the scope of the appended claims.

Having thus described our invention, what we claim is:

1. The combination with a spotting board, of a solvent removing unit attached to the outer end thereof, said unit including an open top casing, means for attaching the same against the outer end of the spotting board, a suction nozzle arranged in the casing and spaced from the walls thereof, the top of the suction nozzle being open, a suction pipe communicating with the nozzle through the casing, a perforated baffle plate removably fitted in said casing for disposition over the suction nozzle in vertical spaced relation thereto, and a screen removably clamped over the top of the casing and covering said perforated baffle plate.

2. The combination with a spotting board, of a solvent removing unit attached to the outer end thereof, said unit including an open top casing, plates extending from opposite sides of the inner end portion of the casing and secured against the respective side edge faces of the spotting board, an open top suction nozzle arranged within the casing substantially centrally thereof and spaced from sides and ends thereof, a suction pipe communicating with the suction nozzle and extending outwardly through the inner end portion of the bottom of the casing, said pipe extending longitudinally of the spotting board and secured against the under face thereof a perforated baffle plate removably fitted within the casing for disposition over the suction nozzle, an absorbent member covering the upper face of the perforated baffle plate, and a foraminous clamping member removably mounted over the absorbent material and firmly holding the absorbent member flat upon said baffle plate.

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