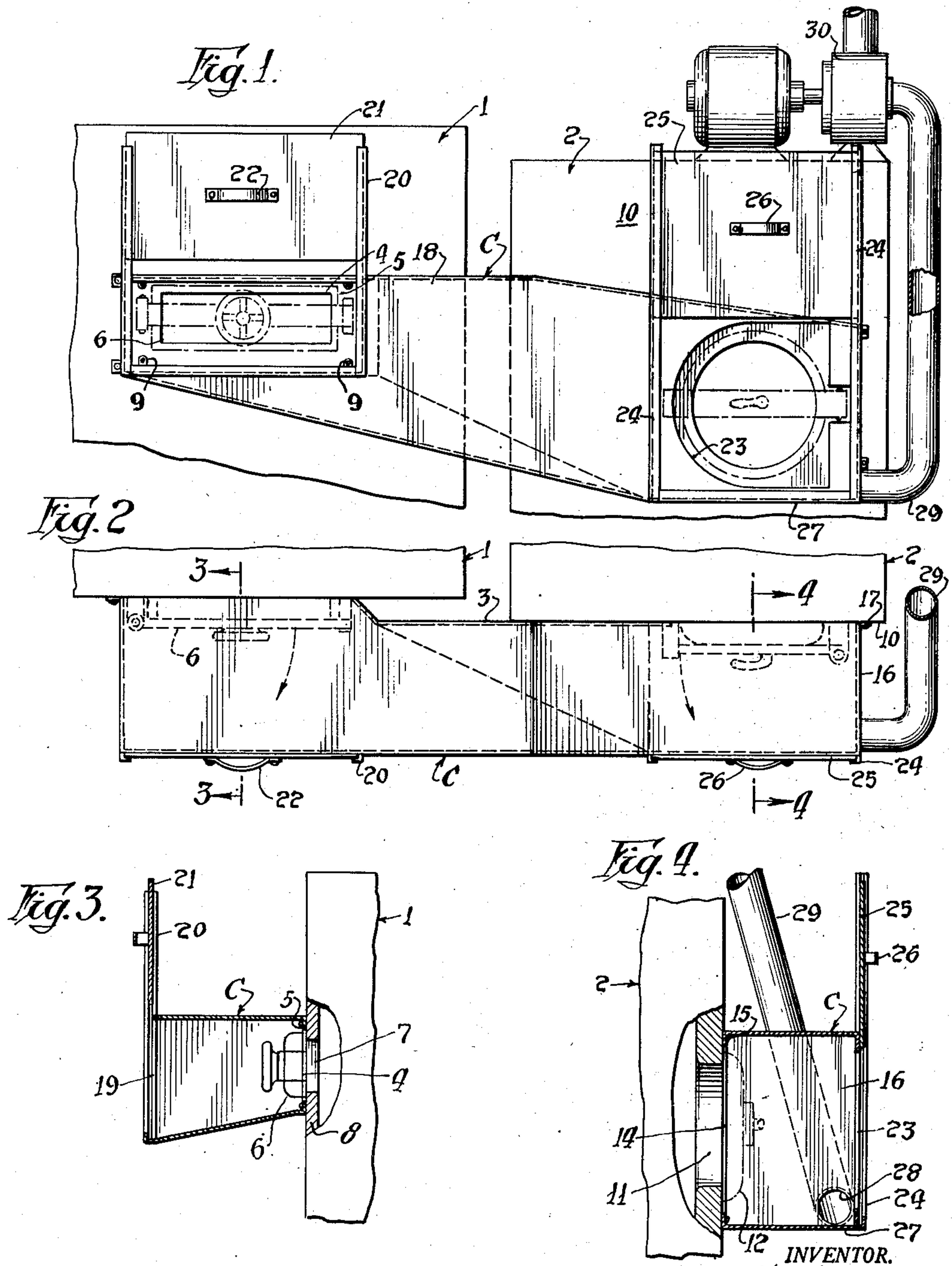


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TRANSFER CHUTE FOR CONNECTION BETWEEN DRY
CLEANING AND SOLVENT RECOVERY MACHINES
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TRANSFER CHUTE FOR CONNECTION BETWEEN DRY CLEANING AND SOLVENT RECOVERY MACHINES

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1

This invention relates to a sanitary transfer chute for dry cleaning machines and it is an object of the invention to provide means for transferring clothing from one machine to another as required in dry cleaning establishments whereby is substantially eliminated any fire hazard and the operator protected from fumes which may emanate from the clothing during the transfer.

At present, many dry cleaning establishments have a large machine into which clothing to be cleaned is placed and which tumbles said clothing while at the same time bathing it in a dry cleaning solvent. Immediately next to this cleaning machine is a machine of substantially similar size into which the clothing removed from the previously described machine is placed. In this second machine, the clothing is again tumbled in order to remove all traces of the dry cleaning solvent. This latter machine also reclaims this solvent for reuse in the first machine. When the first machine has cleaned the clothing a door in front of the machine is opened, and a worker lifts out the clothing, carries it to the second machine and places it there within. By this method several hazards exist, outstandingly fire, since the solvent is inflammable and the solvent when inhaled to excess is injurious to the worker. It is a further object of the invention to provide a transfer chute so arranged to substantially eliminate these risks or disadvantages.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved sanitary transfer chute for dry cleaning machines whereby certain advantages are attained, as will hereinafter more fully set forth.

In order that my invention may be better understood, I will now proceed to describe the same with reference to the accompanying drawings, wherein:

Figure 1 is a fragmentary view in front elevation illustrating in applied position a transfer chute embodying the invention;

Figure 2 is a fragmentary view in top plan of Figure 1;

Figure 3 is a detail sectional view taken substantially on the line 3—3 of Figure 2; and

Figure 4 is a detail sectional view taken substantially on the line 4—4 of Figure 2.

In the accompanying drawings, 1 denotes a dry cleaning machine of a general type now in use and 2 a conventional dry cleaning solvent recovery machine. These machines are placed side by side and in close proximity to each other to permit the use therewith of the transfer chute C.

2

The chute C at one end portion thereof is provided in its inner side wall 3 with an opening 4 of area to permit the outwardly disposed flanges 5 defining the opening 4 to completely surround the outwardly opening door 6 for the removal opening 7 in the front wall 8 of the cleaning machine 1. The outer or free margins of the flanges 5 are defined by the laterally disposed lips 9 which are bolted or otherwise securely anchored to the wall 8 of the machine 1.

The opposite end portion of the inner wall 3 of the chute C has close contact with a side wall 10 of the recovery machine 2. This wall 10 is provided with a discharge opening 11 with which coacts the usual outwardly swinging door 12 and which opening 11 is materially lower than the opening 7. This opening 11 in the wall 10 of the machine 2 registers with an opening 14 in the inner wall 3 of the chute C of a size to extend entirely around the opening 11 of the door 12. The portions of the wall 3 above and below the opening 14 are securely anchored, as at 15, to the wall 10.

The opposite ends of the chute C are closed and the end wall 16 adjacent to the opening 14 is provided along its inner vertical margin with an outwardly disposed flange 17 anchored to the wall 10 of the machine 2.

The outer side wall 18 of the chute C is provided with an opening 19 opposed to the opening 4 and of substantially the configuration and dimensions as the opening 4 and through which may readily pass the free end portion of the door 6 when swung outward into open position to allow access through the chute C to the opening 4 so that the workman may withdraw the clothing from the machine 1.

At the opposite end portion of the opening 19 are the vertically disposed guide elements 20 for the sliding door 21. These elements 20 extend above the chute C a distance sufficient to allow the door 21 to be raised entirely above the opening 19. To facilitate the desired opening and closing of the door 21 the outer face thereof at the center of the door 21 is provided with a hand grasp 22 of any desired type.

The outer wall 18 of the chute C is provided with a second opening 23 opposed to the opening 14. This opening 23 is of such configuration and dimensions to allow ready access to the opening 14 and to permit the desired outward opening movement of the door 12. Adjacent to the ends of the opening 23 are the guide elements 24 which, like the guide elements 20, are anchored to the outer side wall 18 of the chute C. These guide elements also extend above the chute C and have associated

3

therewith the sliding door 25. The door 25 when in its fully opened position is entirely above the opening 23 and to facilitate the raising and lowering the door 25, the central portion thereof is provided with a hand grasp 26 of a conventional type.

The end wall 16 of the chute C closely adjacent to the bottom wall 27 is provided with a relatively small discharge opening 28 from which leads an upwardly disposed flue pipe 29 leading to an exhaust fan 30 shown in Figure 1 of the drawings positioned on the top of the machine 2.

Clothing to be cleaned customarily is agitated in a so-called dry cleaning solvent. Many of the solvents used are volatile and toxic to humans. Also many of the solvents used are combustible. At present clothing that has been cleaned is removed from the cleaner by an individual who carries it to a machine that recovers the solvent yet within the clothing, and places the clothing therein. This process is time consuming, dangerous to the health of the operator and in many cases presents an ever present fire hazard. By means of the present invention, the clothing is pulled out of the cleaning machine 1 into the chute C which having its bottom wall 27 inclined downwardly to the solvent recovery machine 2 permits the clothing to be very readily slid thereupon. The customary cleaning solvent even when in a gaseous form is heavier than air. Therefore the tendency is for the solvent to seek the lowest level. By providing a mechanical exhaust by the fan 30, out through the flue 29 these fumes are readily discharged to the atmosphere, preferably outside of the cleaning establishment.

From the foregoing description it is thought to be obvious that an improved sanitary transfer chute for dry cleaning machines constructed in

4

accordance with my invention is particularly well adapted for use by reason of the convenience and facility with which it may be assembled and operated.

I claim:

1. In a laundering apparatus, including a dry cleaning machine and a solvent recovery machine, an elongated chute closed at its ends and having an opening in a side wall adjacent one of its ends in communication with the door opening of the dry cleaning machine and a second opening in the said side wall adjacent its other end in communication with the door opening of the solvent recovery machine, said chute sloping downwardly from the first door opening to the second door opening, a flue pipe leading outwardly and upwardly from the said other end of the chute immediately adjacent to the bottom thereof to atmosphere, and a power operated suction fan connected in said flue pipe for exhausting fumes from within said chute.

2. The invention as defined in claim 1, with other openings in the opposite side wall of said chute in line with the first named openings, and a closure for each of the said other openings.

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