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2,817,300

APPARATUS FOR REMOVING FINISHES

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2 Sheets-Sheet 2

FIG. 4

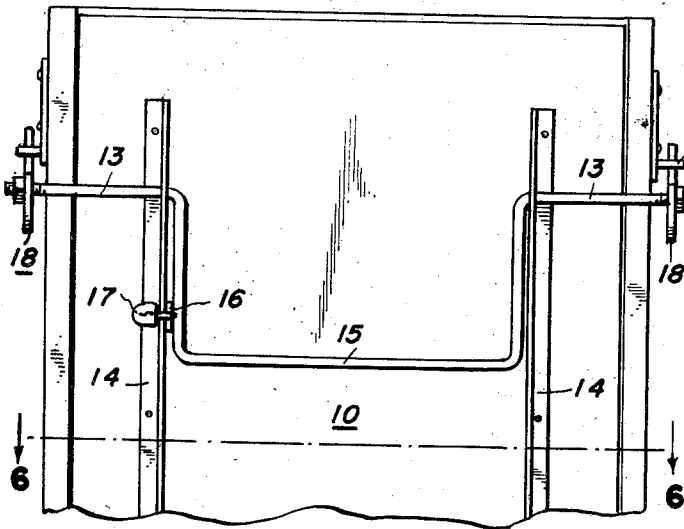


FIG. 5

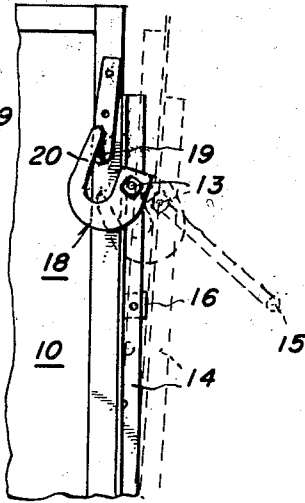


FIG. 6

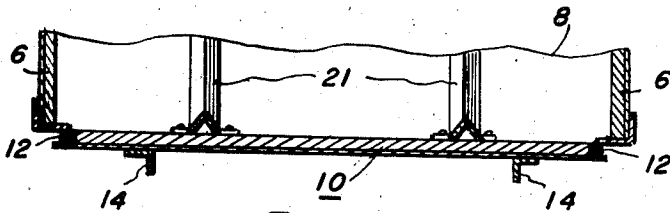


FIG. 7

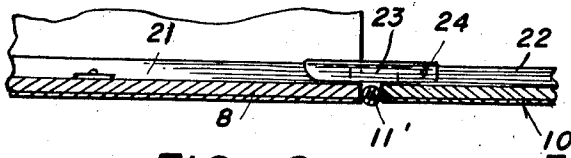
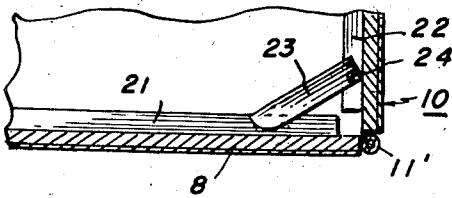


FIG. 8



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APPARATUS FOR REMOVING FINISHES

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1 Claim. (Cl. 104-48)

This invention relates to apparatus for removing finishes from furniture or the like.

It is an object of the invention to provide a housing to receive the furniture to be treated having a closure for sealing the housing and oscillating spraying mechanism within the housing for spraying the furniture with a finish removing fluid to dissolve the finish coating and remove the same.

A further object of the invention resides in providing a track on the bottom of the housing for supporting a movable carrier to convey the article of furniture into and out-of the housing, the closure of said housing supporting an extension for said track which aligns with the track in the housing when the closure is swung to an open position whereby the closure serves as a support for the movable carrier when moved out-of the housing.

A still further object of the invention resides in providing a closure for the housing having a pivoted latching mechanism for holding the closure in tight sealing engagement with the housing and also acts as a support for the closure, when in open position, to support the closure in a horizontal position in the plane of the bottom of the housing.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawings forming a part of this specification and in which like numerals are employed to designate like parts throughout the same.

Fig. 1 is a side elevational view of the apparatus,

Fig. 2 is a top plan view of the same, partly in section,

Fig. 3 is a front end view of the same,

Fig. 4 is a front elevational view of the latching mechanism for the closure,

Fig. 5 is a side view of the latching mechanism,

Fig. 6 is a section taken on line 6-6 of Fig. 4,

Fig. 7 is a detail side view of the track joint in operative position, and

Fig. 8 is a view showing the position of the track joint when the closure is closed.

In the drawings wherein for the purpose of illustration a preferred embodiment of the invention is shown, the numeral 5 indicates, generally, a housing of rectangular elongated shape having side walls 6, top and bottom walls 7 and 8, an end wall 9 and a closure 10. The housing is supported in elevated relation to the ground by legs 11 depending from each corner of the housing.

The closure 10 is pivotally connected at its lower edge, by hinges 11', to the front edge of the bottom wall 8 to swing downwardly and surrounding the edge of the closure is a sealing gasket 12 for establishing an air tight fit between the closure and end of the housing. A latching bar 13 extends transversely of the outer face of the closure being pivotally mounted in angle bars 14 vertically mounted in spaced relation on the outer face of the closure. The bar 13, intermediate its ends, is off-set to form a U-shape handle 15 and one arm of the handle is provided with an apertured lug 16 adapted to register with an opening in one of the bars 14 to re-

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ceive a lock 17 for securing the handle in closed position. Mounted on the ends of the latching bar 13 are hooks 18 adapted to be swung into engagement with lugs 19 extending laterally from the side walls of the housing. The inner edge of the hooks is tapered, as at 20, to exert pressure on the lugs 19 when swung about the axis of rod 13, thus drawing the closure 10 into tight sealing engagement with the end of the housing.

The bottom wall of the housing has a track composed of rails 21 extending longitudinally thereof and mounted on the inner face of the closure are rails 22 adapted to align with the rails 21 when the closure 10 is swung downwardly to a horizontal position in which position it is supported by the handle 15 of the latching bar, as shown in dotted lines in Fig. 1. To bridge the joint between the rails 21 and 22, short sections of rail 23 are pivotally connected, as at 24, to the rails 22 and the free ends of the sections are disposed in overlapping sliding engagement with the rails 21, so that when the closure is moved the rail sections 23 automatically adjust themselves with respect to the position of rails 21 and 22. A wheeled carrier 24', as shown in dotted lines in Fig. 1 is movable on the rails and supports the article of furniture so it may be easily moved into and out-of the housing.

The fluid spraying mechanism consists of a series of spaced transverse pipes 25 suspended from the top wall of the housing which are pivotally mounted for oscillating movement in a horizontal plane. The pipes are connected to a conduit 26 leading to a fluid circulating pump, not shown, which supplies the finish removing fluid to the pipes under pressure. The ends of the pipes 25 are equipped with angularly disposed nozzles 27 for spraying the fluid in a downward direction. The series of pipes are connected together by a connecting rod 28 pivotally connected at 29 to the pipes and one end of the connecting rod is pivotally attached to a crank arm 30 attached to the shaft of an electric motor 31 mounted on top of the housing. Upon rotation of crank arm 30 the connecting rod 28 is reciprocated to oscillate the pipes 25. A sump tank 32 mounted beneath the bottom of the housing collects the excess fluid from the housing and through conduit 33 returns it to the circulating pump confined within the control box 34 attached to the side of the housing. A vent 35 on the top of the housing exhausts the fumes and air from the housing after the finish is removed.

In use, when the closure 10 is open and the handle 15 of the latching bar 13 is disposed at right angles to the face of the closure, the handle acts as a support for the closure to support the closure in the plane of the bottom wall 8 of the housing. As the closure moves to its open position, the sections of rail 23 automatically move to a position bridging the joint between the rails 21 and 22 to form a continuous track for the carrier 24' which may then be moved from the housing onto the closure. After the furniture to be treated is placed upon the carrier, the carrier is moved along the track into the housing and the closure is swung upwardly to close the end of the housing. To secure the closure in air tight engagement with the end of the housing, the handle of the locking bar is turned downwardly to swing the hooks 18 into engagement with the lugs 19. The fluid circulating pump is then started forcing fluid through the pipes 25 and from the nozzles 27. The oscillating movement of the pipes distributes the fluid over the entire surface of the furniture and after it is thoroughly wet the circulating pump is turned off and the blower is started to supply air in the housing for drying the furniture after which it is removed from the housing.

It is to be understood that the form of my invention herein shown and described is a preferred example of the same and changes in the shape, size and arrangement of

the parts may be made without departing from the spirit of the invention or scope of the claim.

Having thus described my invention, I claim:

Apparatus for removing finishes from furniture comprising an elongated rectangular housing, a closure at one end of said housing pivotally mounted to the bottom wall for vertical swinging movement, track rails extending longitudinally of the bottom wall of said housing, a wheeled carrier for supporting furniture to be treated movable on said track rails, track rails extending vertically of the inner face of said closure in alinement with said first mentioned track rails when said closure is swung to a horizontal plane, the adjoining ends of said first and second mentioned track rails being spaced apart, rail sections pivotally connected to said second-mentioned track rails and slidable on said first-mentioned track rails for bridging the adjoining ends of said first and second-mentioned track rails, a shaft rotatably mounted transversely of the outer face of said closure having a U-shaped off-set portion intermediate its ends, pins extending laterally from the sides of said housing at the end adjacent said closure, hooks at the ends of said shaft for engaging said pins when the off-set portion of said

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shaft is swung against the outer face of said closure, said U-shape portion serving to support said closure in a horizontal plane when swung outwardly at right angles to said closure.

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