Dec. 4, 1934. J. F. GAIL 1,983,169

MATTRESS TUFTING APPARATUS

Filed Feb. 3, 1932 7 Sheets-Sheet 1

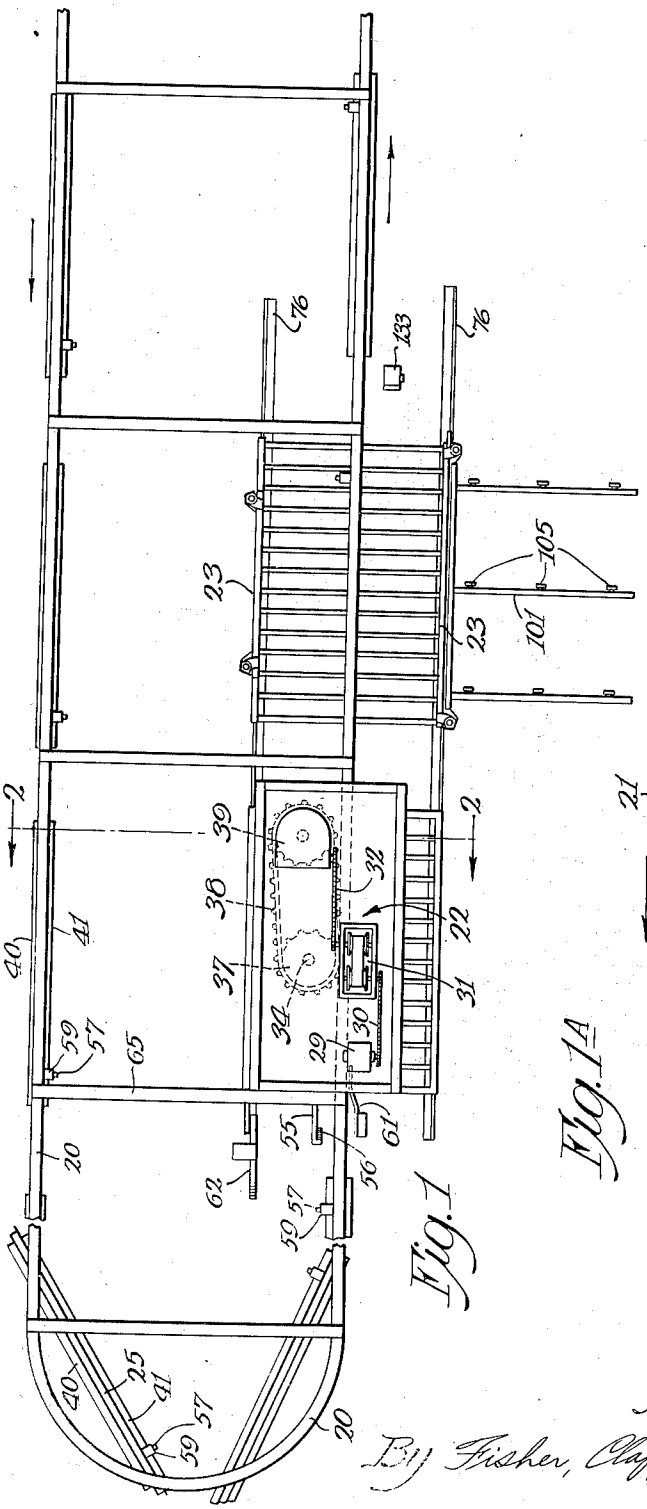


Fig. 1

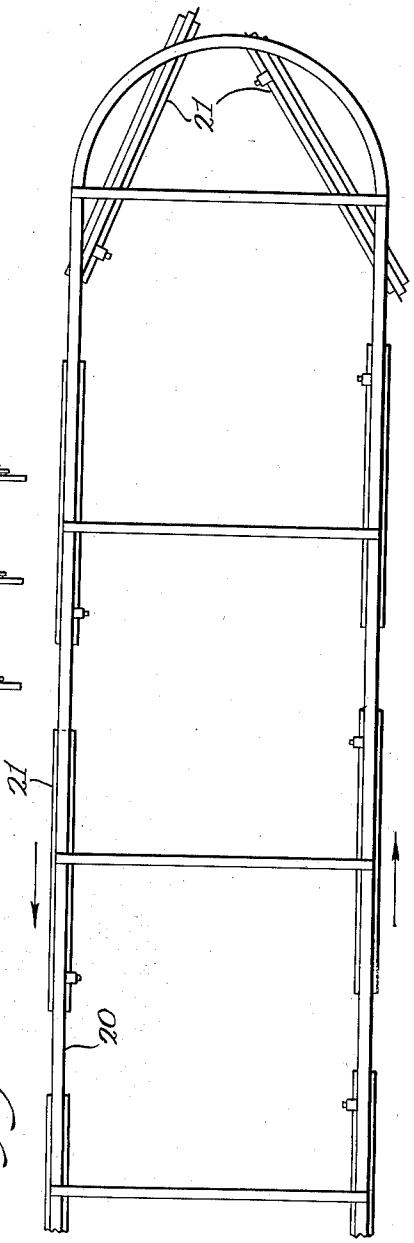


Fig. 1A

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MATTRESS TUFTING APPARATUS

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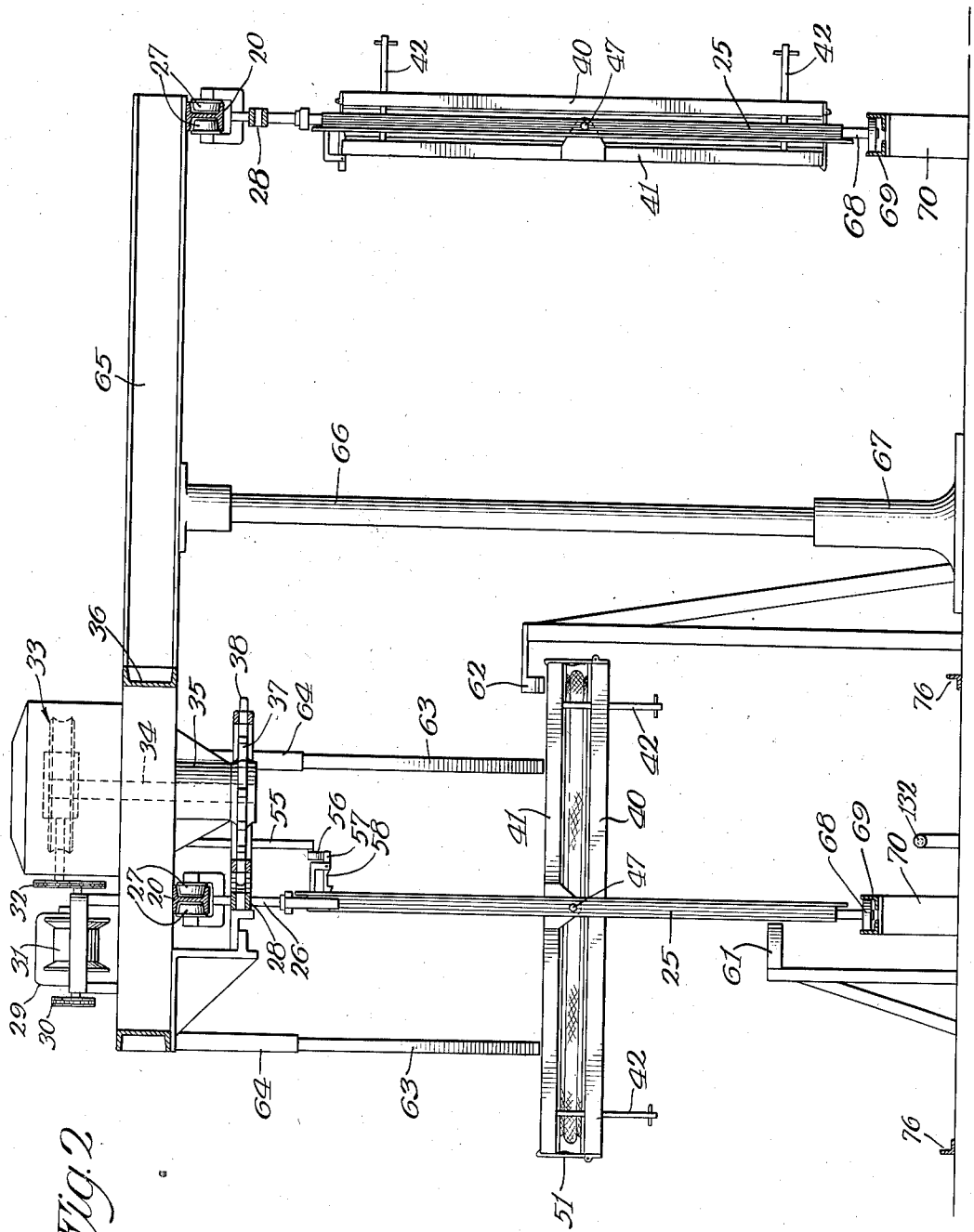


Fig. 2

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MATTRESS TUFTING APPARATUS

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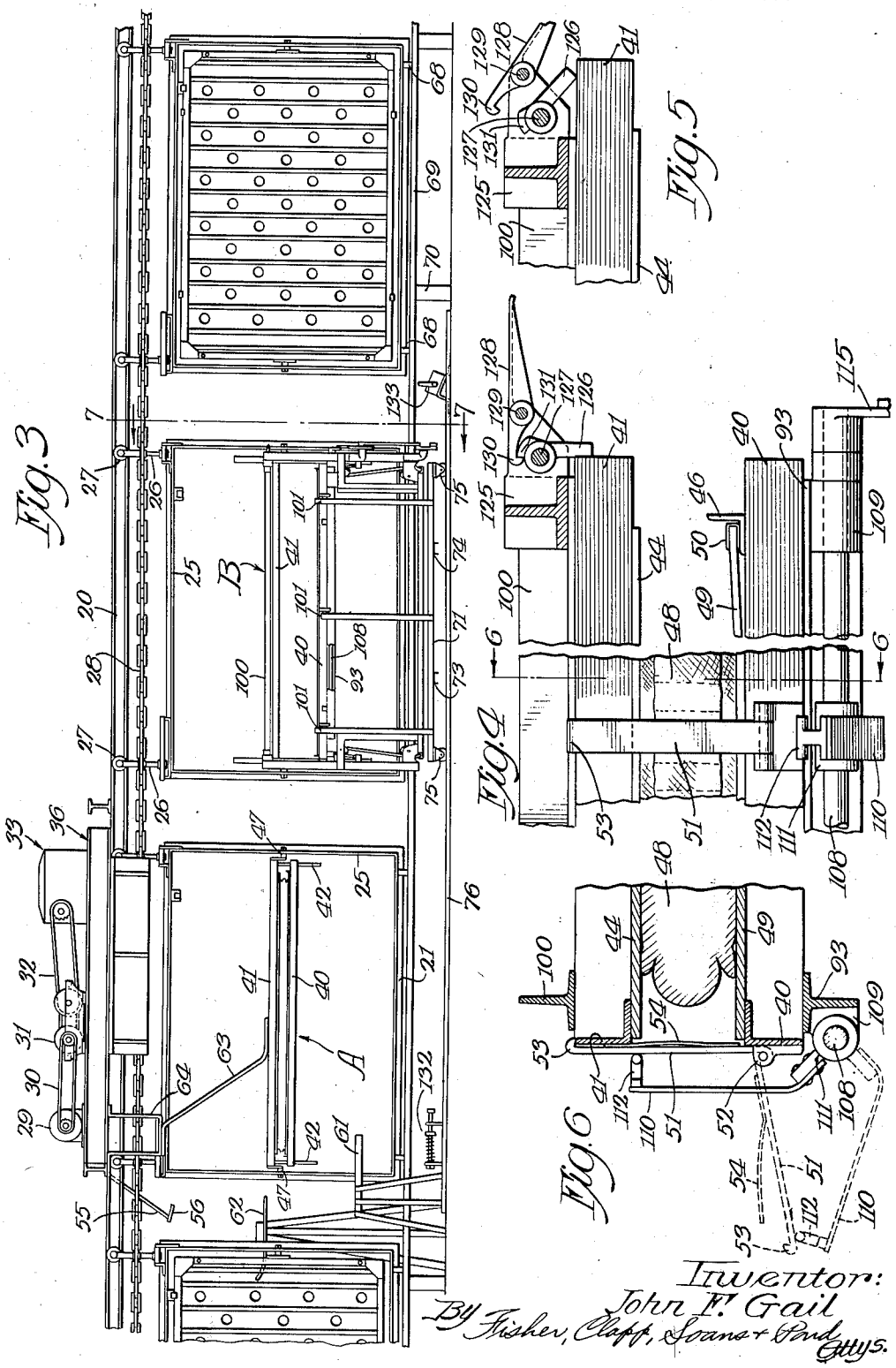


Fig. 3

Fig. 5

Fig. 4

Fig. 6

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Dec. 4, 1934. J. F. GAIL 1,983,169

MATTRESS TUFTING APPARATUS

Filed Feb. 3, 1932 7 Sheets-Sheet 4

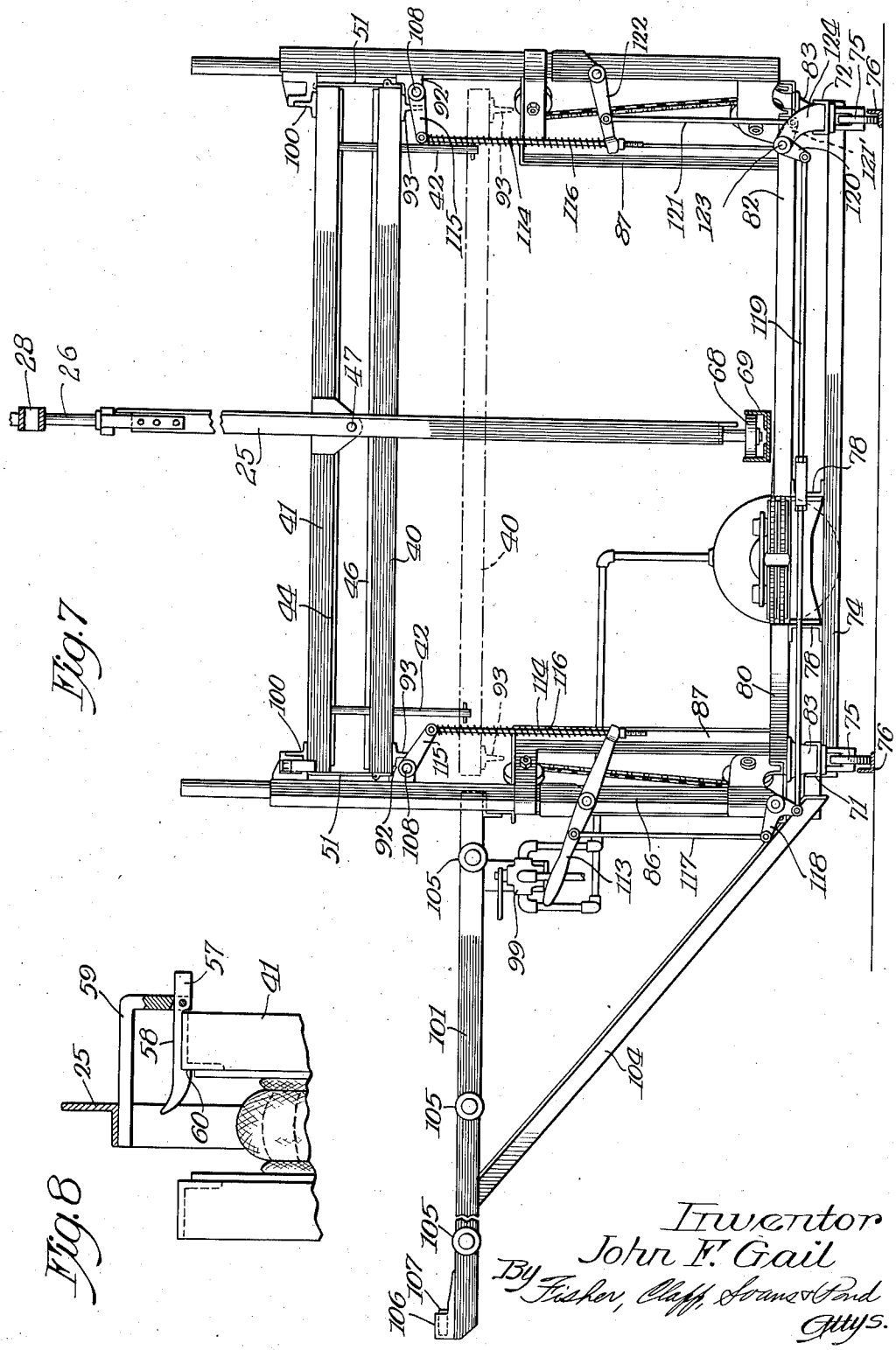


Fig. 7

Fig. 8

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MATTRESS TUFTING APPARATUS

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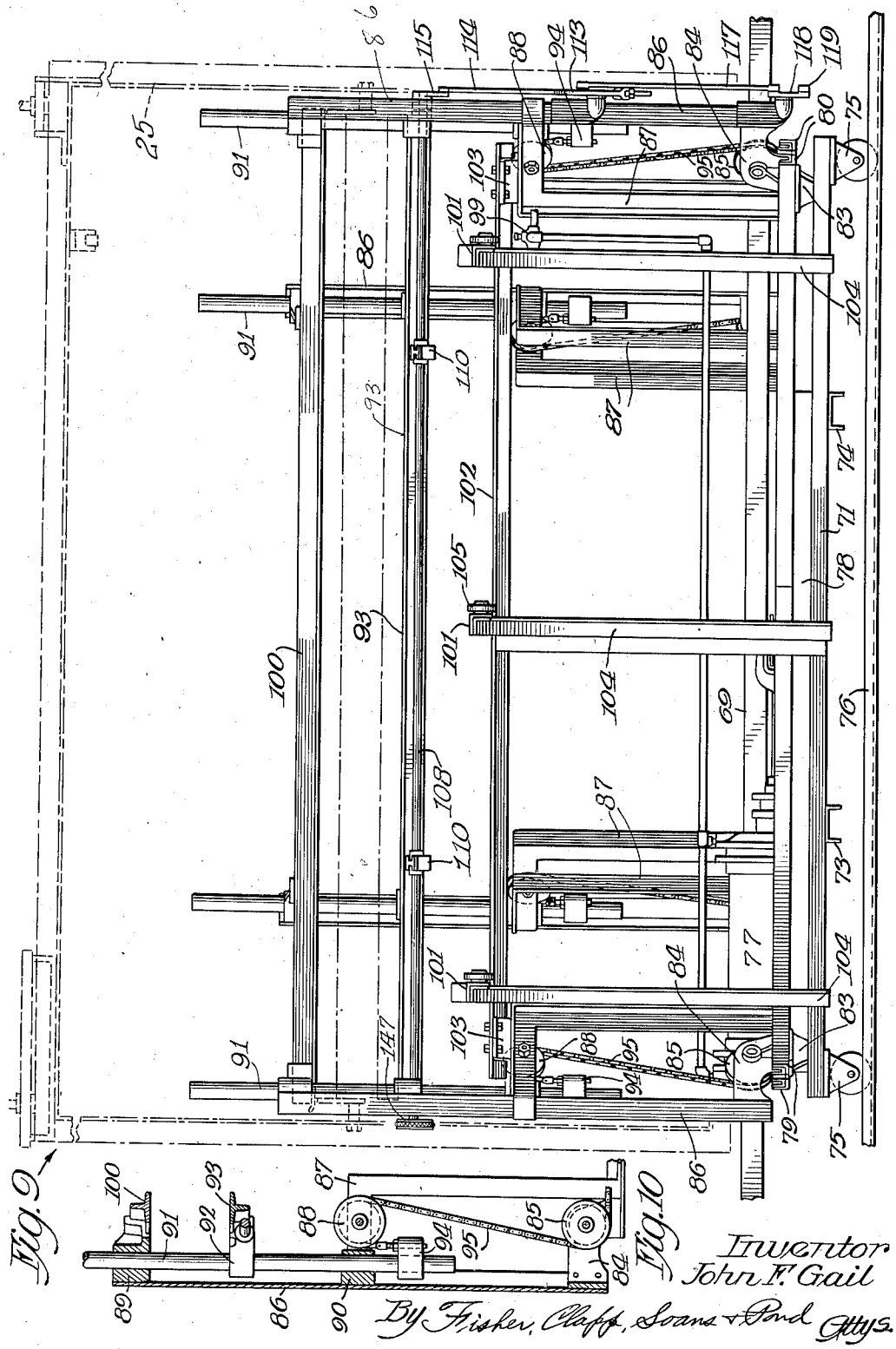


Fig. 9

Fig. 10

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MATTRESS TUFTING APPARATUS

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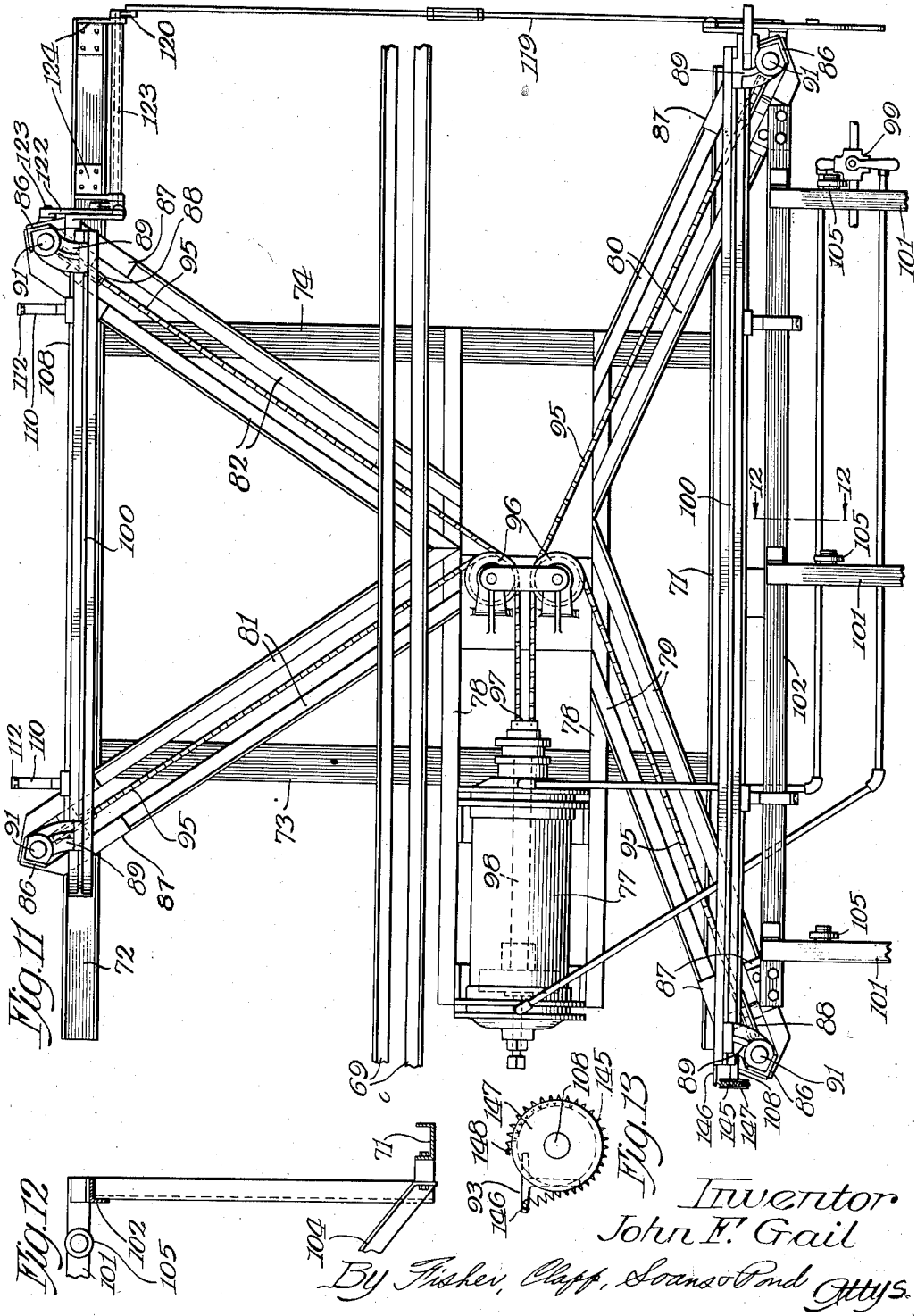


Fig. 11

Fig. 12

Fig. 13

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MATTRESS TUFTING APPARATUS

Filed Feb. 3, 1932 7 Sheets-Sheet 7

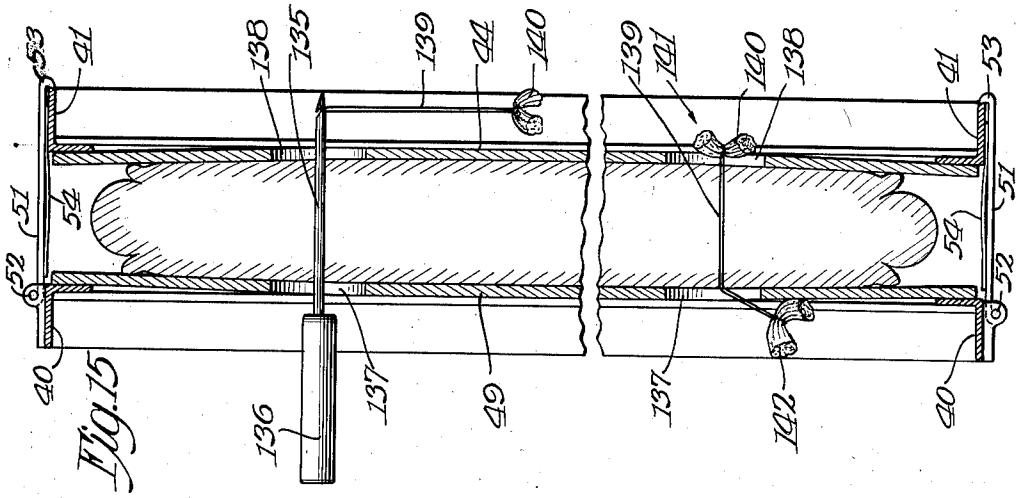


Fig. 15

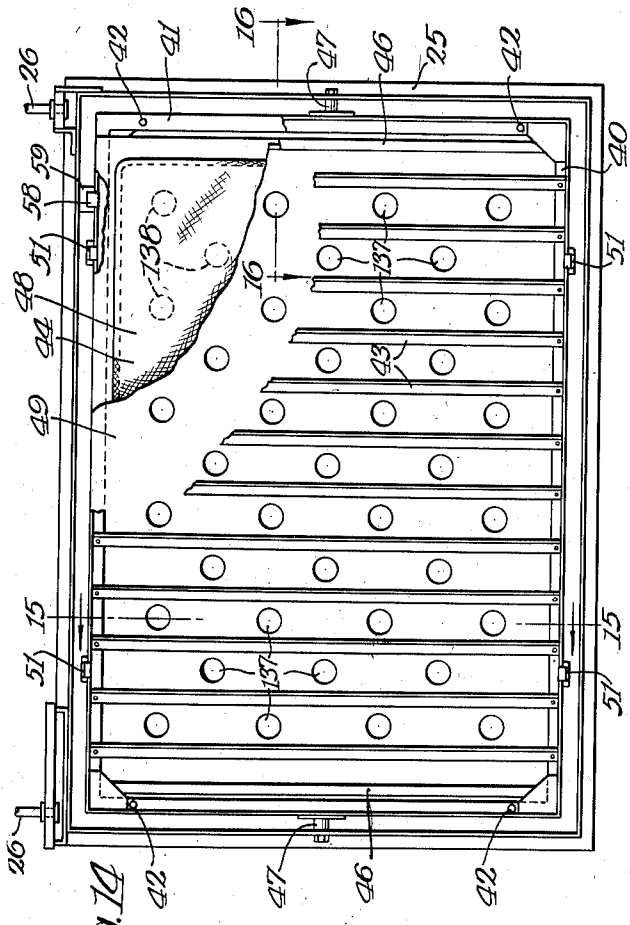


Fig. 14

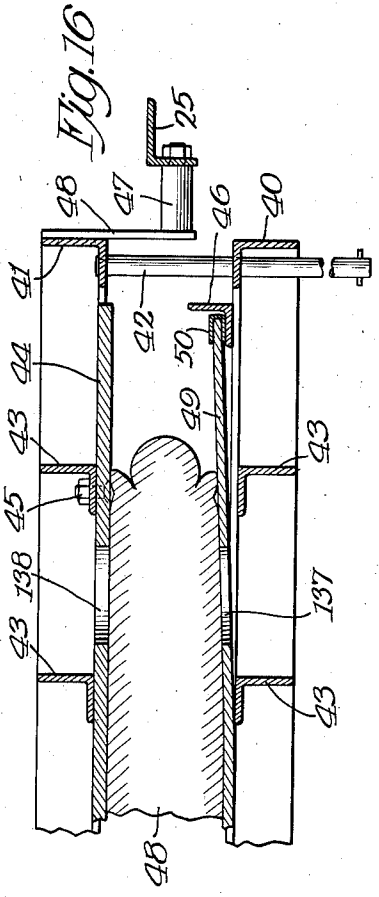


Fig. 16

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UNITED STATES PATENT OFFICE

1,983,169

MATTRESS TUFTING APPARATUS

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Application February 3, 1932, Serial No. 590,647

15 Claims. (Cl. 45—138)

This invention relates to mattress tufting apparatus, and more particularly to apparatus for handling mattresses to facilitate manual tufting thereof.

The main objects of the invention are: To provide apparatus for handling mattresses to facilitate tufting thereof; to provide such apparatus which is particularly suited, but not restricted, to use in connection with manual mattress tufting; to provide means for insuring accurate positioning and spacing of the tufts; to provide comparatively simple but efficient apparatus of the type referred to; and, in general, it may be said that the object of the invention is to provide apparatus for handling and preparing mattresses for tufting purposes.

Other objects and advantages of the invention will be understood by reference to the following specification and accompanying drawings (seven sheets), wherein apparatus of the type referred to is illustrated.

In the drawings:

Figs. 1 and 1A are plans of the left and right hand portions, respectively, of the apparatus.

Fig. 2 is a section on the line 2—2 of Fig. 1.

Fig. 3 is a side elevation of that portion of the mechanism illustrated in Fig. 1.

Fig. 4 is a side elevation on an enlarged scale of a portion of the mechanism shown in Fig. 3.

Fig. 5 is a fragmentary view of a portion of Fig. 4 in a changed position.

Fig. 6 is a section on the line 6—6 of Fig. 4.

Fig. 7 is a section on the line 7—7 of Fig. 3.

Fig. 8 is a detail of a locking device.

Fig. 9 is a side elevation of the mechanism shown in Fig. 7.

Fig. 10 is a section illustrating a detail of construction of the mattress-compressing mechanism.

Fig. 11 is a plan of the mattress-compressing mechanism.

Fig. 12 is a section on the line 12—12 of Fig. 11.

Fig. 13 illustrates a detail of construction.

Fig. 14 is a side elevation of a mattress carriage.

Figs. 15 and 16 are sections on the lines 15—15 and 16—16, respectively, of Fig. 14.

Referring now to the drawings, and more particularly to Figures 1 and 1A, the general arrangement of apparatus herein concerned may be briefly described as including an endless, more or less oval-shaped, track 20, from which a plurality of mattress carriers are portably suspended. The mattress carriers are designated 21. Means designated 22 as an entirety are provided for propelling the mattress carriers around the track 20, and mattress-compressing means 23 are provided for facilitating the compression of mattresses in the respective carriers so as to facilitate tufting thereof, as will be hereinafter explained.

The carriers 21 are so constructed that the mattress is carried around the track in a vertically disposed position, and the tufting thereof is effected while the mattresses are so disposed. The carriers are so arranged that they may be swung to horizontal position to facilitate the removal of a completed mattress by sliding the same horizontally to a receiving table and so as to facilitate insertion of an untufted mattress into the empty carrier by similarly sliding the untufted mattress from the table into the carrier. The carrier is adjustable so that the mattress may be compressed between it by the compressing devices 23, after which the carrier is again restored to vertical position for the tufting operation. The details of the structure illustrated will now be explained.

Referring now to Figs. 2, 3 and 14, it will be seen that each of the mattress carriers 21 includes an outer frame 25 which is conveniently formed of angle iron, this frame being generally rectangular in shape. At its upper corners, the outer frame 25 is provided with upwardly extending suspension arms 26 which are provided with anti-friction rolls 27. As clearly shown in Fig. 2, each of the suspension members 26 is bifurcated at its upper end and each arm of the bifurcation is provided with a roll 27 respectively engaging the opposite sides of the I-beam track 20. Any suitable provision may be made for adjustably connecting the suspension members 26 to the respective frames so that the height of the frames may be adjusted, and so that the frames may be adjusted to a suitably level condition. Either one or both of the suspension members 26 of each frame is connected to an endless chain 28 so that the mattress carriers are thus interconnected for movement in unison around the track 20.

For propelling the mattress carriers, I provide driving mechanism which includes a suitable source of power, such as an electric motor 29, which is connected by means of a belt 30 to one end of a Reeves variable speed drive 31, the output end of which is connected by means of a belt or chain 32 to a worm and worm wheel driving mechanism 33 whereby a vertical shaft 34 is continuously rotated. The shaft 34 is mounted for rotation in a bearing 35 which is carried by suitable framework 36, and a sprocket 37 is secured to the lower end of the shaft, as shown in Fig. 2.

A studded chain or belt 38 extends around the sprocket 37 and around an associated sprocket 39, and the sprocket 38 is so disposed relative to the chain 28 that the studs of the chain 38 will mesh with the chain 28 and thereby impart movement to the latter. The sprocket 39 is so arranged relative to the chain 28 that the driving chain 38 is gradually withdrawn from its driving engagement with the chain 28, as clearly shown in Figure 1.

An adjustable mattress holding or clamping frame is mounted within the outer frame 25 and includes front and back frame members 40 and 41, respectively, which are adjustably connected by means of elongated bolts, such as indicated at 42. Each frame 40 and 41 consists of an outer angle iron frame, as will be readily understood from inspection of Fig. 14, together with a plurality of angle iron members 43 which extend between the opposite sides of the frame, as clearly shown in Fig. 14. The back frame 41 includes a wall member 44 formed of wood or sheet metal, this wall member being secured to the frame at suitably spaced points by suitable means such as bolts, as indicated at 45 in Fig. 16. The front frame member 40 is provided with a pair of angle iron guide members, such as 46, these members being located on the inside of the frame and serving a purpose which will presently appear. The front and back frames 40 and 41 are mounted in the outer frame 25 by means of pivot connections such as indicated at 47, so that the front and rear frames 40 and 41 may be swung as a unit about the horizontal axis of the pivots 47, 47 which are, of course, in axial alignment. The pivots 47 are connected to the rear frame member 41 through the agency of a bracket 48 which is rigidly secured to the rear frame and projects forwardly so that the front and rear frames 40 and 41, when in their operative position, are approximately balanced in the frame 25.

The mattress 48 is adapted to be compressed between the front and rear frames 40 and 41, a wall or tray member 49 being associated with the front frame 40 to cooperate with the wall member 44 of the rear frame to compress the mattress. The member 49 is not secured to the front frame 40, but is adapted to be slid into and out of operative relation thereto on and between the guides 46, 46, the opposite ends of the tray 49 being reinforced with a metal cleat or the like, indicated at 50. For holding the front and rear frames 40 and 41 in operative relation, i. e., with a mattress compressed therebetween, a plurality of hooks, such as indicated at 51 in Figures 4, 6 and 14, are provided. Each hook 51 is in the form of an elongated bar hingedly connected, as indicated at 52, to the front frame member 40, and provided at the other end with a hook 53 which is adapted to hook over the edge of the frame member 41. A leaf spring 54 is secured at one end to the hook 51 and arranged so that its free end tends to spring away from the face of the hook. As shown in Fig. 6, the free end of the spring 54 fits between the frame member 41 and the hook 51 so that it tends to swing the hook 51 out of latching engagement with the frame 41. It will, of course, be understood that the expansive pressure of a mattress compressed between the frames 40 and 41 is ample to cause sufficient frictional contact between the hook 53 and frame 41 to prevent unlatching of the hook under normal conditions.

Assuming that each of the mattress carriers is filled with a mattress, as is the condition during normal operation of the apparatus, and that a mattress has been completely tufted and should be removed from the carrier in which it is disposed, such carrier is caused to swing on its pivots 47 to a horizontal position, as indicated at A in Fig. 3. The mechanism for causing the carrier to assume such horizontal position includes a latch-disengaging member 55 having a cam-like end portion 56 for engagement with the projecting end 57 of a pivoted latch member 58. The latch member 58 is best shown in Fig. 8, and its relation to the disengaging or trip member 55, 56 is best shown in Figs. 2 and 3. As shown in Fig. 8, the latch member 58 consists of a bar pivoted intermediate its ends on a bracket 59 which projects from the outer frame 25. In its normal position, the latch 58 extends over the upper edge of the inner or rear frame member 41 and is provided with a hook element 60 which drops in front of the front edge of the rear frame 41 to hold the latter in upright position against an end portion of the bracket 59. As an incident to the travel of the frame 25 and mattress carrier therein, the outer end portion 57 of the latch 58 passes under the cam-like element 56 which depresses the outer end of the latch to raise the inner hook end thereof from operative engagement with the frame 41. A guide element 61 (Figures 1, 2 and 3) serves to initiate pivotal movement of the carrier, such movement being limited by a stop 62 against which the inner side or upwardly swinging portion of the carrier comes to rest, as indicated in Fig. 2. Suitable guides 63, 63 are provided for maintaining the mattress carrier in its horizontal position after it leaves the stop member 62. The members 61 and 62 may conveniently be supported by independent supporting means, as clearly shown in the drawings, and the members 63, 63 may conveniently be secured to suitable brackets such as 64 which depend from the framework 36.

The framework 36 and the continuous track 20 is preferably supported by means of cross-heads or beams 65 which are supported on posts 66 located centrally of the opposite sides of the track 20. The posts 66 are suitably mounted on the floor or other support by means of pedestals 67, as clearly shown in Fig. 2. Of course, if desired, the framework may be suspended from above, but the above described arrangement is practical and economical. For preventing swaying of the mattress carriers during their travel, each carrier is provided with a pair of rollers 68, 68 depending from the lower side of the outer frame member and engaging a channel track 69 which is supported by pedestals, such as 70.

The mattress carrier and mattress therein which has been turned to horizontal position, as described above, is next propelled into co-operative relation with compressing mechanism designated as an entirety by B. This compressing mechanism is a portable device and is adapted to move in unison with the travel of the mattress carrier for such a distance as may be necessary to remove a completed mattress from the carrier and to insert an untufted mattress therein.

The compressing mechanism B comprises a main frame which consists of a pair of upwardly facing channel members 71 and 72 which are rigidly connected together by means of downwardly facing cross members 73 and 74, respectively, which extend transversely between the

side members 71 and 72. The main frame is provided with depending rollers 75, preferably located at the ends of each of the side members 71 and 72, and these rollers are adapted to roll in angle iron tracks such as indicated at 76. A pneumatic piston 77 is mounted between frame members 78, 78 which are suitably secured to the cross members 73 and 74 and diagonally extending pairs of frame members 79, 80, 81 and 82, preferably of angle iron, connecting the outer side frame members 71 and 72 with the inner frame members 78, 78. As indicated in Figure 7, the inner ends of the diagonal frame members rest directly on the upper flanges of the inner frame member 78, while the outer ends of such members rest on bracket castings, such as indicated at 83, which are suitably secured to the respective side frame members 71 and 72.

At their outer ends, each of the pairs of diagonally extending frame members is provided with a bracket such as indicated at 84 which constitutes a bearing for a pulley 85 which is rotatably mounted in the bracket, and each bracket is formed with an end portion to which an upwardly extending angle iron frame member 86 is secured. For bracing the upwardly extending members 86, braces such as indicated at 87 are provided, there being one such brace extending between each of the members of each pair of frame members 79, 80, 81 and 82, and the respective upright members 86, as clearly shown in Figure 11. Another pulley 88 is mounted for rotation between each pair of braces 87, as clearly shown in Figures 9 and 11. Each upwardly extending frame member 86 is provided with a pair of brackets 89 and 90, respectively, which are provided with bearing apertures for slidably receiving a bar or rod 91. Each bar or rod 91 is provided with a bracket 92 rigidly secured thereto and extending inwardly therefrom. The inner ends of the brackets 92 support T-iron members 93. By inspection of Figure 7, it will be seen that there is a T-bar at each side of the mechanism, and it will be understood that such members are adapted to be moved vertically in unison with vertical sliding movement of the rods or bars 91 in the respective bearings 89 and 90.

For effecting such movement of the members 93, each bar 91 is provided with a bracket such as indicated at 94 and each bracket has secured to it one end of a cable 95. The cable 95 extends from the bracket 94 upwardly around the pulley 88 and downwardly around the pulley 85, one of which is associated with each frame member 86. From the pulley 85, each cable 95 extends inwardly intermediate the members of each diagonally extending pair (see Figure 11) and the inner ends of the cables pass around pulleys such as indicated at 96. The inner ends of the cables are connected as indicated at 97 to the outer end of the piston rod 98 of the pneumatic cylinder 77.

The cylinder 77 is controlled by means of a two-way valve 99 which controls the admission and exhaust of air or other fluid from the opposite ends of the cylinder 77, whereby the piston rod 98 is caused to travel in opposite directions to thereby impart movement to the cables 95 and therethrough to the bars 91 and compressor members 93 carried thereby.

Associated with each compressor member 93 is a complementary compressor member 100, each compressor member 100 being fixedly secured to the outer end of the brackets 89, as clearly shown in Figure 10.

As indicated in Figure 3, the compressor members 100 and 93 are so arranged when in open position that the horizontally disposed mattress carrier frames 40 and 41 may be propelled into the space between said compressor members. By appropriately operating the valve 99, the lower compressor member 93 may be moved upwardly so as to engage the lower mattress carrier member 40 and to ultimately compress the mattress between the upper and lower carrier frames 40 and 41 (see Figure 7) so as to permit the springs 54 to disengage the locking hooks 51. Upon disengagement of the hooks, the valve is operated to relieve the pressure in the cylinder and to lower the adjustable compressor member 93, the lower mattress carrier frame 40 being then permitted to follow the compressor member 93 to the lowered position indicated in broken lines in Figure 7. When the mattress carrier frame 40 is thus lowered, the mattress may be freely removed from the carrier by being drawn edgewise on to a supporting rack. The supporting rack just referred to preferably comprises a plurality of horizontally disposed angle iron members 101, the inner ends of which are secured to longitudinally extending bars 102 which are supported by means of brackets 103 on the brace frames 87, 87, as clearly shown in Figure 9. The outer ends of the horizontal bars 101 are supported by diagonally extending brackets 104 which are connected at their lower ends to the lower frame member 71, as indicated in Figure 12, the upper ends of the brackets 104 being suitably secured to said bars 101. The bars 101 are provided with a series of rollers 105 on which the supporting tray 49 and mattress thereon are adapted to be rolled free of the carriers 40 and 41. Suitable stops, such as indicated at 106, are provided for limiting outward movement of the tray 49. The stops preferably include a cushion bumper 107 for preventing injury to the edge of the tray.

When the tray 49 and mattress thereon have been removed from the carrier frames to a position on the supoprting rack, the completed mattress is removed by hand or otherwise and an uncompleted, i. e., untufted, mattress is substituted. The untufted mattress then on the tray is slid into the space between the separated mattress carrier frames 40 and 41, and the valve 99 is operated to again elevate the compressor members 93. The compressor members 93 are caused to restore the lower carrier frame 40 to normal operative position relative to the carrier frame 41 in which a mattress is compressed therebetween. While the lower compressor members 93 maintain the carrier frames 40 and 41 in such position, the hooks 51 are restored to operative position, after which the compressor members are lowered. The hooks 51 then serve to maintain the carrier frames 40 and 41 in said normal position with an untufted mattress compressed between the frames.

For facilitating the restoration of the hooks 51 to operative position, the following means is provided: A shaft 108 is associated with each of the compressor members 93 by being rotatably mounted in brackets 109 which are secured to the respective compressor members. Each shaft carries a plurality of hook-restoring devices 110 which are secured to the shaft for rotation therewith by means of brackets 111. The outer end of each restoring member 110 is provided with a pusher 112 which is adapted to engage the adjacent hook 51 when the shaft 108 is turned in a direction to swing the restoring member 110 up-

wardly. For imparting proper rotary movement to the shafts 108, a hand lever 113 is pivoted intermediate its ends on one of the upwardly extending frame members 86 (see Figure 7), and one end of the lever is connected by means of a rod 114 to a lever 115 which is secured to the adjacent shaft 108. When the outer end of the hand lever 113 is lifted, the inner end is, of course, moved downwardly with the result that the lever 115 is swung downwardly to thereby rock the shaft 108 in such a direction that the hook-restoring members 110 carried thereby are swung upwardly into hook-restoring position, as illustrated in Figure 6. Downward movement of the outer end of the lever 113 operates through a spring 116 surrounding the rod 114 to effect reverse movement of the hook-restoring members 110. For similarly operating the hook members of the remote side of the mechanism, a link 117 is connected between the hand lever 113 and the bell crank 118, which is pivoted as shown in Figure 7 to the lower end of the adjacent frame element 86. An adjustable link 119 connects the bell crank 118 with an arm 120, which is secured to one end of a shaft 123, the latter being rotatably mounted in suitable brackets 124, 124, which extend upwardly from the frame member 72. At the opposite end of the rod 123, there is an arm 121' which is connected by a link 121 to an arm 122 which, like the hand lever 113, is pivoted on an adjacent frame member 86. The arm 122 is connected to the adjacent shaft 108 by means of connections 114, 115 and 116 between the hand lever 113 and its adjacent shaft 108. It will be seen that the described connections between the hand lever 113 and the respective shafts 108 are such that the shafts are caused to rotate simultaneously in opposite directions so that the hook-restoring devices on each shaft are simultaneously caused to swing either in upward, hook-restoring position or downwardly away from the restored hooks. Turning of the hook restorers 110 is effected against the tension of a coil spring 145 (Figs. 11 and 13). This spring is connected at one end to the compressor member 93 as indicated at 146 and extends around a pulley 147 mounted on the shaft 108 and is anchored at its other end to said pulley as shown at 148. The spring 145 tends to return the restoring members 110 to normal position when the hand lever 113 is released.

Inasmuch as the mattress carriers are continuously propelled by the means above described, it is, of course, important that the portable compressing mechanism be caused to travel in unison with the carriers during the operation of removing and inserting mattresses relative to each carrier. To insure such unitary movement, the fixed compressor member 100 is provided with a bracket 125 rigidly secured thereto adjacent one end, and a stop member 126 is mounted in the bracket 125 for pivotal movement on a pivot pin 127. A locking lever 128, pivoted as indicated at 129 on the bracket 125, is provided with a hooked end 130 which is adapted to engage a lug 131 constituting part of the pivoted stop member 126 to hold the latter in downwardly projecting position, as shown in Figure 4. Any suitable form of spring (not shown) may be provided for normally urging the latch member 128 into operative relation relative to the stop member 126. As will be understood from an inspection of Figure 4, the forward end of the upper mattress-carrying frame 41 is adapted to engage the depending stop member 126 with the result that the compressor mechanism will be propelled in unison with the mattress carrier. When the operation of changing mattresses has been completed, an attendant merely depresses the outer end of the latch lever 128 with the result that the pivoted stop member 126 is permitted to swing upwardly and ride over the mattress carrier frame 41, as indicated in Figure 5.

The speed of travel of the mattress carriers is not great, and it will be understood that workmen accustomed to changing mattresses in the above described mechanism are easily able to effect such changing in considerably less time than is required for the mattress to travel the full length of the compressor tracks 76. As soon as the operation of compressing the untufted mattress in a mattress carrier is completed, the compressor mechanism is shifted rearwardly relative to the direction of travel of the mattress carriers, and as soon as the newly compressed mattress is free from the compressor, it is swung to vertical position, as indicated in Figure 3. In its rearward movement, the compressor, of course, receives the next completed mattress and the operation of removing the completed mattress and substituting an uncompleted mattress is again repeated. Any suitable form of stop, herein indicated as a spring cushion stop designated 132, may be provided for limiting rearward movement of the compressor mechanism, and an electric switch 133 for controlling the driving motor 29 may be provided in the path of movement of the compressor mechanism for breaking the circuit to the motor and thereby stopping travel of the mattress carriers in the event that the operation of changing mattresses is not completed within the limit of travel of the compressor mechanism.

One method of tufting a mattress which is compressed in the mattress carriers above described is illustrated in Figure 15. This method includes the penetration of the compressed mattress by means of a hooked needle 135. The needle 135 is provided with a handle 136 for facilitating manipulation of the needle, and the tray 49 and the wall member 44 are provided with registering openings, such as indicated at 137 and 138, respectively, for indicating the proper location of the tufts. A workman on one side of the path of travel of the mattress carriers inserts the hooked needle 135 through the mattress as indicated in Figure 15, and another workman stationed on the opposite side hangs a looped tufting cord 139 on the hooked end of the needle. A tuft 140 is initially secured to the looped tufting cord 139. The workman handling the needle 135 can tell when a tuft is applied to the needle by reason of a slight displacement of the needle effected in the operation of applying the tufting cord, and after a suitable interval withdraws the needle and with it pulls the looped tufting cord through the compressed mattress. The tuft 140 is then pulled into substantially the position indicated at 141 in Figure 15, and another tuft 142 is suitably tied to the then projecting end of the tufting cord 139. A tuft is positioned in each of the sets of registering openings 137 and 138, and when all of the tufts are in place and the mattress permitted to expand, the tufting cords will be drawn tight and the respective tufts 140 and 142 effectively anchored in proper position on the opposite sides of the mattress.

The above described method of tufting a mattress and the apparatus used in connection there-

with are such that highly skilled labor is not required, while, at the same time, enabling the production of mattresses of first class workmanship in a minimum of time and at a low cost. The apparatus may, of course, be changed in many ways without departing from the spirit of the invention, the scope of which should be determined by reference to the following claims, which should be construed as broadly as possible consistent with the state of the art.

I claim as my invention:

1. In apparatus of the class described, the combination of a mattress carrier, a frame in which said carrier is mounted for pivotal movement, an overhead track, means for movably suspending said frame from said track, and means for preventing lateral swaying of said frame.

2. In apparatus of the class described, a mattress carrier for normally supporting a mattress in vertical position, means for movably supporting said carrier, means for mounting said carrier in said supporting means for pivotal movement from said vertical position to substantially horizontal position, and means movable with said carrier and supporting means for locking said carrier in vertical position relative to said supporting means.

3. In apparatus of the class described, a mattress carrier for normally supporting a mattress in vertical position, means for movably supporting said carrier, means for mounting said carrier in said supporting means for pivotal movement from said vertical position to substantially horizontal position, means for locking said carrier in vertical position relative to said supporting means, means for propelling said mattress carrier, and means for disengaging said locking means and effecting adjustment of the carrier from vertical position to horizontal position as an incident to its travel.

4. In apparatus of the class described, the combination of an endless track, a plurality of mattress carriers, means for movably mounting said carriers on said track, a chain connecting said carriers for movement in unison along the track and for maintaining said carriers in relatively fixed spaced relation, an endless belt having a plurality of studs projecting therefrom and meshing with said chain, and means for imparting movement to said studded belt and thereby to effect movement of said chain and mattress carriers.

5. In apparatus of the class described, the combination of a mattress carrier comprising a pair of oppositely disposed mattress-receiving members adjustably connected together for movement towards and from each other, means for supporting said carrier for movement along a predetermined path, compressor mechanism independent of said mattress carrier but located in the path of movement thereof and adapted to receive said carrier and to adjust the members thereof towards each other for compressing a mattress therebetween.

6. In apparatus of the class described, the combination of a mattress carrier comprising a pair of mattress-receiving members adjustably connected for movement towards and from each other, a frame associated with said carrier, the latter being pivotally mounted in said frame for swinging movement about a substantially horizontal axis, means for supporting said frame and the carrier mounted therein for movement along a predetermined path, means for effecting pivotal adjustment of said mattress carrier in the frame to horizontal position at a predetermined point in the path of travel thereof, and compressor mechanism for receiving and adjusting said mattress-carrier members towards each other when horizontally disposed.

7. In apparatus of the class described, the combination of a mattress carrier comprising a pair of mattress-receiving members adjustably connected for movement towards and from each other, a frame associated with said carrier, the latter being pivotally mounted in said frame for swinging movement about a substantially horizontal axis, means for supporting said frame and the carrier mounted therein for movement along a predetermined path, means for effecting pivotal adjustment of said mattress carrier in the frame to horizontal position at a predetermined point in the path of travel thereof, and portable compressor mechanism for receiving and adjusting said mattress-carrier members towards each other when horizontally disposed.

8. In apparatus of the class described, the combination of a mattress carrier comprising a pair of mattress-receiving members adjustably connected for movement towards and from each other, a frame associated with said carrier, the latter being pivotally mounted in said frame for swinging movement about a substantially horizontal axis, means for supporting said frame and the carrier mounted therein for movement along a predetermined path, means for effecting pivotal adjustment of said mattress carrier in the frame to horizontal position at a predetermined point in the path of travel thereof, compressor mechanism for receiving and adjusting said mattress-carrier members towards each other when horizontally disposed, and means for supporting said compressor for limited movement in unison with the travel of the mattress carrier.

9. In apparatus of the class described, the combination of a mattress carrier comprising a pair of mattress-receiving members adjustably connected for movement towards and from each other, a frame associated with said carrier, the latter being pivotally mounted in said frame for swinging movement about a substantially horizontal axis, means for supporting said frame and the carrier mounted therein for movement along a predetermined path, means for effecting movement of said frame and carrier along said path, means for effecting pivotal adjustment of said mattress carrier in the frame to horizontal position at a predetermined point in the path of travel thereof, compressor mechanism for receiving and adjusting said mattress-carrier members towards each other when horizontally disposed, and means for supporting said compressor for limited movement in unison with the travel of the mattress carrier.

10. In apparatus of the class described, the combination of an overhead track, a frame portably suspended from said track, a mattress carrier pivotally mounted in said frame and normally disposed in vertical position, said mattress carrier comprising a pair of oppositely disposed mattress-receiving members adjustably connected together for movement towards and from each other, means for effecting movement of said frame and carrier along said track, means for effecting pivotal adjustment of said carrier from said normal vertical position to substantially horizontal position at a predetermined point in the path of its movement, and a compressor located adjacent the path of travel of said carrier when in horizontal position and adapted to receive and ad-

just said carrier members towards each other for compressing a mattress therebetween.

11. In apparatus of the class described, the combination of an overhead track, a frame portably suspended from said track, a mattress carrier pivotally mounted in said frame and normally disposed in vertical position, said mattress carrier comprising a pair of oppositely disposed mattress-receiving members adjustably connected together for movement towards and from each other, means for effecting movement of said frame and carrier along said track, means for effecting pivotal adjustment of said carrier from said normal vertical position to substantially horizontal position at a predetermined point in the path of its movement, a compressor located adjacent the path of travel of said carrier when in horizontal position and adapted to receive and adjust said carrier members towards each other for compressing a mattress therebetween, and means for supporting said compressor for limited movement along the path of travel of said mattress carrier.

12. In an apparatus of the class described, the combination of a mattress carrier comprising a pair of oppositely disposed members adjustably connected together for movement towards and from each other, latch means carried by one of said members and engaging the other for normally locking said members in predetermined position relative to each other for maintaining the mattress compressed therebetween, means for portably supported said mattress carrier for movement along a predetermined path, a compressor for receiving said carrier and operative to effect adjustment of said carrier members towards each other, first, to release said latch means to permit separation of said members to permit withdrawal of a mattress therefrom, and, subsequently, to adjust said members towards each other to compress a mattress therebetween, and means carried by said compressor for adjusting said latch means to latching position.

13. In apparatus of the class described, the combination of a mattress carrier, means for portably supporting said carrier, means for effecting travel of said carrier along a predetermined path, a compressor unit for receiving said mattress carrier and operative to effect compression of a mattress in the carrier; means for supporting said compressor for movement in unison with the movement of said carrier, and releasable means for locking said carrier and compressor unit together for unitary movement.

14. In apparatus of the class described, the combination of a carrier comprising members adjustable towards and from each other, means for supporting said carrier for movement through a predetermined path of travel, and mechanism adjacent said path of travel for adjusting said carrier members towards each other to compress a mattress or the like disposed between said members.

15. In apparatus of the class described, the combination of a mattress carrier comprising oppositely disposed mattress receiving members, said members being adjustably connected for movement towards and from each other, means for supporting said carrier for movement through a predetermined path of travel, and mechanism independent of but associated with said mattress receiving members for adjusting the same towards each other to compress a mattress therebetween.

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