Aug. 3, 1943. R. WILLARD 2,326,087

DRAWER COMPRESSOR

Filed June 16, 1942 2 Sheets-Sheet 1

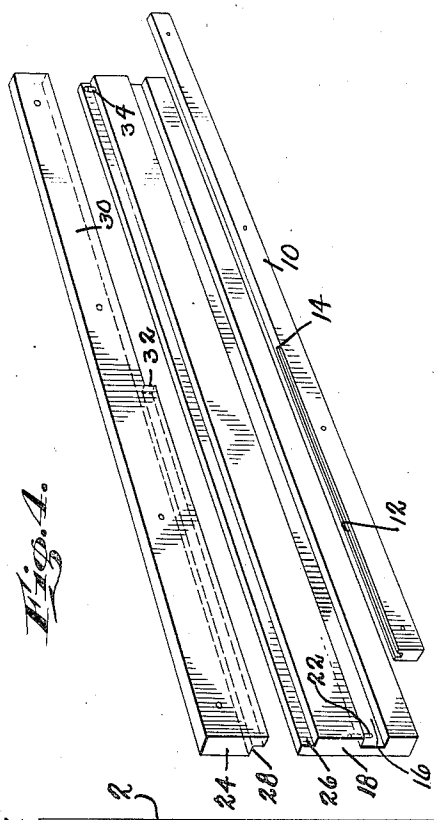


Fig. 4.

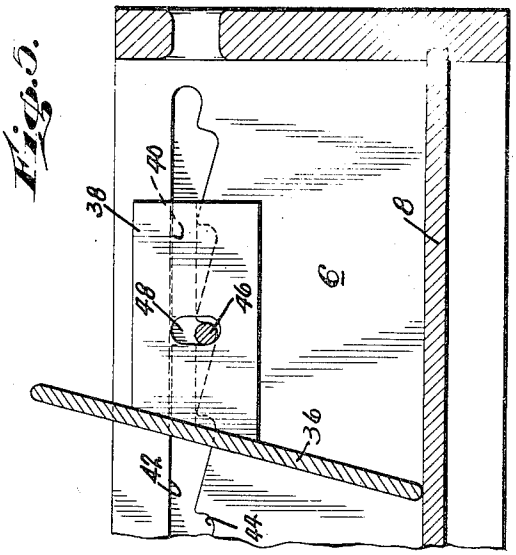


Fig. 3.

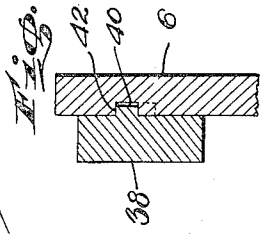


Fig. 2.

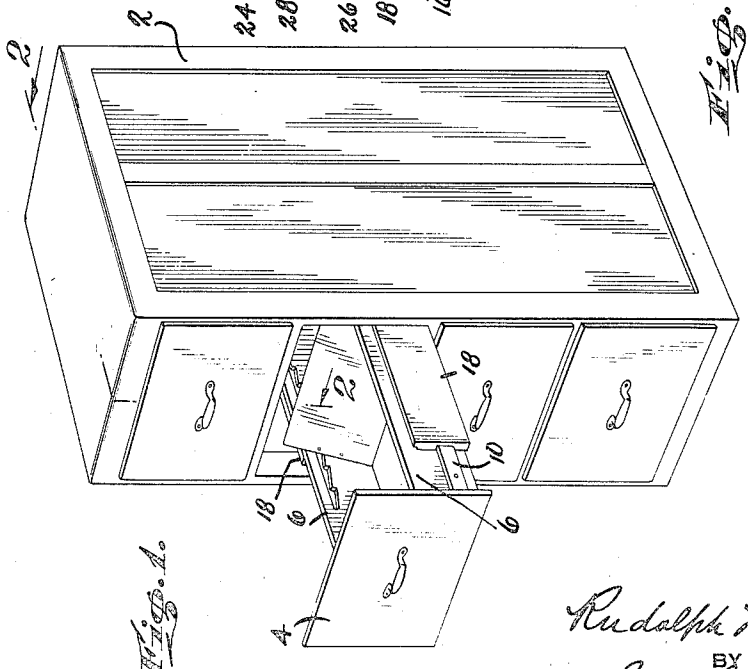


Fig. 1.

Rudolph Willard. INVENTOR

BY James G. Bishop

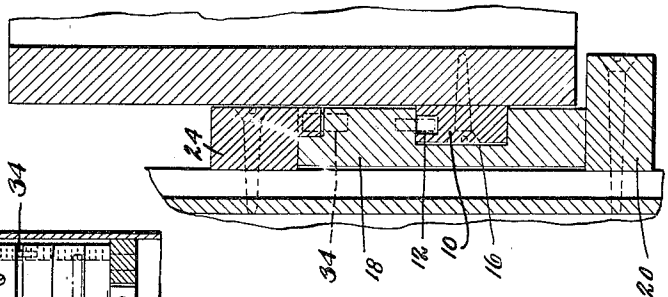
ATTORNEY

Aug. 3, 1943. R. WILLARD 2,326,087

DRAWER COMPRESSOR

Filed June 16, 1942 2 Sheets-Sheet 2

Fig. 6.



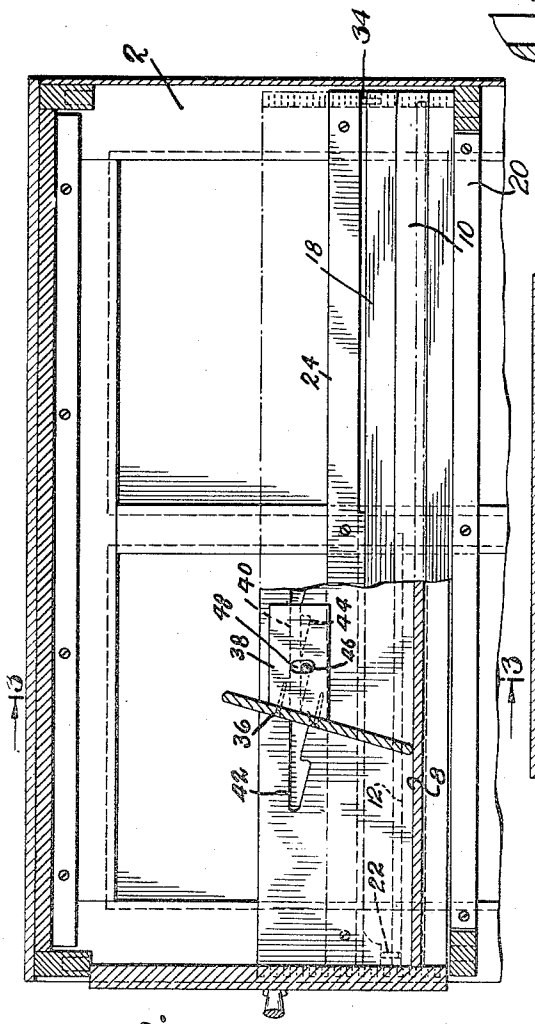


Fig. 2.

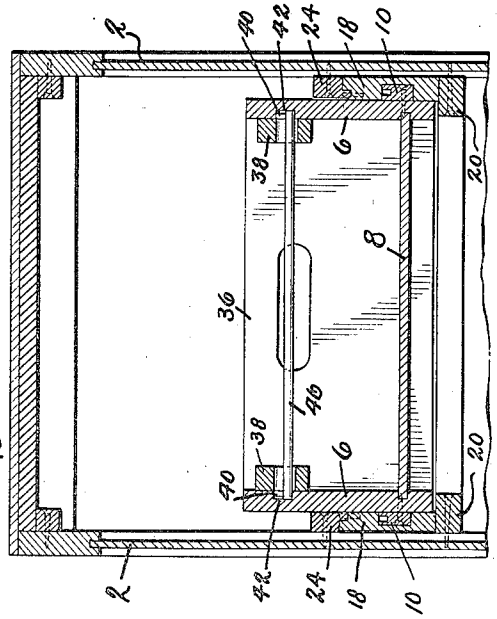


Fig. 3.

INVENTOR
Rudolph Willard
BY
James G. Butcher
ATTORNEY

Patented Aug. 3, 1943 2,326,087

UNITED STATES PATENT OFFICE

2,326,087

DRAWER COMPRESSOR

Rudolph Willard, Ridgewood, N. J.

Application June 16, 1942, Serial No. 447,223

4 Claims. (Cl. 129—28)

My invention relates to an improvement in drawer compressors, and has for one of its objects the provision of a construction which is new and novel and which facilitates constructing the cabinet entirely in wood.

In the accompanying drawings wherein I have illustrated one embodiment of my invention:

Fig. 1 is a view in perspective of the completed cabinet;

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

Fig. 3 is a section substantially on the line 3—3 of Fig. 2;

Fig. 4 is a view showing the drawer guides before assembly;

Fig. 5 is a part sectional view showing details of the drawer compressor;

Fig. 6 is a view in section of the slide and guide mechanism at each side of the drawer; and

Fig. 7 is a cross section of part of the drawer compressor.

Referring to the drawings in detail: 2 designates the sidewalls of the cabinet and 4 one of the drawers thereof. The drawer sides are designated 6, while the bottom of the drawer is designated 8.

Secured on the outside of the drawer to each sidewall 6 thereof is an elongated wooden strip 10, each of these wooden strips being provided throughout part of its upper edge with a longitudinal groove 12. Each groove starts from the front of the strips and extends rearwardly to a point 14, as shown in Fig. 4, for example.

The strips 10 just referred to are received by slots or grooves 16 extending lengthwise of floating drawer carrying wooden guides 18 which are provided at each side of the drawer, these floating guides resting upon wooden strips 20 secured to the inside of the cabinet wall. The wooden guides 18 which, as above noted, rest upon the wooden strips 20, carry the weight of the drawer, and hence I impregnate these guides with a lubricant such as paraffin. A pin 22 is provided at the outer end of each of the grooves 16 of the floating guides 18, these pins extending into the grooves 12 in the strips 10, thereby to limit the outward travel of the strips 10 with respect to the floating guides.

Secured to the interior of the sidewalls of the cabinet 2 immediately above the floating guides 18 are wooden upper guiding strips 24. The upper edge of each of the floating guides is cut back throughout its length, as shown at 26, and each of the strips 24 is cut back throughout part of its lower edge, as shown at 28, so that strips 24 and floating guides 18 are overlapped. In addition the upper guiding strips 24 are reduced in depth throughout part of their length, as shown at 33, to provide a shoulder 32 in the lower edge of each of these strips, these shoulders cooperating with a pin 34 at the rear end of each of the floating guides 18. This limits the outward movement of the floating guides with respect to the strips 24.

The drawer compressor is shown in Figs. 2 and 5. From these figures of the drawings it will be seen that the compressor comprises a rectangular piece of wood 36 extending from sidewall to sidewall of the drawer. Secured to the back of the member 36 at each end thereof are wooden blocks 38. These blocks at their outer faces abut the sidewalls 6 of the drawer. On the outer face of each block, that is, the face adjacent the drawer sidewalls, I provide integral tongues 40. These tongues extend lengthwise of the blocks and lengthwise of the drawer, and are adapted to ride in grooves 42 provided for that purpose in the inner face of each drawer sidewall 6. The tongues 40 are provided for the purpose of properly guiding the compressor 36 in its movement lengthwise of the drawer as the compressor is moved back and forth in adjusting the same. The upper edge of each of these grooves is straight and smooth and parallel to the long axis of the drawer. The bottom of each of these grooves, however, is notched, as shown at 44. These are locking notches or ratchets which cooperate with a dowel locking rod 46 extending across the drawer behind the compressor board 36, the ends of this rod passing through vertically extending slots 48 in the blocks 38 and tongues 40 and into the groove 42. The slots 48 are elongated vertically of the blocks 38 and tongues 40 so as to permit the locking rod 46 to be raised out of the locking notches 44 when it is desired to shift the compressor lengthwise of the drawer in either direction. This rod falls into place by gravity and while it has a positive locking action, nevertheless no springs are required for its operation. This is a real advantage in a device of this character.

It will be seen from the foregoing that I have provided a filing cabinet which is of such construction as to permit the same to be made entirely of wood, without, however, sacrificing the strength necessary in an article of this nature. It will be seen, also, that my cabinet is extremely simple although rugged in its construction and that the drawers thereof, even when fully loaded, are well supported so as readily to slide. It will be seen, furthermore, that so far as the floating guide and the cooperating members shown in

Fig. 4 are concerned, they are so constructed that undue tipping of the drawer when the same is in full outward position is prevented, the movement of the member 10 with respect to the floating guide 18 being limited to about half the length of member 10, while the guide 18 can only move for about half its length with respect to member 24. In other words, there is always a substantial overlap of these three members sufficient to prevent tipping of the drawer even when the same is fully loaded. This substantial overlap also provides a long bearing surface so that the drawer may be opened and closed with the minimum effort.

It is to be understood that changes may be made in the details of construction and arrangement of parts herein described without departing from the spirit and scope of my invention.

What I claim is:

1. In a cabinet drawer, a compressor board within the drawer, wooden blocks secured to the rear face of the compressor board adjacent each edge thereof, a tongue on the outer face of each of said blocks riding in grooves formed in the inner faces of the drawer sidewalls, whereby the compressor board will be held in upright position and may be moved along the drawer to vary the drawer's capacity, a locking bar extending transversely of the drawer, said bar passing through slots in said blocks and projecting into said grooves, the lower surface of each of said grooves being shouldered, and said bar being engageable with said shoulders, thereby to lock the compressor board in adjusted position.

2. In a cabinet drawer, a compressor board within the drawer, wooden blocks secured to one face of the compressor board adjacent the drawer sidewalls, a groove extending lengthwise of the drawer in the inner face of each drawer sidewall, tongues carried by said blocks and extending into said grooves whereby the compressor board will be guided as it is moved lengthwise of the drawer, a dowel rod extending crosswise of said board and through said blocks into the grooves in the drawer sidewalls, and locking notches in the lower surface of each of said grooves into which the rod is adapted to move by gravity thereby to lock the compressor board in adjusted position.

3. In a cabinet drawer, a compressor board within the drawer, wooden blocks secured to the rear face of said board adjacent each edge thereof, a tongue on the outer face of each block and riding in a corresponding groove formed in the inner face of the adjacent drawer sidewall, a locking bar extending transversely of the drawer through vertically extending slots in said blocks and projecting into said grooves, locking shoulders in the lower surface of said grooves, said bar moving by gravity into engagement with opposed shoulders to lock the board against movement rearwardly of the drawer, the slots in said blocks being sufficiently long to permit the rod to be manually lifted out of engagement with said locking shoulders to permit shifting of the compressor board.

4. In a cabinet drawer, a compressor board within the drawer, wooden blocks secured to the rear face of the compressor board adjacent each edge thereof, a tongue on the outer face of each of said blocks riding in grooves formed in the inner faces of the drawer sidewalls to hold the board upright while permitting it to move lengthwise of the drawer to vary the capacity of the drawer, and means for locking the compressor board in adjusted position, said locking means comprising a dowel rod attached to and extending crosswise of the compressor board through slots in said blocks and tongues and into said grooves, and shoulders on one face of the grooves in said drawer sidewalls selectively engageable by the projecting ends of the dowel rod to lock the compressor board in adjusted position.

RUDOLPH WILLARD.