July 10, 1928. 1,676,991

C. BERGMANN

DRAWER MOUNT

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Fig. 2.

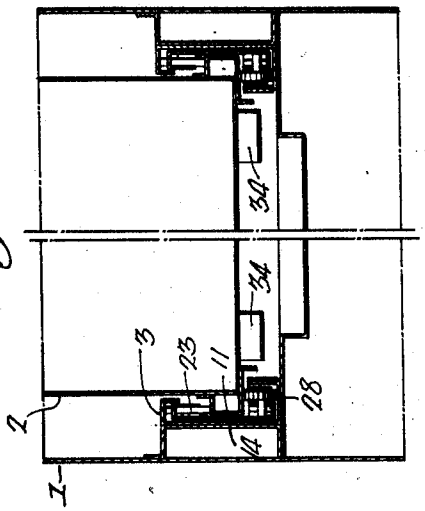



Fig. 3.

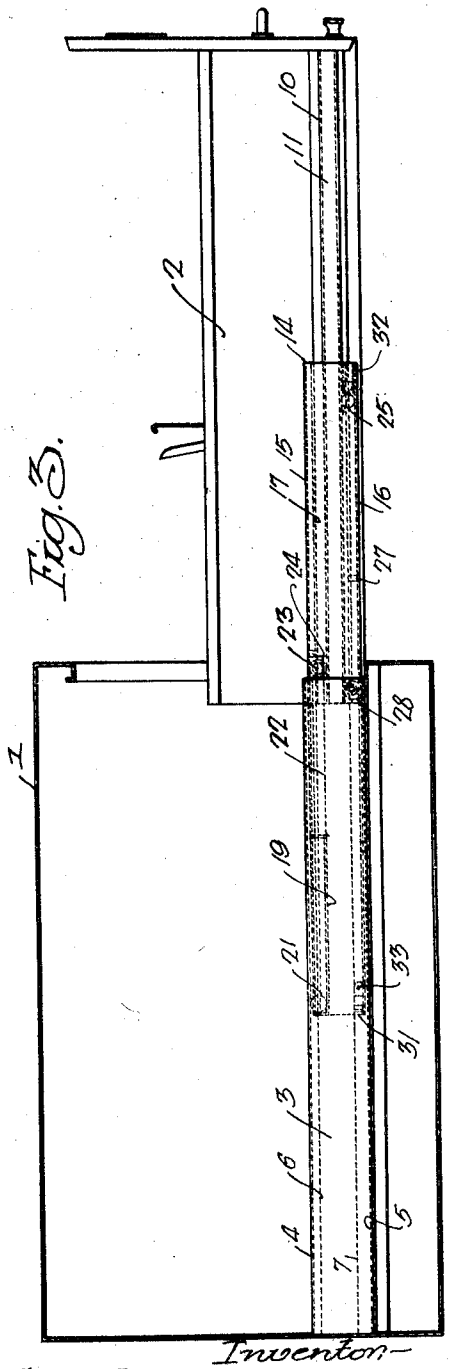
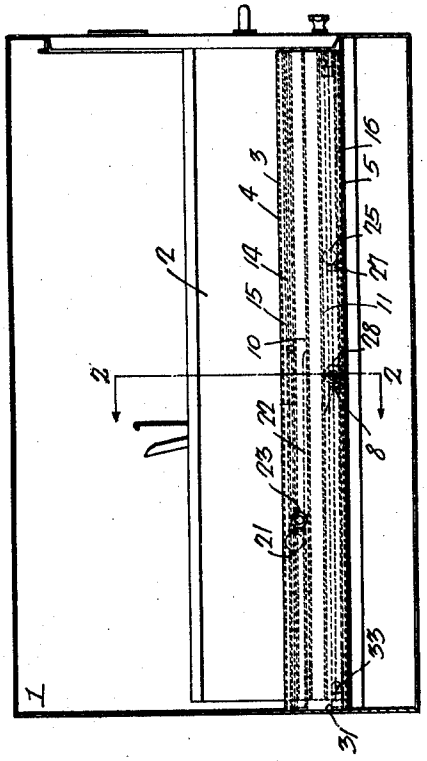



Fig. 1.



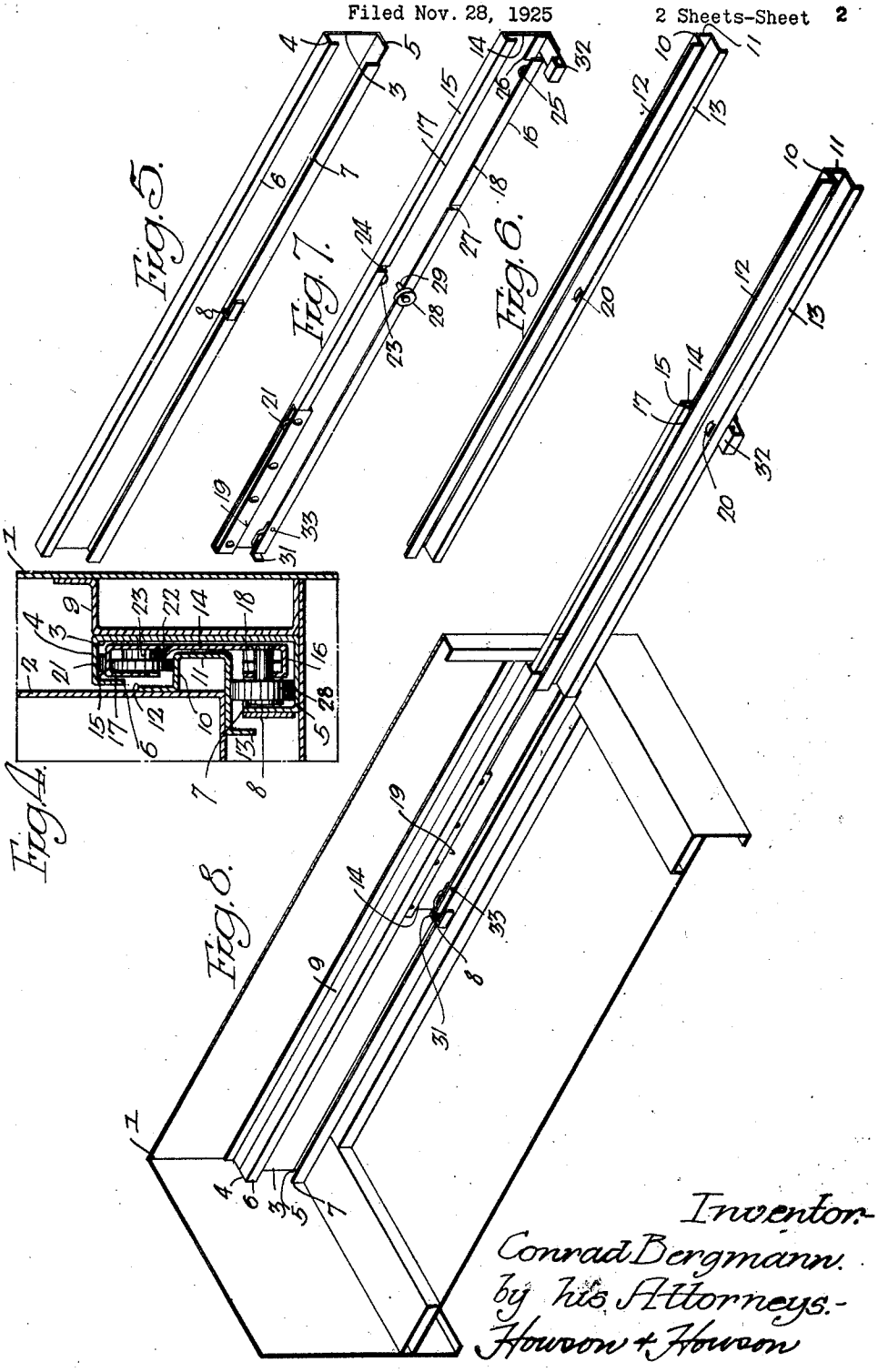

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by his Attorneys.—
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# UNITED STATES PATENT OFFICE.

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## DRAWER MOUNT.

Application filed November 28, 1925. Serial No. 72,015.

This invention relates to improvements in drawer mounts of the type commonly used in metal filing cabinets, and the principal object of the invention is to provide a mount of the extension type and of novel and improved construction affording advantages in manufacture and a high efficiency in operation.

In the attached drawings:

Figure 1 is a longitudinal section through a cabinet provided with a drawer mount made in accordance with my invention;

Fig. 2 is an enlarged section on the line 2—2, Fig. 1;

Fig. 3 is a longitudinal section similar to the section of Fig. 1 showing the drawer extended;

Fig. 4 is a fragmentary sectional enlargement on the line 2—2, Fig. 1;

Fig. 5 is a view in perspective of the relatively fixed track member;

Fig. 6 is a view in perspective of the movable track member which is attached to the drawer;

Fig. 7 is a view in perspective of the intermediate track member, and

Fig. 8 is a view in perspective of the assembled tracks.

With reference to the drawings, I have shown my improved drawer mount in a preferred form applied to a cabinet consisting of the usual casing 1 and drawer 2. The mount itself comprises a pair of relatively fixed track members 3, shown in perspective in Fig. 5, each consisting of a substantially channel-shaped bar having upper and lower transverse flanges 4 and 5 whose outer ends are turned over to form vertical flanges 6 and 7. As clearly illustrated, the upper horizontal flange 4 is narrower than the flange 5 at the bottom whereby the flange 7 occupies a position outwardly of the flange 6. Intermediate the ends is a stop member 8 consisting in the present instance of a small angle, one leg of which is secured by welding or other suitable means to the outside of the flange 7, while the other leg projects through a slot in the flange 7 and across the horizontal flange 5. As shown in Fig. 4, the track members 3 are adapted to be secured one on each side of the casing 1, and in the present instance the members are spaced from the wall of the casing by means of an extension piece 9.

The mount further comprises two movable track members 11 adapted to be secured one on each side of the drawer 2. These track members, as shown in Fig. 6, consist preferably of a bar formed to provide vertically and transversely relatively offset vertical flanges 12 and 13 connected by a U-shaped intermediate channel piece 10. The track member 11 may be secured to the drawer 2 as shown in Fig. 4, the vertical flange 12 being attached to the outer side face of the drawer, and the leg of the channel which terminates in the flange 13 passing under the bottom of the drawer whereby the flange 13 projects downwardly from the latter. The track member 11 also has in the under surface of the lower horizontal flange a recess 20 whose function will be hereinafter described.

The device further comprises one for each side, an intermediate or floating track member 14, best shown in Fig. 7 and comprising a channel bar whose upper and lower transversely and horizontally extending flanges 15 and 16 are flanged at their ends to provide the vertical upper and lower flanges 17 and 18. The flanges 15 and 17 stop at one end short of the member 14 to provide space for a race or channel 19 for a cylindrical roller 21, the race 19 being secured by welding or other suitable means to the member 14.

It will also be noted with reference to Fig. 4 that a section of the back of the bar 14 is slit longitudinally, and that part of the bar immediately adjacent and underneath the slit, designated in Fig. 4 by the reference numeral 22, is bent inwardly so as to form at its upper edge a track or support for a cylindrical roller 23, this roller having an outer enlarged portion which projects below the bottom of the flange 17, and an inner smaller portion which rests upon the upper edge of the inturned part 22. This part 22 extends from the inner end of the race 19 to a point adjacent the center of the bar, and in order to prevent the roller 23 from passing off the track portion 22, a short section of the flange 17 indicated at 24 in Fig. 7 is bent inwardly and functions

as a stop limiting the movement of the roller 23 toward the front of the bar.

A third roller 25 is mounted behind the flange 18 at the forward end of the member, as clearly shown in Fig. 7, and is adapted to travel along the lower horizontal flange 16, the movement of this roller being limited at the forward end of the bar by a stop element 26, and intermediate the ends of the bars by a short section of the flange 18 designated by the reference numeral 27, which is bent inwardly in the same manner as the part 24 of the flange 17 to constitute a stop for the roller. The intermediate track member 14 also comprises a fourth roller 28 journalled upon a pin 29 which is secured in the member and extends from the back of the bar across the horizontal flange 16 and through the flange 18, as shown in Fig. 4, the roller 28 being journaled outside of the flange 18 and extending both beyond the top and bottom of said flange. The track member 14 comprises also a stop element 31 at the rear end and a stop element 32 at the forward end, both of these elements projecting outwardly beyond the flange 18. The stop member 32, however, is in the form of a flat strip whose outer end is turned over to form the stop proper, and this outer turned-over portion is spaced outwardly from the flange 18 for a purpose hereinafter described.

As well illustrated in Figs. 4 and 8, the track member 14 fits between the flanges 4 and 5 of the relatively fixed member 3, the inner edge of the stop 8 constituting a guide for the lower portion, and in order to permit the floating track member 14 to be passed into the member 3 so that the stop 31 may lie behind the stop 8 of the relatively fixed track member, the said stop 31 is pivotally secured at 33 to the flange 18 whereby the stop may be elevated to avoid the stop 8. When in the depressed position, this stop 31 is adapted to engage the stop 8 to limit the forward movement of the member 14 in the member 3. As will be apparent, the roller 21 of the intermediate member 14 engages the underside of the horizontal flange 4 of the track member 3, while the roller 28 travels upon the upper face of the horizontal flange 5.

The movable track members 11 are adapted to extend into and travel in the intermediate members 14, this track member 11 bearing against the roller 23 at the top of the member 14 and the rollers 28 and 25 in the bottom of the member 14. It will be apparent that with this arrangement the intermediate member 14 has rolling engagement with the relatively fixed track member 3, while the movable member 11 has rolling engagement with the intermediate member 14. It will also be noted that by reason of the engagement of the roller 28 with both the movable member 11 and the relatively fixed member 3, the intermediate member will be advanced or retracted when the drawer is pulled out or pushed in, and that the movement of the intermediate member 14 will be approximately half the movement of the drawer and the movable track member 11. When the drawer is pulled out to its greatest extent, as shown in Fig. 3, the intermediate or floating track member will have been advanced by the action of the roller 28, as described, to the point where the stop 31 meets the stop 8. The track member 11 during this movement of the drawer, however, has advanced in the floating member 14 to the point where the roller 25 enters the recess 20 in the under side of the member 11.

The positive stop for the drawer is constituted by the stop member 32, which is engaged by a downward projection 34 on the under side of the drawer 2, as shown in Fig. 2. In this manner, while the recess 20, in which the roller 25 lodges, tends to retain the drawer in the closed position, the outward movement of the drawer is positively limited by the stop 32. In order to remove the drawer from the cabinet, it is necessary to elevate the forward end until the projections 34 can pass over the stops 32, after which the track 11 may be withdrawn from the intermediate track 14.

A considerable advantage is obtained by mounting the rollers in races and providing for a limited movement thereof in the direction of movement of the drawer. This arrangement makes for flexibility and ease of operation and eliminates pivot pins which are objectionable because constituting wearing parts requiring lubrication. The replacement of the rollers in the races, also, is a comparatively simple matter as compared to replacement of the fixed and journaled rollers. In the present instance the pin of the one fixed roller, 28, takes no weight, since the roller engages at top and bottom respectively the movable and relatively fixed tracks.

It will be noted in the present construction, that all of the rollers are carried by the intermediate member, which constitutes another feature of advantage.

Considerable modification may be had without departure from the essential features of the invention, and it will be apparent that with slight modification as to the dimensions of the elements, the rollers may be replaced by balls.

I claim:

A drawer mount comprising a fixed track, a movable track, and an intermediate member cooperating with both of said tracks, said intermediate member having a flange with a pin fixed therein, and a roller journaled on said pin, the roller being adapted to engage both of the said tracks, said inter-

mediate member also including two upright channels each containing a roller adapted respectively to engage under the said fixed track and under the said movable track, and an inverted channel, an integral part of said intermediate member projecting into and extending longitudinally of said inverted channel, and a roller comprising parts of different diameters, the part of smaller diameter being supported upon said integral inturned element whereby the latter constitutes a track for the roller, and the part of greater diameter being adapted to engage the top of said movable track.

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