W. W. WATSON & H. CARLSON.

FOLLOWER FOR VERTICAL FILING DRAWERS.

APPLICATION FILED AUG. 22, 1912.

1,068,190.

Patented July 22, 1913.

2 SHEETS—SHEET 1.

Fig. 1.

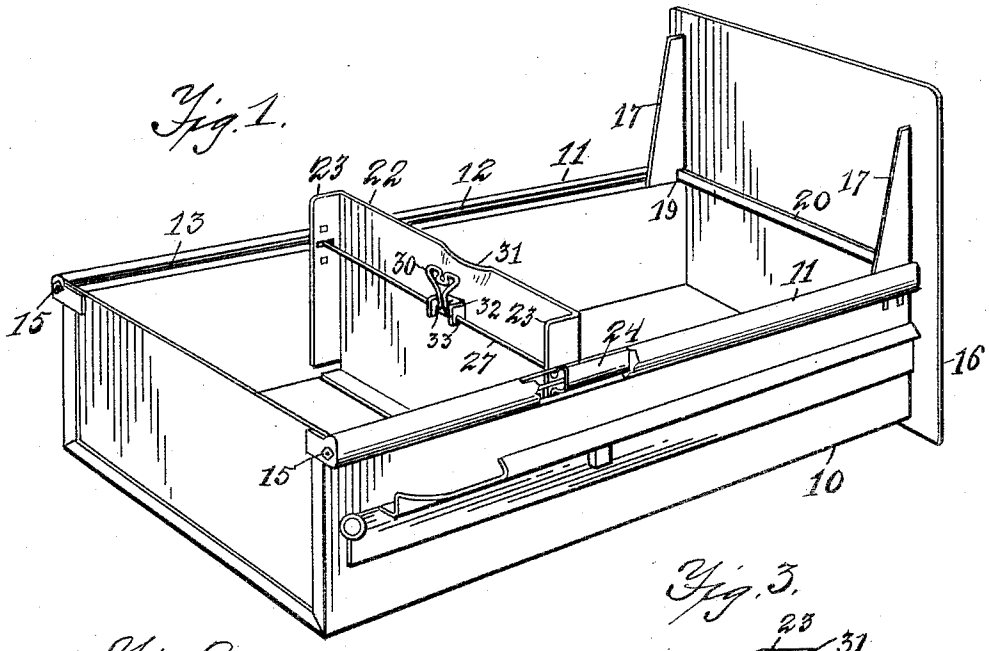


Fig. 3.

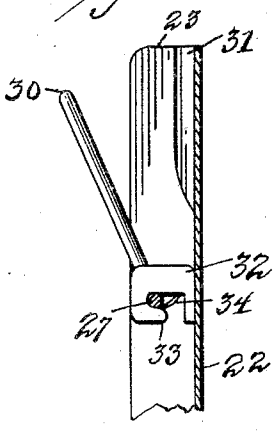


Fig. 2.

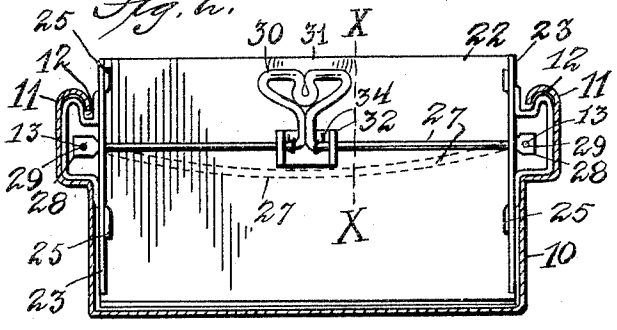
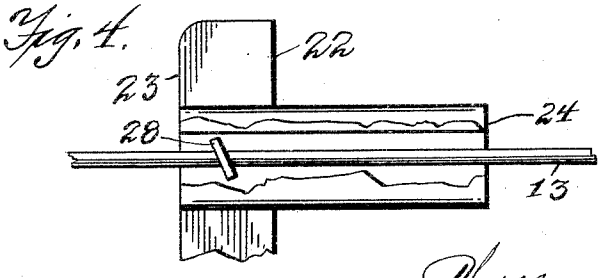


Fig. 4.



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2 SHEETS—SHEET 2.

Fig. 5.

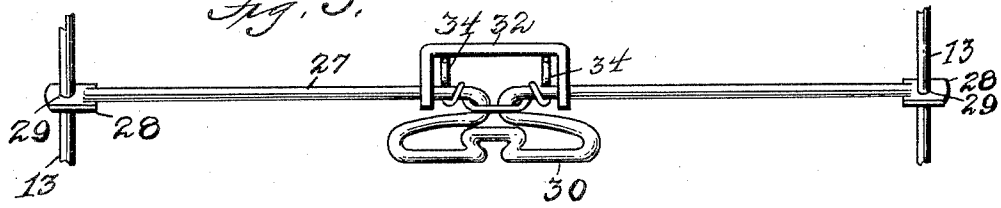


Fig. 6.

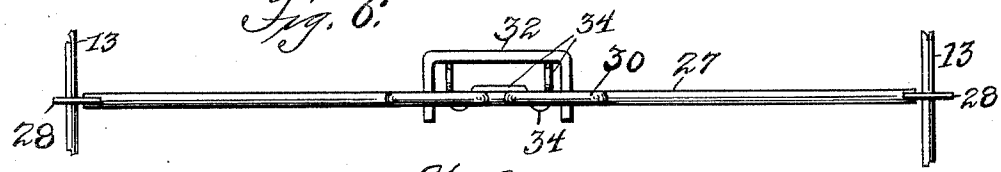


Fig. 8.

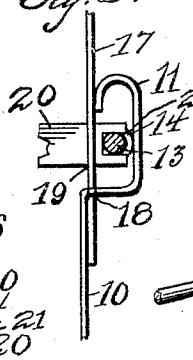


Fig. 10.

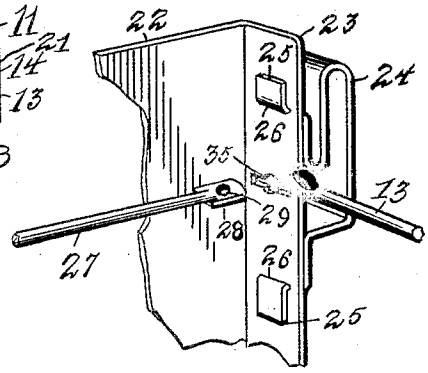


Fig. 7.

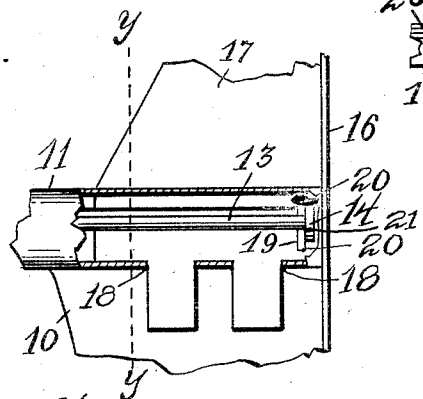


Fig. 11.

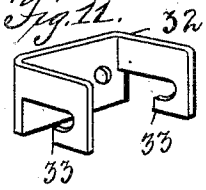
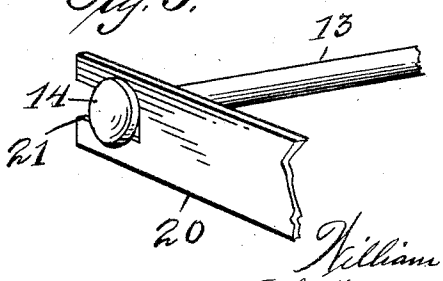


Fig. 9.



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UNITED STATES PATENT OFFICE.

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FOLLOWER FOR VERTICAL FILING-DRAWERS.

1,068,190. Specification of Letters Patent. Patented July 22, 1913.

Application filed August 22, 1912. Serial No. 716,415.

To all whom it may concern:

Be it known that we, WILLIAM W. WATSON and HJALMAR CARLSON, citizens of the United States, residing at the city of Jamestown, in the county of Chautauqua and State of New York, have invented certain new and useful Improvements in Followers for Vertical Filing-Drawers, of which the following, taken in connection with the accompanying drawings, is a specification.

The invention relates to follower or compressor boards for vertical filing drawers, and the object of the improvement is to provide a simple and durable construction which automatically locks against movement at any point in the length of the drawer, yet may be instantly released and moved backward or forward as desired; and the invention consists in the combination and arrangement of the parts as described in this specification and shown in the accompanying drawings and pointed out in the claims.

In the drawings, Figure 1 is a perspective view of a vertical filing drawer with the improved follower or compressor board in position, one side of the drawer being broken away to show the construction of the slide. Fig. 2 is a crosswise sectional view of the drawer in the rear and looking toward the follower. Fig. 3 is a sectional view at line X X in Fig. 2, showing the manner of attaching the locking rod wire to the follower board in its central portion; and Fig. 4 is a detail showing the manner of attaching the locking wire to one of the side rods in the edge of the drawer. Fig. 5 is a plan view of the locking wire and holding clip removed from the drawer and follower board to show its action in connection with the two locking side rods of the drawer, the locking wire being shown in the normal locked position; and Fig. 6 is a similar view of the locking wire shown in an unlocked position so that it may be readily moved back and forth upon the side rods. Fig. 7 is a detail of a corner of the front end of the drawer showing the manner of attaching the front end of the side rod and bracing the drawer end; and Fig. 8 is a sectional view at line Y Y in Fig. 7 showing the manner of holding the front end of one of the side wires; and Fig. 9 is a perspective view of the crosswise key strip engaged by the front end of the side wire of the drawer. Fig. 10 is a perspective view of a portion of one end of the follower board showing the manner in which the locking wire is inserted through the end flange of the follower board for attaching to the side rod of the drawer. Fig. 11 is a perspective view of the holding clip on the follower board for the central portion of the locking wire.

Like numerals of reference refer to corresponding parts in the several views.

The numeral 10 designates a sheet metal filing drawer which has the lengthwise tubular upper edges 11 for the drawer sides and extending lengthwise thereon with the slots 12. The side rods 13 are removably secured lengthwise within the tubular edges 11 opposite the slot 12 in the following manner: The rod 13 is provided with a head 14 for its front end and a screw thread and nut 15 for the rear end. The front end 16 of the drawer 10 is braced in position at each side by means of the sheet metal plates 17 which are attached to end 16 and extend down through the slots 18 in the lower edges of the tubes 11 and are spot welded to the sheet metal side of the drawer, two or three of these lugs being preferred to each plate 17 in order to hold the parts firmly together. The plates 17 cover the front end of the slots 12 and a hole 19 is provided in the plates 17 near the front 16 to receive therethrough the key bar 20, which has open ended slots 21 in its ends which engage the side rods 13 adjacent the head 14 through holes 19. The side rods 13 are inserted through the holes in the rear end of the drawer 10 from the interior of the drawer through the slot 12. The rods are then moved forward against the front end 16 after which the locking bar or strip 20 is sprung into place, thereby firmly holding the front ends of both the side rods 13, yet permitting of their easy removal from the drawer. The rear ends are then firmly secured by turning the nuts 15 until all the parts are firmly held in place.

The follower board 22 is made with the rearward extending flanges 23 at each end. The follower board 22 fills the space within the drawer 10 from side to side and is fitted to slide easily back and forth therein. It is supported on the side rods 13 and tubes 11 and locked in position thereto in the follow-

ing manner: A tubular extension 24 for the follower board 22 is attached thereto at each side preferably by the lugs 25 which extend through slots 26 in the flanges 23 and then the lugs 25 are spot welded thereto. The extensions 24 are formed to fit within the tubes 11 and slidably hold the follower board 22 in a vertical position and slide backward and forward in the tubes 11 with perfect freedom. For this purpose the tubular extensions 24 are made considerably longer than the width of the flanges 23 but preferably do not extend in the rear of said flanges so that the follower board may be pressed against the rear end of the drawer 10 and permit the use of the full capacity of the drawer for filing purposes. Accordingly the tubular extensions 24 extend forward of the follower board 22, these extensions being preferably controlled by the width of the plate 17 as it covers the forward end of the slot 12, since it is apparent that the tubular extention 24 will pass forward beyond the brace plates 17 until they strike the front plate 16 within the tubes 11. This construction makes a firm strong holding means for the follower board in the tubes 11 so that they do not bind and the board can be moved easily and uniformly within the drawer.

In order to lock the follower board 22 upon the rods 15 a locking wire or rod 27 is provided, which has flat ends 28 with holes 29 therethrough to slidably receive the side rods 13. A handle 30 is preferably bent from the central portion of the locking wire 27 by turning it to one side, which handle 30 is of sufficient length to extend up opposite the upper edge of the follower board 22. A rearwardly bent finger hold 31 is provided in the follower board 22 opposite the handle 30 so that no matter how firmly the follower board is pressed against the cards or documents filed within the drawer, the user can insert his thumb or finger within the rearwardly bent portion 31 and thereby obtain a grip on the follower board and operate the handle 30 in conjunction therewith.

A holding clip 32 having hooks 33 open upon the under side is attached to the board 22 at the point where the handle 30 turns into the cross rod 27 to hold the locking rod 27 firmly in position, yet permitting of its removal from the follower board. A spring 34 extends around the handle 30 and around the wire 27 at each side of the handle 30, and the ends of the spring 34 bear against the clip 32 or the plate 22 for a purpose hereinafter set forth.

In order to removably attach the locking rod 27 to the follower board 22, key hole shaped slots 35 are provided in the flanges 23 opposite the side rods 13. The ends 28 of the rods 27 are flattened so that they extend in line with the handle 30, and it is apparent that when the side rods 13 are inserted through the holes 29 in the ends 28 that the movement of the handle 30 in either direction from the vertical position will cause the ends 28 to torsionally bind upon the rods 13. The holes 29 are made just sufficiently large to permit a strong binding effect so that the ends 28 may turn slightly oblique, as shown in Fig. 4, on the side rods 13.

The spring 34 presses the handle 30 normally away from the follower board 22 into the position shown in Fig. 3, thereby normally binding and locking the ends 28 upon the side rods 13. All that is necessary to release this binding or holding of the ends 28 upon the side rods 13 is to press the handle 30 toward the follower board 22 or into the position shown in Fig. 6 from the position shown in Fig. 5. It is then obvious that the follower board and the locking rod 27 may be slipped back and forth freely upon the side rods 13 and that all that is necessary to automatically lock the parts is to release the handle 30 and the spring 34 instantly presses the locking rod 27 and the ends 28 into a binding position by the torsional strain on the wire 27, since the spring 34 draws against the side of the handle 30 twisting the ends 28 against the sides of rods 13.

The locking rod 27 is attached and detached at the follower board 22 and the side rods 13 in the following manner: Each of the ends 28 of the rod 27 is inserted through one of the key hole slots 35 in one of the flanges 23. This is accomplished by bending the central portion of the wire or rod 27 out of line, as shown in dotted line in Fig. 2, preferably by pressing downward on handle 30 beneath the holding clip 32 on the follower board 22 so that the two ends 28 quickly and easily slip through the keyhole slots 35 and the rod 27 also is sprung within the hooks 33, the spring 34 having first been attached to the locking rod 27. It is obvious that the locking rod may be removed in the same manner in which it was attached. The side rods 13 are then inserted through the holes 29 and fastened within the tubular edges 11 of the drawer 10 as hereinbefore described, thereby completing the assembling of the parts.

We claim as new—

1. In a device of the class described, a drawer having tubular lengthwise upper edges for the drawer sides with lengthwise inner slots, rods lengthwise in said tubular edges, a follower board, extensions on said follower board slidably mounted in said tubular edges, and a spring locking wire on said follower board slidably mounted on said rods in said tubular edges to lock the same by the torsion of the wire.

2. In a device of the class described, a filing drawer, lengthwise tubes on the upper

edges of the drawer sides having lengthwise slots on their inner sides, locking rods in said tubular edges opposite said slots, a follower board having extensions thereon to slidably engage within said tubular edges, a locking wire attached to said follower board having a central handle, the ends of said locking wire having holes therein to receive said locking rods therethrough, and a spring on said locking wire to lock the ends thereof on said locking rods by torsional strain.

3. In a device of the class described, a filing drawer, lengthwise tubular upper edges on the sides of said drawer having lengthwise inner slots, a locking rod in each of said tubular edges opposite said inner slots, a follower board having extensions thereon slidably mounted within said tubular edges, rearward projecting spaced hooks on said follower board, a locking wire having flattened ends with holes therethrough to slidably receive said locking rods, an upwardly extending handle on said locking wire, said locking wire engaging within said spaced hooks on said follower board, and a spring engaging said locking wire and pressing against the said follower board to normally turn said locking wire at a locking angle on said locking rods.

4. In a device of the class described, a filing drawer, lengthwise tubular upper edges for the drawer sides having lengthwise slots in their inner sides, headed locking rods in said tubular edges held by their heads at their front ends by the slotted ends of a crosswise key bar and threaded nuts at their rear ends, a follower board having rearwardly extending end flanges, tubular extensions attached to said end flanges to slidably engage within said tubular edges of the drawer sides, a clip having downwardly turned spaced hooks attached to the rear side of said follower board, a locking wire removably attached beneath said hooks and through said end flanges and having holes through the ends to receive said locking rods, and a spring on said locking wire to normally turn the same away from said follower board and torsionally lock the ends on said locking wire, substantially as and for the purpose specified.

In testimony whereof we have affixed our signatures in the presence of two witnesses.

WILLIAM W. WATSON.
HJALMAR CARLSON.

Witnesses:
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H. E. CHINDGREN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."