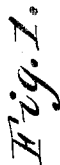


APPLICATION FILED JUNE 25, 1910.

Patented Sept. 5, 1911.

2 SHEETS—SHEET 1.



WITNESSES:

R. A. Fischer.
K. H. Hansen



INVENTORS:

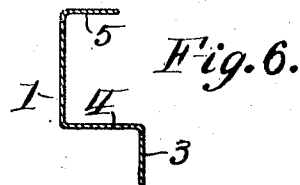
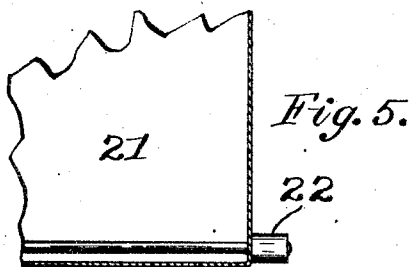
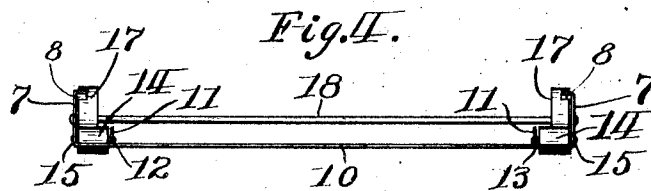
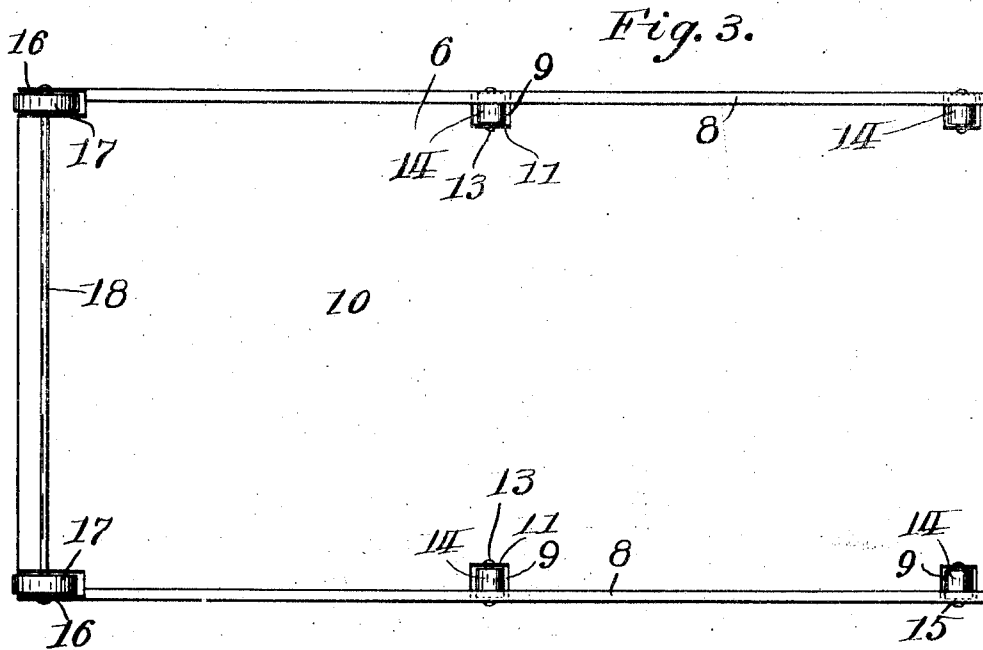
William E. Jones,
BY Charles Carothers
John E. Styker
ATTORNEY.

W. E. JONES & C. CAROTHERS.
DRAWER FOR FILING CASES AND SIMILAR STRUCTURES.
APPLICATION FILED JUNE 25, 1910.

1,002,520

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2 SHEETS—SHEET 2.



WITNESSES:
R. A. Fischer
B. V. Hansen

INVENTORS:
William E. Jones,
Charles Carothers,
BY *John E. Stryker*
ATTORNEY.

UNITED STATES PATENT OFFICE.

WILLIAM E. JONES AND CHARLES CAROTHERS, OF HENNEPIN COUNTY, MINNESOTA.

DRAWER FOR FILING-CASES AND SIMILAR STRUCTURES.

1,002,520.

Specification of Letters Patent.

Patented Sept. 5, 1911.

Application filed June 25, 1910. Serial No. 538,930.

To all whom it may concern:

Be it known that we, WILLIAM E. JONES and CHARLES CAROTHERS, citizens of the United States, residing in Hennepin county, in the State of Minnesota, have invented new and useful Improvements in Drawers for Filing-Cases and Similar Structures, of which the following is a specification.

Our invention relates to improvements in drawers for filing cases and similar structures and particularly to a drawer of the class having an extension support adapting it to be opened its entire length without detaching it from the cabinet.

This drawer is especially, though not exclusively, adapted for use in connection with steel filing cases, and is preferably made of steel.

The object of our invention is to produce a drawer of the class described which may be moved freely, easily and without jar, and which will be secure in the track and comparatively noiseless. In devices of this class heretofore in use, the drawer and support have not moved synchronously, that is to say, the drawer has traveled a certain distance, after which it has pulled or pushed the pan or support forward and back. By the peculiar arrangement of roller bearings which we have devised, the drawer and pan move together, the former riding upon the periphery of the rollers and traveling double the distance of the pan on which the same rollers are axially journaled.

In the drawings, Figure 1 is a side elevation of our improved drawer and pan in a cabinet, the wall of which is partly broken away, the drawer being shown extended. Fig. 2 is an enlarged side elevation of the pan, a portion of the drawer being shown in dotted lines. Fig. 3 is a plan of the pan. Fig. 4 is a front end view of the pan. Fig. 5 is a detail showing one of the rollers attached to the drawer, and Fig. 6 is a detail showing an enlarged section of the track.

The tracks 1 are attached at the lower corners of the pigeonhole 2 (in which the drawer is placed) to the supporting bars 20 by rivets or any other suitable means. This track is formed with a lower flange 3, the roller way 4, and the upper retaining flange 5, the purpose of which will be hereinafter more fully described. The extension support or pan 6 is formed with vertical sides 7 and top rails 8, which are adapted to pass between the roller way 4 and the retaining

flange 5. Openings 9 are cut in the base 10 of the pan, a portion of the metal at the edge of each opening being turned up to form the ears 11. These ears have perforations 12 adapted to receive one end of the respective journals 13, upon which the rollers 14 revolve, the other end being supported in perforations 15 in the upturned edge of the pan. These rollers 14 travel on the roller way 4 of the track. To aid in securing noiseless action of the drawer, we prefer to make the rollers of wood fiber. Ears 16 are formed on each side of the rear end of the pan and beneath these a portion of the pan is cut away to receive the wheels 17, the axle 18 of which is supported and journaled in the ears 16. These wheels also run upon the roller way 4 of the track in contact above with the retaining flange, the purpose of this arrangement being to hold the pan securely in the track and in horizontal alinement when the pan is extended. The sides of the pan 6 are slightly wedge shaped, the broader portion being toward the front to facilitate the smooth action of the drawer as it is returned toward the closed position. Near the center and below the pan, a stop 19 is attached, whose function it is to prevent the sliding of the pan from the tracks by reason of the fact that said stop when the pan is extended comes in contact with the supporting bar 20 upon which the lower flange 3 of the track is attached.

The receptacle or drawer proper 21 rides upon the rollers 14 of the pan, and as it is extended, its movement is facilitated without sagging by rollers 22 which are journaled in the rear end of the drawer and so placed that they run under and are held in place by the top rails 8 of the pan. The drawer 21 is prevented from running out of the end of the pan by stops 23 arranged on each of the upturned edges of the pan, with which the rollers 22 come in contact when the drawer is extended to its outside limit.

It will be observed that the pan is mounted upon the rollers 14 and that the drawer travels upon the periphery of these rollers so that the movement of the drawer is just double that of the pan. When therefore the drawer is pulled out, it revolves the rollers 14 upon which it rests and the pan being mounted upon these rollers, moves with it until the limit of extension is reached by the action of the stops 19 and 23 on the pan

and drawer, respectively. When the drawer is pushed back the reverse action takes place. The large wheels 17 retained within the tracks 1 in conjunction with the wedge-shaped sides of the pan cause a smooth and uniform movement of the pan, while the under-running rollers 22 retained by the vertical side 7 and the top rails 8 of the pan facilitate a similar movement of the drawer proper.

In explaining the principle of our invention and the best mode in which we have contemplated applying that principle as well as in the following claims, we have called the extension support for our drawer a "pan" but it is obvious that our invention is not limited to any particular form of extension support and by the word "pan" in the claims we mean any extension support for the drawer adapted to co-act with the other elements named in the claims respectively.

Having described our invention, what we claim and desire to protect by Letters Patent is:

In a device of the class described, the combination of a drawer, tracks, retaining

flanges on said tracks, a pan, upwardly extended sides on said pan, rearwardly inclined rails extending inwardly from said sides, upwardly extended lips cut from the bottom of the pan, rollers rotatably mounted between said lips bearing upon the tracks and supporting the drawer upon their peripheries, wheels mounted on the sides at the rear of the pan and engaging said tracks, and flanges for retaining said pan in horizontal alinement, under-running rollers at the rear of the drawer engaging said rearwardly inclined rails and retaining the drawer in horizontal alinement and stops to limit the movement of the drawer and pan, said drawer and pan being adapted to move synchronously throughout their entire movement, the drawer traveling at twice the speed of the pan.

In testimony whereof, we have signed our names to this specification in the presence of two subscribing witnesses.

WILLIAM E. JONES.
CHAS. CAROTHERS.

Witnesses:

K. H. HANSEN,
J. E. STRYKER.