(No Model.) 2 Sheets—Sheet 1.

H. W. ANDREWS.

DOCUMENT FILE.

No. 564,404. Patented July 21, 1896.

Fig. 1.

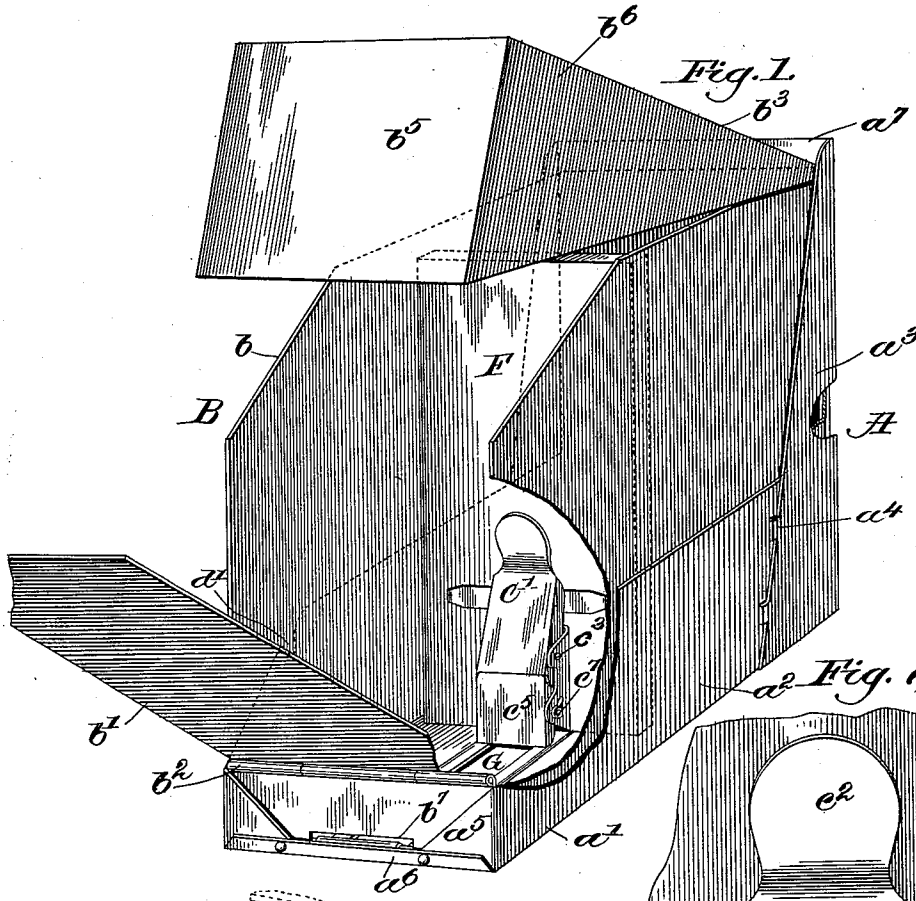


Fig. 2.

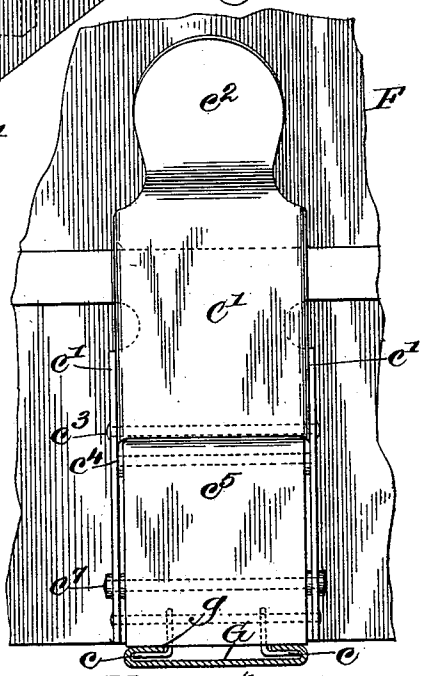
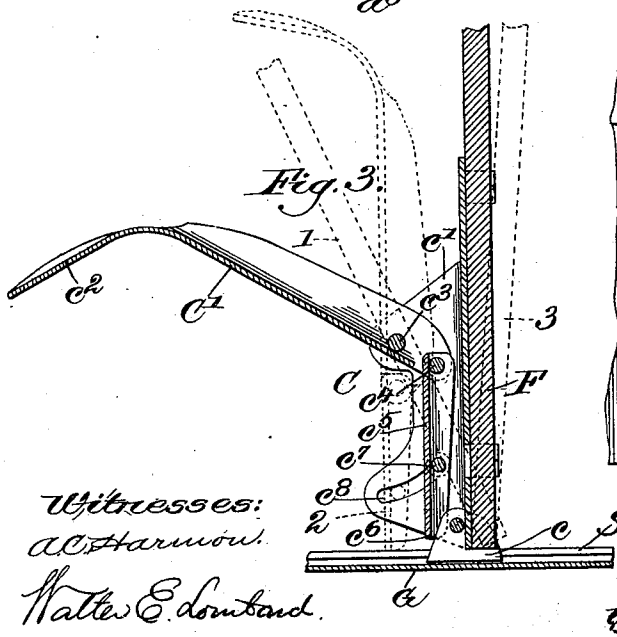


Fig. 3.



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Walter E. Lombard.

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

(No Model.) 2 Sheets—Sheet 2.

H. W. ANDREWS.

DOCUMENT FILE.

No. 564,404. Patented July 21, 1896.

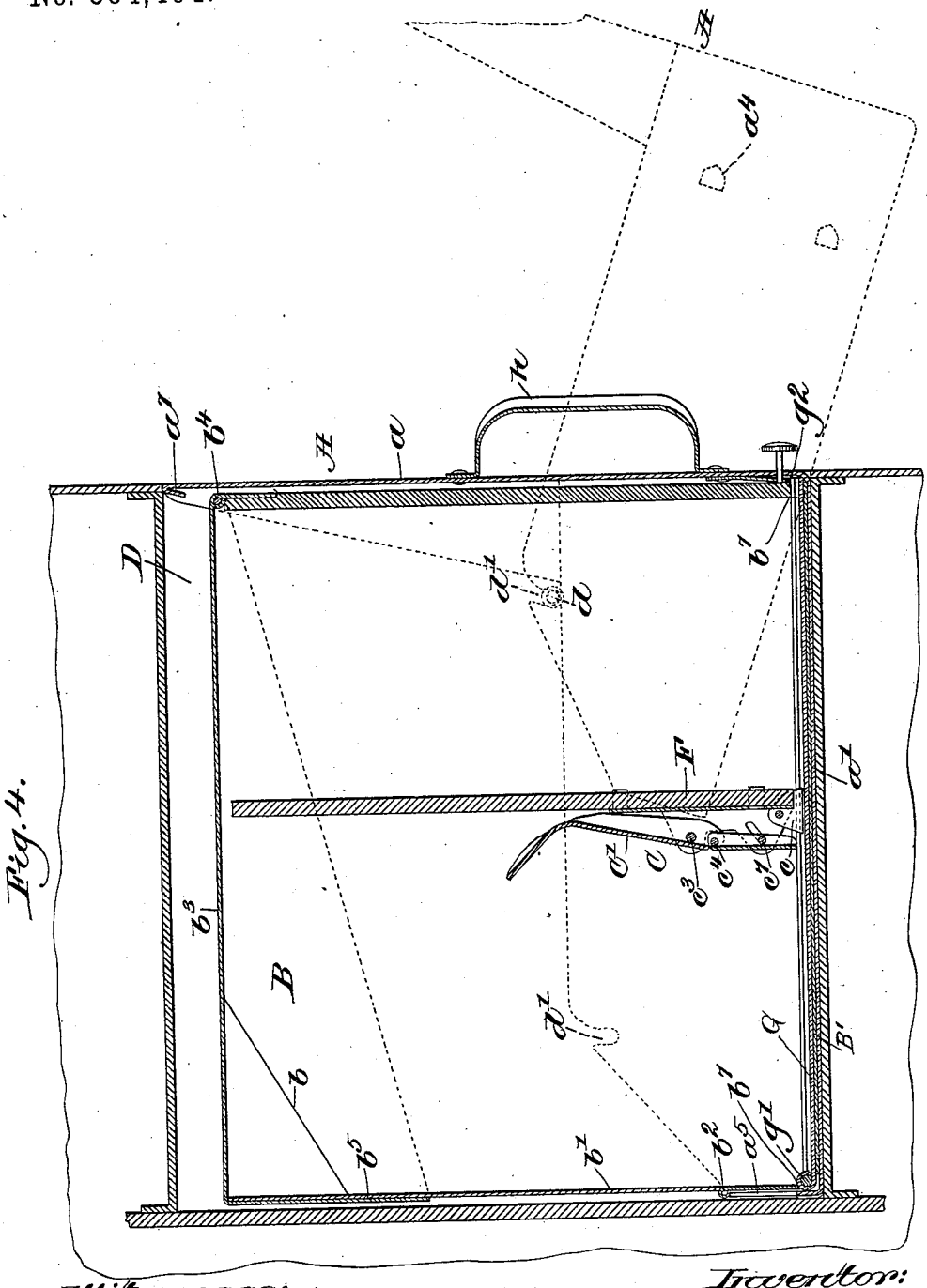

Fig. 4.

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UNITED STATES PATENT OFFICE.

HORACE W. ANDREWS, OF BOSTON, MASSACHUSETTS.

DOCUMENT-FILE.

SPECIFICATION forming part of Letters Patent No. 564,404, dated July 21, 1896.

Application filed February 10, 1896. Serial No. 578,652. (No model.)

To all whom it may concern:

Be it known that I, HORACE W. ANDREWS, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Document-Files, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

My invention relates to boxes for filing papers and other documents, and to transfer-cases for removing the filed documents from the filing-boxes.

The object of my invention is to remove several serious objections which arise in the use of the common document-file, a type of which is shown in Letters Patent No. 408,978, dated August 13, 1889, in which a follower is employed to compress the papers against the rigid front end of the file, being retained in place by a locking-lever operating against a centrally-arranged track on the bottom of the file. This type of device, as now used, has a central guide-track secured to the bottom of the file to guide and retain the follower, the latter having two arms inclosing the outer edges of the track and traveling in grooves formed therefor in the bottom of the file. Adjacent these arms a clamping-lever is pivoted in ears projecting from the rear side and lower end of the follower, this lever being so pivoted that when raised its lower end will bite into the top of the track with a wedging grip against the resistance of the two arms and lock the follower against backward movement, thus holding the papers clamped between the follower and the front of the file. The results of this wedging action of the lever, as heretofore used, are that the follower is forced bodily forward, so that if the papers being filed were previously tightly compressed the file itself is liable to be sprung or broken; the end of the lever and the top and bottom of the track are worn away by the excessive friction of parts caused by the wedging and sliding movement in clamping the parts into locked position, so that the parts become loose; the track itself is bent and crimped out of shape unless an exceedingly heavy track is used; the lever being pivoted at the lower end of the follower, the clamp is required to withstand the leverage of the entire length of the follower as it is pressed backward by the filed papers, and various other disadvantages accrue. Accordingly it is the object of my invention to obviate all these objections, and with that end in view I provide a clamp that presses down in a substantially vertical line against the track with no tendency to slide, so that all scraping and wearing away of the track and lever are avoided.

My invention employs a light track and requires no depressions in the file bottom. It also locks the lower end of the follower in its adjusted position on the track, thus avoiding any disastrous bodily forward movement of the follower, and braces the follower considerably above its lower end, at the same time pressing the upper end of the follower forward slightly to clamp the loose upper ends of the papers.

It is the further object of my invention to provide an improved file-box made in one piece, and an improved transfer-case to cooperate with the file, so that the documents may be filed in the transfer-case in the first instance, and thus obviate the inconvenience of a separate removal of the documents from the file, after the latter has been filled, to the transfer-case.

My invention comprehends further advantages and improvements, which will appear in the course of the hereinafter-detailed description.

In the accompanying drawings, illustrative of my invention, Figure 1 is a perspective view showing the document-file and the transfer-case together, parts being broken away to show details of construction. Fig. 2 is a rear elevation of a portion of the follower, showing the clamp in locking position, the track being shown in vertical cross-section. Fig. 3 is a central vertical section in broken detail of the parts shown in Fig. 2, the clamping-lever being thrown down out of locking position. Fig. 4 is a central vertical longitudinal section of a file and transfer case in place in a file-cabinet, and also showing in dotted lines my improved attachment and the manner of using the same for convenient inspection of the file contents.

In the present embodiment of my invention A designates the document-file, and B designates the transfer-case.

The document-file comprises the usual front a, provided with a suitable handle h, bottom a', and sides a^2. In the preferred form of my invention I make the file of one piece, preferably of sheet metal, which is bent around at the front, forming the wings a^3, and secured by solder, rivets, or otherwise to the sides a^2, ears a^4 being herein shown as formed on the wings a^3 and hooked over apertures provided therefor in the sides. The sides a^2 are bent around at a^5 and fastened to the upturned edge a^6 of the bottom, and strengthening-flanges may be provided at the edges of the metal, as shown at a^7, at the top edge of the front a.

Centrally arranged lengthwise of the bottom a', within the file, is the guide-track G, preferably of stiff sheet metal, rolled or bent over at either edge to form the ways g to receive the slides c of the clamp C, which together guide and control the movements of the follower F. The follower F is made of light stiff material, preferably of thin wood, and is free to slide back and forth on the guide-track G, the papers to be filed being placed between it and the front a. In order that the papers may be readily filed, it is preferable that the slides c should be pivotally connected to the follower, as shown, thereby permitting the latter to tip back into the dotted position 1, Fig. 3; but the slides c may be rigid with the follower, being formed by suitably bending extended lower portions of the supporting-brackets c' of the clamp C.

C′ designates the clamping-lever, outwardly bent at its upper end to form a finger-hold c^2 and pivoted at c^3 near its lower end to the upper portion of the bracket c'. Freely pivoted at c^4 to the lower end of lever C′ is the clamping plate or dog c^5, which when lowered, as shown in position 2, Fig. 3, strikes against the track G with its lower end c^6, and a further throw forward of the lever C′ clamps the follower securely against the filed papers. The final clamping movement of the lever C′ throws the pivot c^4 down and past the dead-center beyond the pivotal point c^3, thus locking the parts in clamped position, and at the same time throwing the upper end of the follower F forward by reason, as indicated in position 3, Fig. 3, of the raising of the pivot c^3 in throwing the clamping-plate c^5 beyond the dead-center, as stated. The clamping-lever C′, being thus pivoted considerably above the bottom a', not only insures that the lever shall always be in a convenient position to be raised by the fingers, but relieves the follower of much of the strain that is brought upon it where the clamping device is pivoted at the very foot of the follower, the bracing effect, in the present instance, being transmitted directly through the plate c^5 and lever C′ to the follower at a point of the latter considerably above its foot.

In order that the clamping-plate c^5 may remain stationary at its lower edge c^6 and not be forced over the track G nor have any tendency to force the slides c forward, as it would necessarily if it turned on its pin c^7 as a fixed pivot, I have provided the cam-slot c^8 to receive the projecting ends of the guide-pin c^7. This slot c^8 is also preferably extended forwardly, substantially as shown, at its upper end, so as to cause the clamping-plate c^5 to swing closely against the follower, when raised, and thereby permit the latter to tip back farther when not in clamped position. This slot and pin may be reversed, if desired, the slot being provided in the plate, and the pin carried by the bracket, and the latter in either case may be formed by punching out a projection or lip from the adjacent metal.

The pin c^7 may be provided with a friction-roller, or it may itself revolve in its bearings and thereby constitute in itself a friction-roller to relieve the slot c^8 from undue wear. The action of the slides and the clamping-plate or dog may be reversed, and the clamping be secured by an upward movement of the dog by grasping the track from underneath.

The transfer-case B is made of any suitable material, preferably of tough pasteboard, the front being wood rabbeted or grooved at its edges to receive the adjacent edges of the pasteboard, as shown in Fig. 1. The bottom, sides, and front of the case are formed or secured together, the upper rear corners b of the sides being cut diagonally, for convenience in fingering over the papers filed. The back b' is hinged at b^2 adjacent the bottom of the case, so that it may be swung down, as shown in Fig. 1, and the top or cover b^3 is hinged at b^4 to the upper end of the front of the case. This cover has an overhanging back portion b^5 of considerable relative depth and overhanging sides b^6, the advantage of this overhanging feature being that it enables the free ends of the filed papers to be gathered in readily in the closing of the cover.

The ordinary way in which papers are filed and preserved is to file them in the document-file first, and then, when that is filled, to take them out of the file and transfer them to the transfer-case. This is not only inconvenient and takes time, but some of the numerous papers are apt to get confused and lost in transferring. It is one of the objects of my invention to obviate this difficulty in the use of transfer-cases. Accordingly I have hinged the track G of my improved document-file at one end, as g', a retaining device (shown as a spring-catch g^2) being provided to normally hold the opposite end of the track in operative position on the bottom of the file, and have provided slits b^7 at the opposite ends of the transfer-case B, immediately adjacent the bottom of the same, so that when the track is raised on its hinge and the follower F is removed the track may be slipped through one slit b^7 into the case. The follower is then again mounted on the track within the case and the track is slipped through the opposite slit b^7 and lowered into engaged position beneath the catch g^2, the

bottom B′ of the transfer-case lying between the bottom of the file-case and the hinged track G. When thus combined, as shown in Fig. 1, papers are filed directly in the transfer-case precisely as if the filing were done in the file without the case.

When the transfer-case is filled, it is turned up with the track G and slipped off from the latter. The follower is then removed from the case and again adjusted on the file for further use, and the transfer-case with its contents of filed papers is stored away.

If it is not desired to use the file with a transfer-case, as just described, the track need not be hinged, but may be secured to the bottom of the file in any usual manner.

Fig. 4 shows a portion of a filing-cabinet, in which D designates one of the dividing-walls or partitions between two adjacent files. Properly fastened in this partition I provide a guide button or roller *d*, preferably like a screw-head, which engages the contiguous side of the file as the latter is pulled out, one of these buttons or hooks being provided in each partition, and preferably one on either side of each partition. Near the rear end of the file a notch or recess *d′* is formed in the edge of the side, so that when the file is pulled out for the purpose of inspecting its contents this notch *d′* will catch on the button *d*, and hold the file in the position shown in dotted lines in Fig. 4. If it is desired to withdraw the file entirely, all that is necessary is to raise the outer end, which movement will disengage the notch from the button and leave the file free to be withdrawn.

I do not intend to restrict myself to the precise details of invention as herein set forth, inasmuch as many changes in form, proportions, and arrangement of parts may be resorted to within the spirit and scope of my invention.

What I claim is—

1. In a document-file, the combination with the follower, its track, and means to hold said follower in sliding engagement with the track, of a clamp for clamping the follower to the track, said clamp comprising a bracket secured to said follower and having a lever pivotally mounted therein, a clamping plate or dog loosely pivoted to the said lever, a laterally-extended slot or its equivalent in the lower end of said bracket, and a pin extending from said plate or dog in loose engagement with said slot, whereby said plate or dog is moved into clamping position without tendency thereof to slide on the track or to press the follower forward, substantially as described.

2. In a document-file, the combination with the follower, its track, and means to hold said follower in sliding engagement with the track, of a clamp for clamping the follower to the track, said clamp comprising a bracket secured to said follower and having a lever pivotally mounted therein, a clamping plate or dog loosely pivoted to the said lever, a cam-slot upwardly inclined at its forward end in the lower end of said bracket, and a pin extending from said plate or dog in loose engagement with said slot, substantially as described.

3. In a clamp for document-files, a bracket member, a lever pivoted near one end in the upper portion of said bracket, a plate or dog member pivoted to the end of said lever below said lever-pivot, an inclined slot being formed in one of said members, and a pin being carried by the other of said members to coöperate with the slot, substantially as described.

4. A file, having a movable guide-track hinged therein adjacent one end thereof, substantially as described.

5. A file, having a movable guide-track hinged therein adjacent one end thereof, and a catch adjacent the other end thereof to receive and hold the free end of said track, substantially as described.

6. A transfer-case, having slits formed through its opposite ends adjacent its bottom, adapted to receive the guide-track of a document-file, substantially as described.

7. The combination with a document-file, having a movable guide-track and follower, of a transfer-case adapted to fit within said document-file and to receive said track and follower to have the documents filed thereby within said case, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HORACE W. ANDREWS.

Witnesses:
JOHN C. EDWARDS,
AUGUSTA E. DEAN.