No. 749,021. PATENTED JAN. 5, 1904.

C. C. BOYKIN.

PAPER FILE.

APPLICATION FILED DEC. 6, 1902.

NO MODEL.

Fig. 1.

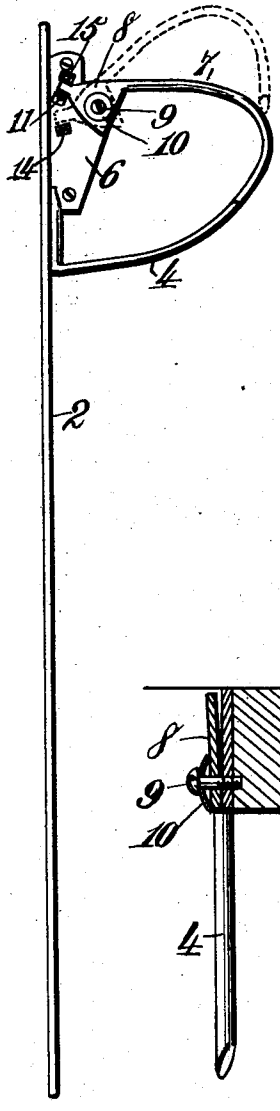


Fig. 3.

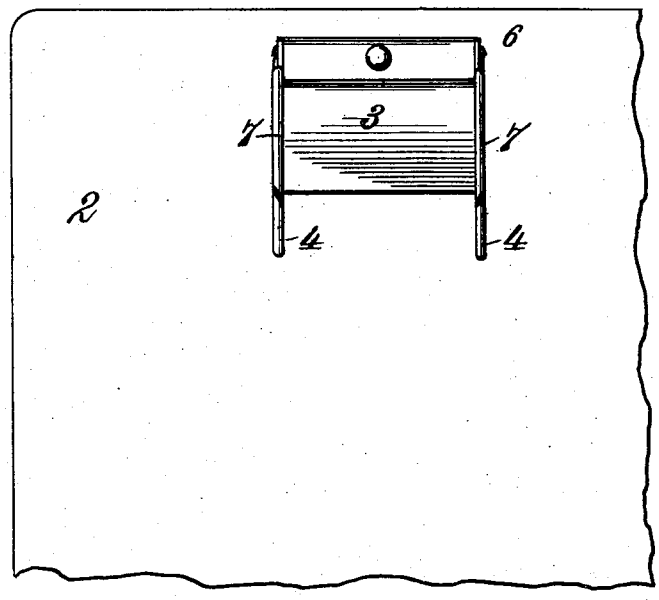


Fig. 2.

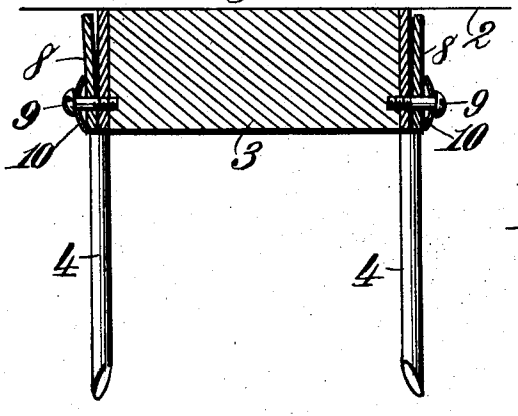


Fig. 4.

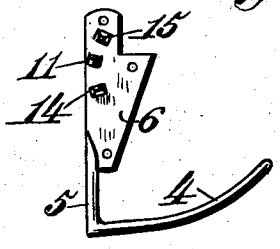


Fig. 5.

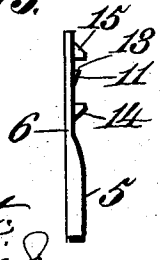
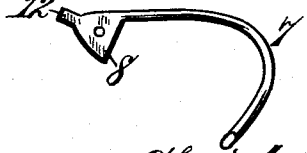


Fig. 6.



Witnesses.
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No. 749,021. Patented January 5, 1904.

UNITED STATES PATENT OFFICE.

CHRISTOPHER C. BOYKIN, OF NORFOLK, VIRGINIA, ASSIGNOR OF ONE-HALF TO GEORGE W. FACE, JR., OF NORFOLK, VIRGINIA.

PAPER-FILE.

SPECIFICATION forming part of Letters Patent No. 749,021, dated January 5, 1904.

Application filed December 6, 1902. Serial No. 134,152. (No model.)

To all whom it may concern:

Be it known that I, CHRISTOPHER C. BOYKIN, a citizen of the United States, residing at Norfolk, in the county of Norfolk and State of Virginia, have invented new and useful Improvements in Paper-Files, of which the following is a specification.

This invention relates to what I shall for convenience term a "paper-file," the object of the invention being to provide a simple and light article of this character which can be inexpensively made and which can be employed for filing letters, bills, prescriptions, and other printed or written matter.

The filing means may be secured to any suitable base, such as a board or the bottom of a desk-drawer, and is of such a character that the papers can be readily and quickly filed without possibility of their being lost and as easily removed.

The improved device includes in the embodiment thereof which I select for illustration in the accompanying drawings, forming part of this specification, a file-rod and a rocking transfer-rod mounted for lateral movement and adapted, when in its effective or closed position, to securely hold the papers, and means for locking the transfer-rod in its effective position and for also moving it laterally when carried away from such effective position. In the present case, though not necessarily, I provide two file-rods, and consequently two transfer-rods, the papers by this means being held against lateral motion upon the foundation to which the filing means is secured.

It will be understood that I employ the terms "transfer-rod" and "file-rod" in their broad sense to include equivalent devices for securing the same results.

Preferably the transfer-rods are mounted upon the bodies of the file-rods and such bodies also preferably support the means for imparting the lateral motion to the transfer-rods and for also locking the latter in their effective positions.

Referring to the said drawings, Figure 1 is a side elevation of the improved paper-file, showing the transfer-rod in its two positions by full and dotted lines, respectively. Fig. 2 is a sectional elevation, the section being taken horizontally through the pivots of the transfer-rods. Fig. 3 is a plan view of the file. Fig. 4 is a detail view, in side elevation, of one of the file-rods. Fig. 5 is a plan view of the same; and Fig. 6 is a detail view, in side elevation, of one of the transfer-rods.

Like characters refer to like parts in the several figures.

The different parts of the improved device may be fastened to any suitable support. I have shown them in connection with a board 2 of a substantially rectangular form. At or near the top of the board 2 is suitably fastened the block 3, to the side faces of which the file and transfer rods hereinafter more particularly described are connected. As heretofore stated, I illustrate two filing-rods and two transfer-rods, and one of each is carried upon each end of the block 3. I will now describe one of the file-rods and its co-operating transfer-rod and the same description will apply to the others.

The numeral 4 indicates a file-rod, its upper or free end being beveled in order to facilitate the application of papers thereto. The opposite end of the file-rod terminates in a transverse body 5, extending substantially at right angles to said file-rod. The body is made integral with the file-rod, and it has a flattened or plate portion 6, adapted to be fastened by screws or equivalent means to the side of the block 3. It will be understood, therefore, that the file-rods are not directly connected to the board 2, but are united to the block 3, which constitutes a convenient means for supporting the same and for also separating or spacing them the requisite distance.

The transfer-rod 7 is mounted for rocking movement upon the body 5, said transfer-rod having an approximately segmental body 8, through which the pivot 9 extends, the pivot in the present case consisting of a screw extending freely through said segmental body and tapped into the body 5 and block 3. A spring-washer 10 surrounds the pivot-screw 9 and acts, respectively, against the segmental body 8 and the head of the screw. It will be understood, therefore, that the transfer-rod 7 has not only a rocking motion, but also a lateral one, for a purpose that will hereinafter appear.

The free ends of the transfer-rods 7 are beveled, so that when said rods are closed such beveled ends are adapted to fit against the similarly-beveled ends of the file-rods. It will be seen that when the transfer-rods are in their effective or closed positions the file-rods constitute practically a continuation of the same and are approximately when in such relation of semi-elliptical form, by reason of which papers can be lifted up along the file-rods and moved onto the transfer-rods without any undue friction.

Upon the outer face of the body portion 5 and in proximity to the pivot 9 is a cam 11, adapted to coöperate with the projection or toe 12, extending from the segmental body 8. The working face of the cam is beveled, the said cam being provided with a locking-face 13 in a plane at right angles to the outer face of the body portion or plate 6.

In Fig. 1 the transfer-rod 7 is shown in full lines as occupying its effective or locking position, the beveled free end of the same being in contact with the similarly-beveled free end of the file-rod and the projection or toe being behind and in contact with the locking-face 13, and the inner face of said projection being contiguous to the outer face of the body 5, and this relation is maintained by the spring-washer 10, hereinbefore described, pressing against the body 8.

When it is desired to open a transfer-rod to apply a paper to the coöperating file-rod, the upper end of the same is pressed inward, thereby carrying the projection or toe 12 in the opposite direction and out of contact with the locking-face 13, whereby said transfer-rod can be moved freely away from the said file-rod in order to accomplish the result stated. In order to limit the opening movement of the transfer-rod, the projection or toe 12 is adapted to abut against the fixed stop 14 upon the body 5, a like stop 15 at the opposite side of the cam 11 being provided to prevent the file-rod from closing too far. It will be seen that the cam is arranged between the two stops and that the three parts are upon a substantially curved line, and they are preferably made in one piece with the body 5. With the file-rod open, as shown by the dotted lines in Fig. 1, it is swung closed by grasping it at any convenient point, and when the projection or toe 12 comes in contact with the fixed cam it rides along the beveled surface of said cam, which moves the file-rod sidewise or laterally, the spring-washer 10 being flattened or compressed, so that when said toe or projection passes off the working face of the cam it can be sprung behind said cam by the action of the spring-washer 10 as the latter resumes its initial position.

While in some cases I can employ simply one file-rod and a coöperating transfer-rod, the latter of which serves normally to securely retain the paper upon the file-rod, I prefer, however, to employ two of each.

The transfer-rods being in their effective and locked positions, they may be released simply by placing the thumb and little finger against their upper ends and forcing them toward each other, which results in carrying the projections or toes 12 out of engagement with the locking-faces 13, whereby said transfer-rods can be simultaneously opened. When opened, papers can be readily applied to the file-rods. As the upper ends of said file-rods are beveled, they are adapted to readily penetrate the papers, in order to facilitate filing the same. When the transfer-rods are in their effective positions, the papers filed away can be readily removed from the file-rods onto the transfer-rods in order to reach a certain paper, and should it be desired to remove this particular paper the transfer-rods can be readily opened in the manner described, so that the paper in question can be readily slipped from the file-rods.

The improved device is simple, in that there are no complicated and delicate parts. It is light, owing to the fact that there are a small number of metal parts. As the file-rods have integral bases, they can be readily fastened to a block, thus avoiding the necessity of connecting said rods directly to a board or other foundation. The means hereinbefore described serve positively to hold the transfer-rods in their paper-retaining positions and also to positively move the transfer-wires laterally when it becomes necessary to file papers or remove the same.

The invention is not limited to the precise construction hereinbefore described, for many variations may be adopted within the scope of my claims.

Having thus described my invention, what I claim is—

1. A file including a pair of file-rods and a pair of independently laterally movable coöperating transfer-rods, and means for locking the transfer-rods in their effective positions and for positively moving the same outwardly and away from each other as they are moved toward their effective positions.

2. A file including a pair of file-rods and a pair of independently laterally movable coöperating transfer-rods, and independent fixed cams for moving the transfer-rods outwardly as they move into their effective positions, said cams being adapted to lock said transfer-rods in their effective positions.

3. A file including a pair of file-rods and a pair of independently laterally movable coöperating transfer-rods, and independent fixed cams having beveled locking-faces for operating the transfer-rods in an outward direction and away from each other as they are moved toward their effective positions, said cams being also adapted to lock said transfer-rods in said effective positions and having beveled working faces.

4. A file including a pair of file-rods and a pair of independently laterally movable coöperating transfer-rods, each file-rod being

provided with a body, and independent means upon the body for locking the transfer-rods in their effective positions and for positively moving the same laterally as they are moved toward said effective positions.

5. A file having a pair of file-rods and a pair of independently laterally movable coöperating transfer-rods, fixed means for engaging the rocking transfer-rods and for moving them outwardly and away from each other as they advance toward their effective positions, and means for limiting the motion of said rocking transfer-rods.

6. A file including a file-rod provided with a body, a transfer-rod having a body provided with a projecting toe, a pivot extending through said bodies whereby the transfer-rod is mounted for rocking movement, and a cam upon the body of the file-rod for engaging said toe as the rocking transfer-rod is operated to move the latter sidewise.

7. A file having a pair of file-rods, each provided with a body and a pair of coöperating rocking transfer-rods mounted upon the respective bodies, a cam upon each body for locking the proper transfer-rod in its effective position and for also moving the same positively outward, and stops upon the bodies at opposite sides of the respective cams for limiting the rocking motion of said transfer-rods.

8. A file having file-rods and coöperating transfer-rods, each file-rod having an integral body, a block to which said bodies are secured and the transfer-rods being mounted for rocking movement upon the respective bodies.

9. A file having a file-rod provided at its inner end with an integal substantially flat body, in approximately the same plane with the rod, and a coöperating transfer-rod pivotally supported by said body for swinging movement in the plane of the latter.

10. A file having a file-rod provided with a body, and a pivotally-mounted transfer-rod upon said body, the pivot consisting of a screw, a spring-washer surrounding the screw and bearing against the head thereof and also against the body of the transfer-rod, and means for moving the transfer-wire laterally and also locking it in its effective position.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CHRISTOPHER C. BOYKIN.

Witnesses:

I. N. FARMER,

H. W. HURDLE.