(No Model.)

O. F. TIFFANY & W. L. BREWER.

LETTER FILE.

No. 509,972. Patented Dec. 5, 1893.

Fig. 6.

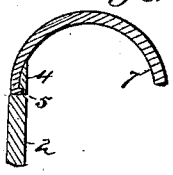


Fig. 1.

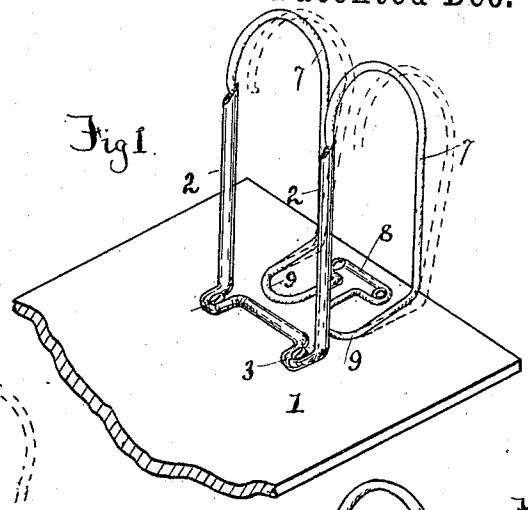


Fig. 2.

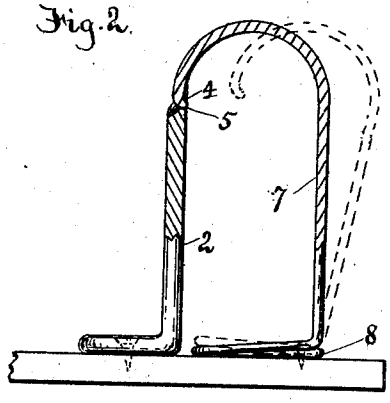


Fig. 5.

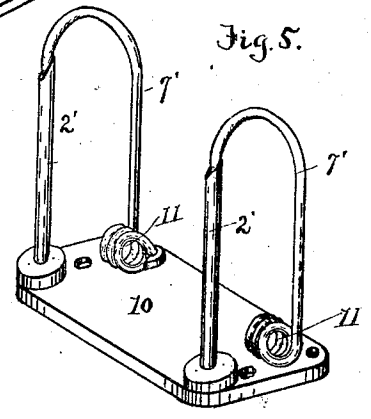


Fig. 3.

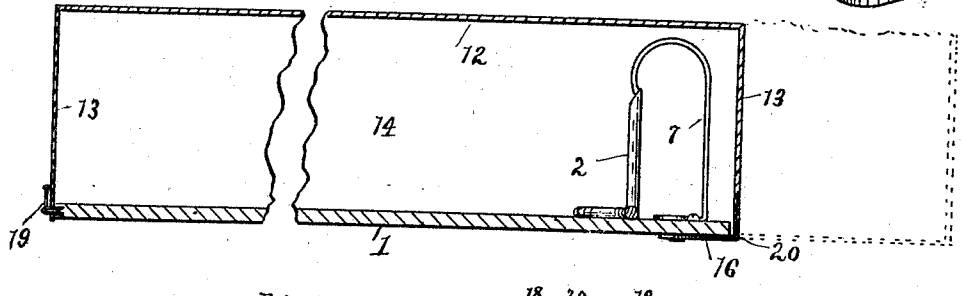
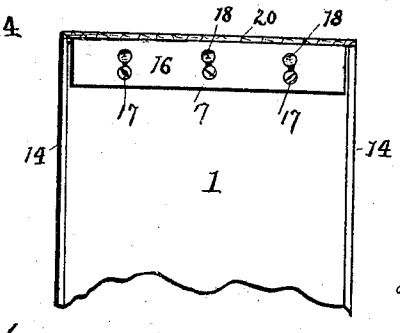


Fig. 4.



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LETTER-FILE.

SPECIFICATION forming part of Letters Patent No. 509,972, dated December 5, 1893.

Application filed February 2, 1893. Serial No. 460,725. (No model.)

To all whom it may concern:

Be it known that we, OSCAR F. TIFFANY and WELLS L. BREWER, of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Letter-Files; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the reference-numerals marked thereon.

Our present invention has for its object to provide a file for letters, bills and invoices, which shall be simple and cheap in construction and one that will permit the ready application and removal of letters or papers from it, and their movement to permit inspection when desired, and it further has for its object to provide a filing case to which the file is readily applicable, and to these and other ends consists in certain improvements in construction and combinations of parts, all as will be hereinafter fully described and the novel features pointed out in the claims at the end of this specification.

In the accompanying drawings: Figure 1 is a perspective view of a file constructed in accordance with our invention. Fig. 2 is an enlarged sectional view showing the connection between the filing and transfer wires; Fig. 3, a longitudinal sectional view showing the application of a cover or casing; Fig. 4, a bottom plan view showing the connection of the case with the base board of the cover or casing; Fig. 5, a perspective view of a modified form of file. Fig. 6 is a detail, sectional view of the transfer and receiving wires.

Similar reference numerals in the several figures indicate similar parts.

The base board of the file is indicated by 1 and the receiving or filing wires 2, 2, are preferably composed of a single piece of wire or similar material, the connecting portion being bent out into two loops, as shown, forming a broad bearing on the base board and also a means of attachment for the two securing screws 3, 3, securing them to the base. The upper ends of the receiving wires 2, 2, are recessed slightly on the forward sides, as shown, and are provided with recesses or perforations 4, 4, with which hooks or projections 5, 5, on the ends of the transfers wires 7, 7, are arranged to co-operate retaining the receiving and transfer wires together when engaged. The transfer wires are arched as usual and have a tendency to open or move back to the position in dotted lines Fig. 3, the hooks 5, however, holding the wires in engagement, and this opening may be caused by the elasticity of the vertical portions of said transfer wires themselves, but in practice we find it convenient to make both wires of a single piece of material having a double loop 8 at the center affording a bearing on the base board, and the portion of the wire between said loop and the vertical part is bent so as to form an elastic portion. In the embodiment shown in Figs. 1 and 2, this elastic portion is formed with the forwardly extending parts or loops 9, which are given a slight set upwardly from the board to cause the necessary spring action.

In Fig. 5 a modification is shown in which a base plate or casting 10 is employed to which the vertical receiving wires 2′ are soldered or otherwise secured, while the arched transfer wires 7′ are secured rigidly to the base plate at their lower ends and between said ends and the upper portions are coiled or formed into springs 11 which serve to open the file when the receiving and transfer wires are disengaged.

Inasmuch as the construction shown in Figs. 1 and 2 is very cheap, it is admirably adapted not only for a file for current letters, but also may be applied to filing cases when full and in Figs. 3 and 4 we have shown it in connection with a suitable case composed of a top 12, end pieces 13 and sides 14, and of a depth sufficient to accommodate the filing wires and their contents. To one of the end pieces 13 is hinged a short bottom strip 16 by means of suitable hinges or a piece of flexible material 20, which strip may be secured to the lower side of the end of the base board 1 by means of suitable fastenings such as the headed pins or screws 17, the heads of which are adapted to enter the perforations 18 in the strip, and

when the latter is moved the narrowed parts of the slots will engage the under sides of the heads and hold the cover or case in position. When desired to inspect the papers, the cover is turned back, as in dotted lines Fig. 2, and they may be moved up or over onto the transfer wires, as will be understood. When the cover is closed down it may be secured by a hook or other suitable catch 19. To secure the wires closed, it is only necessary to move the ends of the transfer wires forward of the receiving wires, when the springs will move the hooks or projections into the recesses in the receiving wires. These hooks 5 do not project through the recesses in the receiving wires a sufficient distance to prevent the free movement of the papers over them, but securely hold the parts together and are not liable to be displaced accidentally, and the recessed ends of the receiving wires accommodate the ends of the transfer wires.

As far as the connection between the receiving and transfer wires is concerned, it is immaterial what form of spring is employed to open them and we therefore do not desire to be confined to precisely the arrangement of parts shown herein, as other arrangements could be employed for accomplishing the same result.

The papers applied to this file may be perforated by a suitable perforating apparatus, or the receiving wires may serve to puncture them as desired.

Though we prefer the arrangement in which the hook or projection is on the transfer wire and the recess in the receiving wire, as this permits a more ready application of the papers to the latter, it is obvious that the form of connection could be reversed, if desired, without departing from our invention.

We claim as our invention—

1. In a bill file, the combination with the receiving and transfer wires arranged to cooperate with each other, and a spring for separating them in a vertical and rearward direction, of cooperating projections and recesses between the ends of said wires for holding them in engagement against the tension of the spring, whereby upon the disengagement of the projection the wires will separate and papers can be readily applied to the receiving wire, substantially as described.

2. In a bill file, the combination with the receiving wire, having the recessed end and the lateral slot or recess therein, of the transfer wire having the projection adapted to cooperate with the lateral recess in the receiving wire, and a spring operating to separate the wires held under tension by the engaging ends of the latter, substantially as described.

3. In a bill file, the combination with the receiving wire having a lateral recess, of the spring transfer wire having the lateral projection entering the recess, the spring of the transfer wire operating to separate the engaging ends of the receiving and transfer wires vertically and rearwardly when disengaged, substantially as described.

4. In a bill file, the combination with the base board and the stationary receiving wire, of the arched transfer wire secured to the base and having the elastic portion intermediate its connection with the base and the arch, whereby the arch is moved bodily by the elastic portion without strain, substantially as described.

5. In a bill file, the combination with the base board, the two receiving wires formed of a single piece of material having the laterally extending loops betwen them forming a broad base, and a means of attachment to the base board, substantially as described.

6. In a bill file, the combination with the base board and the two stationary receiving wires, of the two movable transverse wires having arches at their upper ends, formed of a single piece of material, secured to the base and having elastic portions between the point of connection with the base and the arches, operating to separate the wires, and connections between the receiving and transfer wires holding them in engagement against the tension of the elastic portion, substantially as described.

7. In a bill file, the combination with the base board and the two stationary receiving wires, of the two movable transfer wires having arches at their upper ends, formed of a single piece of material, secured to the base and bent out of a straight line to form elastic portions between the point of connection with the base and the arches, operating to separate the arches and receiving wires, and interlocking connections between the receiving and transfer wires for holding them in engagement against the tension of the elastic parts, substantially as described.

8. In a bill file, the combination with the base board and the two receiving wires formed of a single piece of material having the laterally extending loops between them forming a broad support and a means of attachment to the base, of the two arched transfer wires formed of a single piece of material secured to the base and formed into springs between the point of connection with the base and the upper parts, and cooperating projections and recesses between the ends of the receiving and transfer wires for holding them in engagement against the tension of the springs, substantially as described.

9. In a bill file, the combination with the base board and the receiving and transfer wires thereon, of the casing or cover removably hinged to said base board, substantially as described.

10. In a bill file, the combination with the base board and the receiving and transfer wires thereon, of the casing or cover comprising the top side and end pieces and the strip

hinged to said casing and removably connected to the base board, substantially as described.

11. In a bill file, the combination with the base board and the receiving and transfer wires thereon, of the casing or cover comprising the top side and end pieces, the strip hinged to said casing having the slots therein and the headed pins on the under side of the base board with which they cooperate, substantially as described.

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