(No Model.) 2 Sheets—Sheet 1.

M. R. JEWELL.

LETTER FILE.

No. 455,596. Patented July 7, 1891.

Fig. 1.

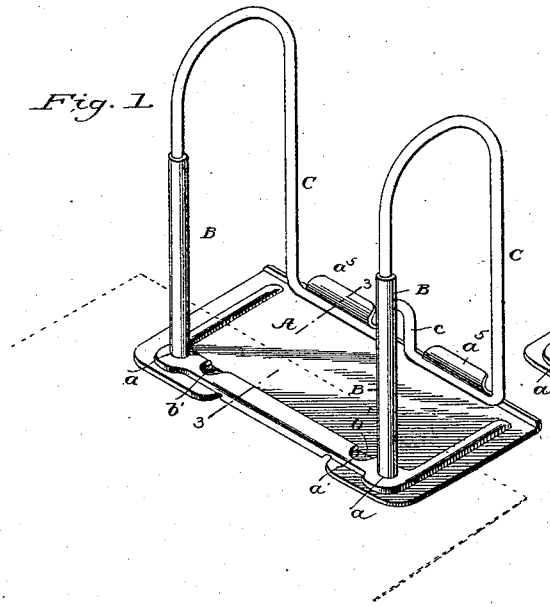

Fig. 2.

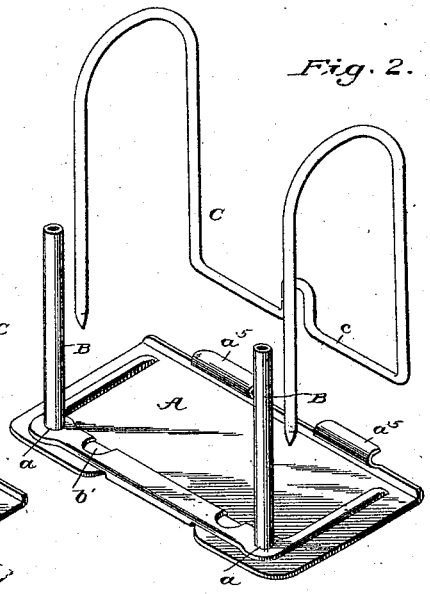

Fig. 3.
on line 3-3

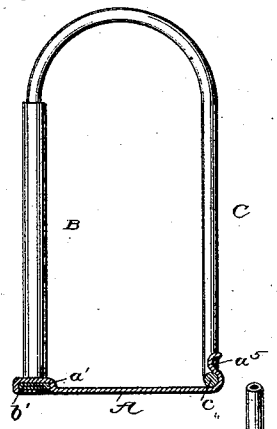

Fig. 4.

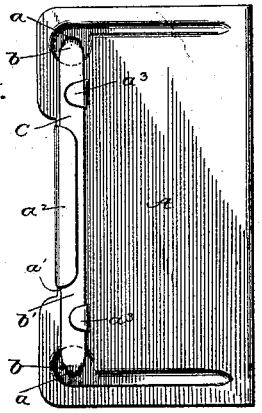

Fig. 5.

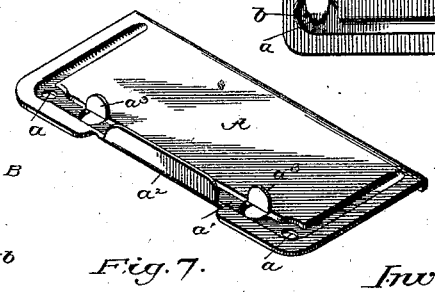

Fig. 6.

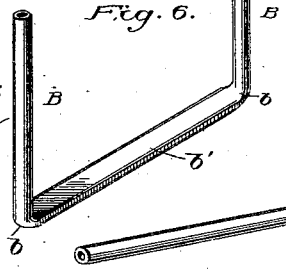

Fig. 7.

Witnesses:
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H. A. Kennedy

Inventor:
M. R. Jewell
By his Atty
Phil. T. Dodge

(No Model.) 2 Sheets—Sheet 2.

M. R. JEWELL.

LETTER FILE.

No. 455,596. Patented July 7, 1891.

Fig. 9.

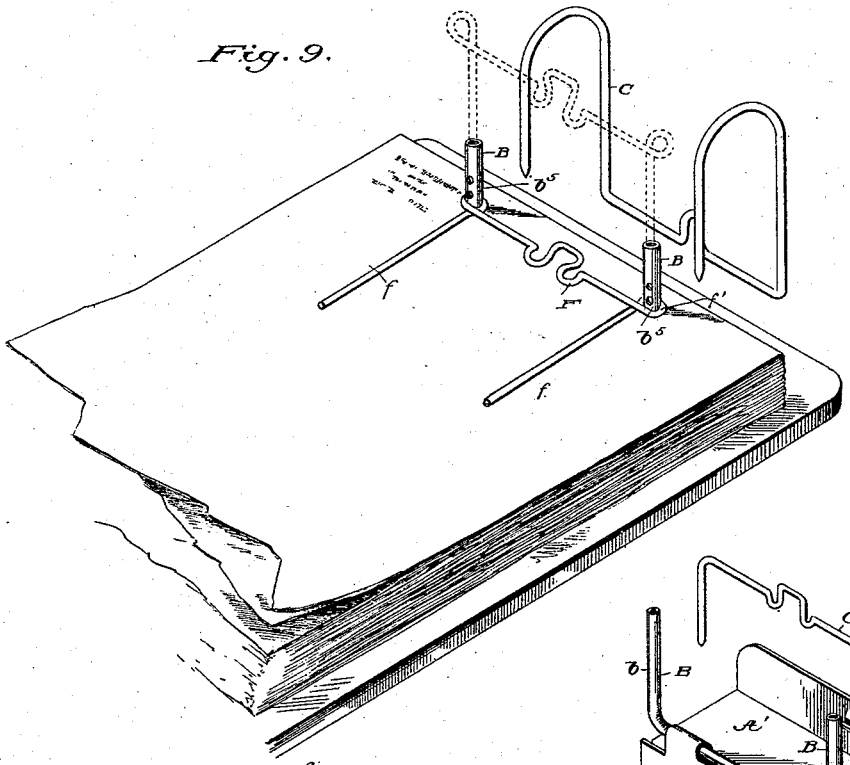
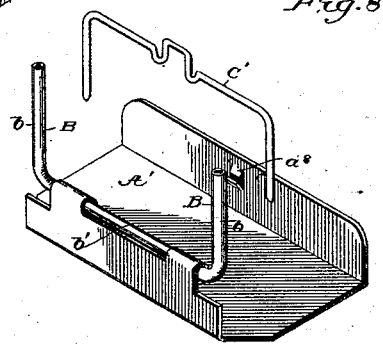


Fig. 8.



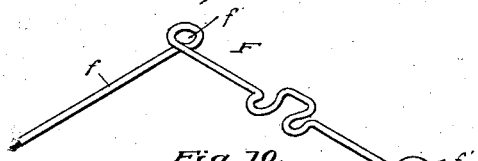


Fig. 10.

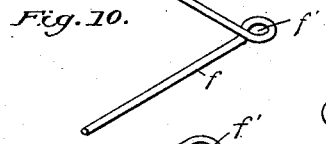


Fig. 11.

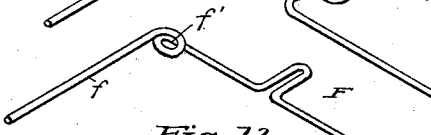
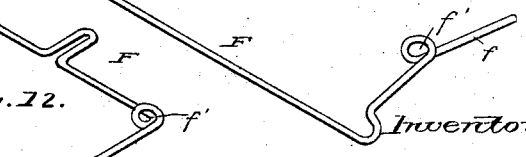


Fig. 12.



Witnesses:

W. W. Mortimer.

T. L. Kennedy.

Inventor:

M. R. Jewell
By his Atty
Phil T. Dodge

UNITED STATES PATENT OFFICE.

MAJOR ROMEYN JEWELL, OF ROCHESTER, NEW YORK, ASSIGNOR TO THE OFFICE SPECIALTY MANUFACTURING COMPANY, OF NEW YORK.

LETTER-FILE.

SPECIFICATION forming part of Letters Patent No. 455,596, dated July 7, 1891.

Application filed May 20, 1890. Serial No. 352,527. (No model.)

To all whom it may concern:

Be it known that I, MAJOR ROMEYN JEWELL, of Rochester, in the county of Monroe and State of New York, have invented certain Improvements in Letter-Files, of which the following is a specification.

This invention has reference to those letter-files which consist of one or more arched or ∩-shaped wires to receive the perforated edges of the sheets, each wire or arch being composed of two separable parts in order to permit the application and removal of the sheets.

The present invention relates more particularly to improvements on the filing devices represented in the applicatiom of James S. Shannon, filed January 3, 1890, Serial No. 335,753.

In the accompanying drawings, Figure 1 is a perspective view of my improved device with its parts connected in operative relations. Fig. 2 is a perspective view showing the parts separated. Fig. 3 is a cross-section on the line 3 3 of Fig. 1. Fig. 4 is a bottom view of the file. Fig. 5 is a perspective view of the base-plate as it appears previous to the attachment of the filing-arms. Fig. 6 is a perspective view showing the two filing-arms. Fig. 7 is a perspective view of the tube, such as is employed for the production of the arms. Fig. 8 is a perspective view showing my tubular arms applied to another known form of file. Fig. 9 is a perspective view showing the manner of using my combined pressure device and receiving-wire. Figs. 10, 11, and 12 are perspective views showing this device in different forms.

Referring to Figs. 1 to 7, A represents a flat metal base-plate, which is ordinarily secured to a base-plate or within a box or other receptacle.

B B represent two tubular posts rising rigidly from the plate near one edge and commonly known as the "filing-arms."

C represents a wire having two arched or curved arms adapted to be joined to and removed from the filing-posts at will. When the wire is joined to the post, the device as a whole presents two upright parallel arches which serve to retain the sheets, as shown in dotted lines, and to admit of the sheets being turned to and fro from the filing-arms to the wire, and vice versa, thus allowing the series of sheets to be separated at any desired point after the manner commonly practiced in Shannon letter-files and familiar to every person skilled in the art.

In their general construction and mode of operation the foregoing parts are similar to those in the Shannon application above recited and are not claimed as of my invention.

My first improvement relates to an improved manner of forming and attaching the filing-posts B. Instead of forming these posts separately and attaching them to the base-plate independently, as heretofore practiced, I provide, as shown in Fig. 7, a sheet-metal tube of appropriate length and size, preferably formed by coiling tin or sheet iron and bending its two ends at the points *b b* until they stand parallel with each other and at right angles to the intermediate connecting portion *b'*. In this manner I produce the two filing-arms or posts in one piece, together with a strong connection by which they are held in proper relation to each other. I prefer, as shown in Fig. 6, to flatten the cross-connection; but this is not a necessary feature.

I construct the base-plate A, as shown in Fig. 5, by stamping the same from sheet metal with two openings *a* therethrough, and also with a recess *a'* in the end or rear face and with lips a^2 and a^3. I insert the filing arms or posts through these openings from the back and seat the cross-connection in the depression *a'*, after which the lips are folded or closed downward, as shown in Figs. 1, 3, and 4, thereby securing the cross-connection and the filing-posts rigidly in position. The essence of the invention in this regard lies in securing the cross-connection and posts by lips on the base-plate, and it is manifest that these lips may be modified in form and arrangement to any extent within the range of mechanical skill, provided only they are adapted to operate in the manner and with the effect substantially as herein described.

The transfer device C consists, like that in the Shannon application before referred to, of a single wire having its two ends bent upward

and returned in ∩ form, so that their ends may be inserted into the respective filing-posts, of which they will form continuations, as shown in Fig. 1. Each filing-post B, together with the connecting end of the wire, constitutes what is commonly known as a "filing-arch."

In the Shannon device the middle or horizontal portion of the filing-wire C is located at a considerable distance above the bed-plate, so that the filing-arches are shorter or of less height on the outer side than on the side of which the filing-posts form a part. It is therefore impossible to transfer all the sheets from the filing-posts to the transfer-wire if the former are completely filled. Consequently it is the necessary practice to limit the number of sheets applied to the filing-posts, and thus reduce the capacity of the file to correspond with the capacity of the transfer-wires. I overcome this difficulty and increase the capacity of the file by extending the transfer-wire C downward to the base-plate, so that each arch has its two sides of equal length and of equal capacity.

In Figs. 1 and 3 it will be seen that the intermediate or cross member *c* of the transfer-wire lies directly upon the upper surface of the bed-plate, where it is held for the time being by lips a^5, beneath which it is sprung and retained by its elasticity.

In making use of the file it is generally desirable to hold the sheets down in compact form upon the filing-wires, and for this purpose it is usual to employ pressure devices of various kinds applied to the filing-posts B. When the accumulated letters are to be removed from the file to a storage-box or other receptacle, it is customary to insert U-shaped receiving-wires temporarily into the posts B and to transfer the letters to these receiving-wires, removing them therewith.

In order to avoid the necessity of employing a transfer-wire distinct from the pressure device, I provide a device which may be used alternately as a pressure device or as a receiving device for use in transferring the sheets. This is shown in equivalent forms at F in Figs. 10, 11, and 12. It consists, simply, of a wire suitably bent to present two parallel terminal arms *f* and two eyes *f'*. When it is used as a pressure device to confine the papers, it is slipped downward over the posts on top of the papers, as shown in full lines in Fig. 9, the upward pressure of the papers causing the eyes to bite upon the filling-posts, so as to hold the parts in position. When it is to be used in transferring the sheets, the arms are inserted into the posts, as shown in dotted lines in Fig. 9, after which the sheets are carried upward and removed with the wire in the manner commonly practiced. Instead of having the device engage frictionally with the outside of the posts the latter may be perforated transversely, as shown at b^5, Fig. 9, so that when used as a pressure device the arms *f f* may be inserted through these perforations.

Referring again to the tubular posts formed integral with the cross-connection, they may be used in files of various forms. In Fig. 8 I have shown them applied to a file of the type covered by patent to Shannon dated September 21, 1880, the arms being in this instance hinged to the frame or plate A' and adapted to receive the wire C', which interlocks with the lip a^8. This device is identical with that in the Shannon patent, except that the arms B are formed in one piece with the cross-connection instead of being constructed separately and attached to the cross-connection, as in the original patent.

Having thus described my invention, what I claim is—

1. In a letter-file, two parallel filing-arms of tubular form and a cross-connection integral therewith, in combination with a base-plate to which the cross-connection is rigidly secured as a means of maintaining the filing-arms in operative position.

2. In a letter-file, a base-plate perforated and provided with lips, in combination with the tubular filing-arms and their cross-connection applied to the plate and secured by the lips engaging the cross-connection.

3. In a letter-file, the base-plate provided with the perforations *a*, the recess *a'*, and the lips, substantially as described, whereby it is adapted to receive and retain the filing-arms and their cross-connection, as described.

4. In a letter-file, the filing arms or posts consisting of a sheet of metal coiled into tubular form, bent at the ends to present the parallel arms, and flattened between said arms.

5. In combination with a letter-file having tubular posts B, the device F, having parallel arms adapted for insertion into the posts, and also adapted for attachment transversely to the posts as a pressure device to confine the sheets thereon.

In testimony whereof I hereunto set my hand, this 2d day of May, 1890, in the presence of two attesting witnesses.

MAJOR ROMEYN JEWELL.

Witnesses:
KITTIE B. HARK,
FRED H. MUTSCHLER.