

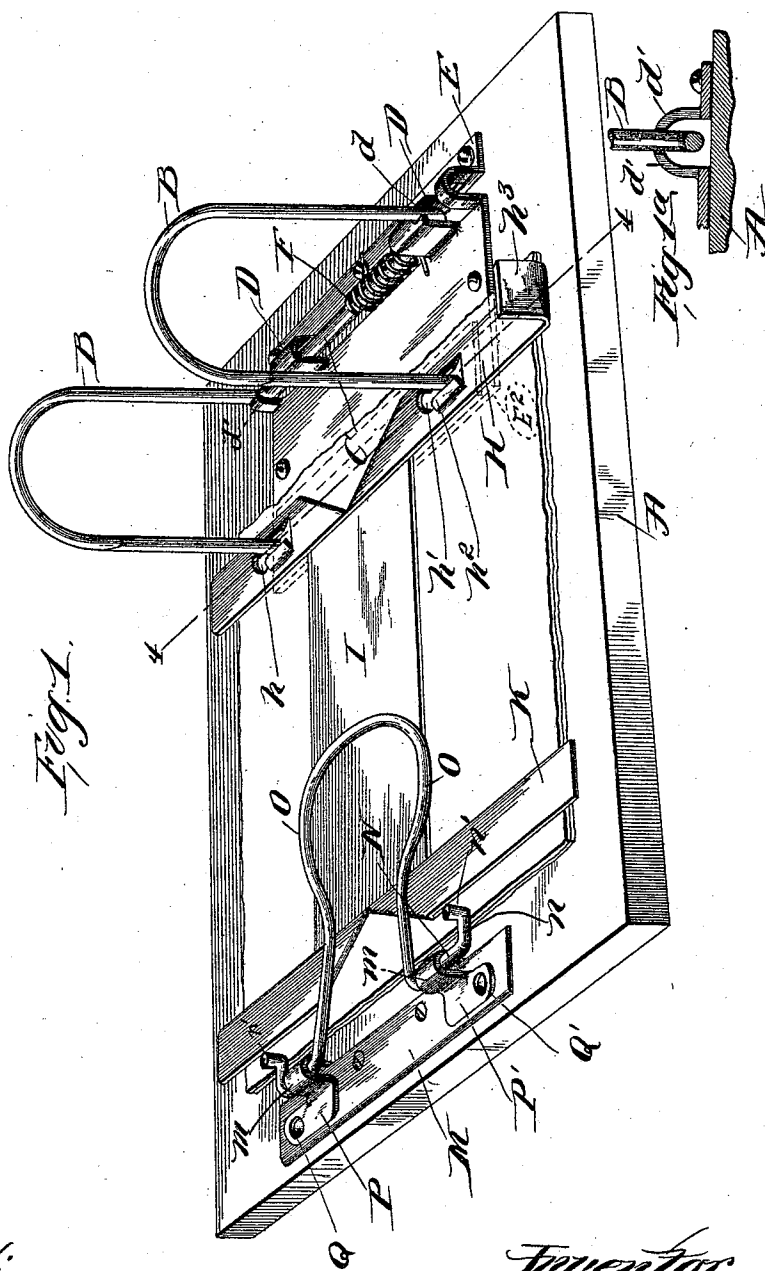
(No Model.)

2 Sheets—Sheet 1.

W. LUMLEY.
LETTER OR BILL FILE.

No. 499,433.

Patented June 13, 1893.



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LETTER OR BILL FILE.

SPECIFICATION forming part of Letters Patent No. 499,433, dated June 13, 1893.

Application filed March 8, 1892. Serial No. 424,193. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM LUMLEY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Letter or Bill Files, of which the following is a full, clear, and exact specification.

My invention relates to that class of files more especially designed for retaining current documents or for filing papers during the time it is desired to have frequent access to them, preparatory to their storage in the permanent files.

The prime object of my invention is to effectually hold the papers or documents while on file, down flat and smooth in a compact form on the baseboard, but in such a manner that the papers may be examined without detaching any parts of the apparatus or file, or otherwise causing inconvenience to the user.

Another object of my invention is to have the punch employed for forming eyelets or perforations in the documents for the admission or passage of the filing pins, subserve as a clamp for holding the papers in a compact form on the base-board.

My invention consists in certain features of novelty in the construction and combinations of parts by which the said objects and certain other objects hereinafter described are attained, all as will now be fully explained, with reference to the accompanying drawings, and then particularly pointed out in the claims.

In the said drawings, Figure 1 is a general perspective view of the complete device, showing a number of documents held in position thereon. Fig. 1^a is a detail sectional view hereinafter described. Fig. 2 is a plan view of the combined punch and clamp taken on a larger scale, showing in dotted lines the condition of the punch while perforating the paper. Fig. 2^a is a detail view of one of the male dies and cams hereinafter explained. Fig. 3 is a vertical section taken on the line 3—3, Fig. 2. Fig. 4 is a vertical transverse section taken on the line 4—4, Fig. 1. Fig. 5 is a detail section taken on the line 5—5, Fig. 4, on a slightly larger scale; and Fig. 6, is a diagrammatic view on a small scale showing the method of forming the clamp plate hereinafter described.

In the drawings, wherein like signs of reference indicate the same parts throughout the several views, A is the base-board and B B are the curved guard-pins, having a rock shaft C, all of the usual and well known construction. The rock shaft C is journaled in suitable bearings D, formed on a plate E, screwed or otherwise secured to the base-board A. One of the journal bearings D is provided with a notch *d*, into which one of the guard pins B engages; and the plate E, at or near its other end, is provided with two stops or posts *d'*, between which the other one of the guard pins engages. The notch *d* in the bearing D, and the notch formed by the stops *d'*, it will be seen, are rectangular, so that when the pins B have once slipped into them, such pins cannot be turned backward in the usual manner without first imparting to the shaft C a strictly longitudinal movement to disengage the pins D from such notches; thus reducing to a minimum the possibility of the pins B being accidentally knocked out of place.

The guard pins are normally held within the notches by means of a coil spring F, sleeved upon the shaft C, and having a suitable bearing against such shaft at one end and against one of the journal bearings D at the other.

G G are the usual filing pins which are planted or secured in the baseboard A, opposite the guard pins B, in a manner well understood, and upon these filing pins are slipped tubular transferring pins or sleeves *g g'* respectively, whose upper ends are beveled or pointed, or given any other form which will be complementary to and co-incidental with the points of the guard pins B. Both of the transferring pins *g g'* are suitably secured to a single base plate or foot *g³*, which, when the transferring pins are in place on the pins G, rests upon the base board A under the papers on file; and when such pins *g g'* are removed from the pins G, the plate *g³* acts as a washer or guard for preventing the papers from slipping off of the transferring pins. The papers at one end are held down in a flat and compact form upon the base plate *g³* by means of a clamp H, which consists preferably of a flat bar or plate provided with two perforations or openings *h h'*, for

the passage of the transferring pins, and two upturned or inclined spring gripping jaws h^2 , arranged to one side of each of said perforations and having their upper edges so arranged that the clamp may be inserted over the transferring pins by slipping the latter first through the perforations h, h' and then sliding the clamp longitudinally until the spring gripping jaws firmly impinge the transferring pins with their upper edges, which latter are preferably sharpened as shown in Fig. 5; thus gripping the pins g, g' in such a manner that the clamp may, if desired, be pressed farther downward on the pins but cannot be removed therefrom without first sliding it in the opposite direction longitudinally until the pins again enter the enlarged perforations h, h' , whereupon the clamp may be readily slipped upward off of the pins g, g' and if desired turned backward on the guard pins B B, so that free access to the papers on file may be had.

In order to facilitate the manipulation of the clamp H, I provide the same at one end with a thumb piece or hook h^3 , by means of which the clamp may be readily slipped from side to side.

It will, of course, be understood, that when it is desired to transfer the documents from this file to the permanent files, or when it is desired to remove the papers *en masse* for any other purpose, it is only necessary to cast back the guard pins B and slip the transferring pins off of the pins G together with the papers or documents securely clamped thereon between the base plate G^3 and the clamp H, thus guarding against the misplacement of the papers even after removal from the file.

In order to hold the lower ends of the papers and also their intermediate portions down in a flat and compact form on the base-board, and also to afford a bearing plate for the handle of the punch which constitutes a clamp as hereinafter described, I provide the clamp H with an extension plate I, which is, approximately speaking, nearly as long as the maximum length of document to be filed, and it is provided at its end with a T-bar or plate K, which corresponds in extent with the clamp H and serves to hold the lower ends of the documents, while the plate I holds their intermediate portions. Under ordinary circumstances, that is, when the file is not loaded with an unusual number of papers, the clamp H in itself will impart sufficient pressure to the plates I and K to hold them down with the requisite force; and this pressure to the plates I and K is due to the particular formation of the spring jaws h^2 , which, as more clearly shown in Fig. 5, not only prevent the direct upward movement of the clamp H but being inclined as they are from their upper edges downward and outward, they also act as props or braces to hold the outer edges of the clamp H against an independent oscillatory movement, or, in other words, to prevent such clamp from rocking on the pins with

which it engages. Hence, since the plate I is rigid with the clamp H, it is obvious that the only possible movement which the plate I can have is that which is permitted by the elasticity or flexibility of the metal itself, and this is inconsiderable.

In practice, I prefer to construct the clamp H and plates I and K of a single piece of metal. This may be done in the manner more clearly illustrated in Fig. 6, which consists in first splitting or slitting a plate or bar at both ends throughout a portion of its length and at the same time forming button-hole-like cuts in the two portions L L' thus formed at one end of the strip, the edges of which button-hole-like slits or cuts are struck up or upset to form the spring jaws as will be readily understood. The portions L, L' are then folded outward at right angles to the main portion or body of the plate, thus constituting the clamp H, and the like portions at the opposite end of the plate are similarly folded outward so as to form the plate K, as shown in dotted lines. It will be observed that the perforations or enlarged openings h, h' are formed respectively at the outer and inner ends of the button-hole-like slits in the portions L, L', so as to bring them on the outer and inner ends respectively of the jaws h^2 when the portions L, L' are bent into the form of the clamp H, as it appears in Fig. 1; and in order that the spring jaws may readily open to receive the transferring pins, the corners of such jaws adjacent to the openings h, h' , are rounded off or beveled as shown in Figs. 1 and 6.

Secured to the baseboard A at its lower end, or at the end opposite to that upon which the filing pins are situated, is a plate M, which is provided at or near each end with a strap preferably formed integrally therewith and curved upward in such a manner as to form journal bearings or boxes m for the reception of short transverse shafts N on the extremities of a handle O. The handle O is preferably composed of one piece of spring metal so that its arms or extremities will have a normal tendency to spring apart or outward; and the inner edge or side of each of these journal bearings m , is provided with an inclined surface or cam m' , against which the arms or extremities of the handle bear. These cams or inclines m' are so formed, that is, their upper edges overhang the lower edges as more clearly shown in Fig. 2^a, so as to give the handle a normal tendency to spring downward toward the base-board A, into the position shown in full lines in Fig. 1; and the pressure of such handle is utilized for holding the lower end of the plate I and the plate K firmly upon the papers or documents on file,—the handle being sprung down upon said plates as shown. The straps of which the journal boxes m are formed terminate in horizontal ears or lips P, P', respectively, which are provided with perforations or springs Q, Q', respectively, and are situated

a short distance above the plate M, so as to admit the papers to be punched between them and the said plate—the outer edges of the lips P, P' and the plate M being beveled so as to offer no obstructions to the entrance of the papers. In the plate M, directly under and co-incidental with each of the perforations Q, Q', is formed a female die R and under each of these dies, through the board A, is formed a channel or passage r for the escape of the portions punched out. Each of the short shafts N is provided with a short crank arm n which carries a male die n', adapted to be forced through the perforations Q, Q' and into the female dies, when the handle O is pulled over into the position shown in dotted lines in Fig. 2, it being, of course, understood, that the dies n' when in their normal positions, as shown in full lines in Fig. 2, are arranged beyond or wider apart than the female dies, a distance equal to the end-wise movement imparted to the shafts M by the cams m', so that the dies n', when drawn together by the cams, will accurately fit into the female dies and not strike the plate M, when the handle O is pulled over into the position shown in dotted lines in Fig. 2; and it will also be understood that the distance between the female dies is equal to the distance between the filing pins, so that the perforations formed by the punch will exactly fit the transferring sleeves or the filing pins.

If desired, the pins G, instead of being planted in the baseboard A, may be suitably secured in or formed upon an extension E² of the plate E, as more clearly shown in Figs. 4 and 5, and in dotted lines in Fig. 1; thus making such pins practically a part of the plate E in which the guard hooks or pins B are journaled and thereby holding them permanently in the proper position in relation to or in alignment with such guard pins and avoiding the necessity of nice adjustment or measurement, when securing the parts to the baseboard.

Having thus described my invention, what I claim as new therein, and desire to secure by Letters Patent, is—

1. In a file, the combination with the baseboard having filing pins, of a clamp having slots for the passage of said pins provided at their inner and outer ends respectively with openings h' and at their edges with straight-edged spring gripping jaws adapted to engage said pins, substantially as set forth.

2. In a file, the combination with the baseboard having filing pins arranged at one end thereof; of a spring handle or clamp arranged at the other end thereof and adapted to bear upon the lower ends of the papers, substantially as set forth.

3. In a file, the combination with the baseboard having filing pins at or near one end thereof, of a clamp adapted to fit on said pins, and the spring handle at the other end of said board, adapted to bear upon the papers, substantially as set forth.

4. In a file, the combination with the baseboard having filing pins at or near one end thereof, of a clamp having openings for the passage of said pins, and adapted to be secured thereto, and a spring handle at the other end of said board adapted to bear upon the papers, substantially as set forth.

5. In a file, the combination with the baseboard having filing pins; of a clamp adapted to be fitted upon said pins and having an extension, and a spring handle adapted to rest upon said extension for holding the papers down, substantially as set forth.

6. In a file, the combination with the baseboard having filing pins; of a clamp having openings for the passage of said pins and being provided with a thumb piece and inclined gripping jaws for engaging said pins, substantially as set forth.

7. In a file, the combination with the baseboard having filing pins; of a clamp having openings for the passage of said pins and being provided with upwardly inclined spring gripping jaws for engaging said pins, the jaws of one of said openings being rounded or beveled at their outer ends, and those of the other being rounded or beveled at their inner ends, substantially as set forth.

8. In a file, the combination with the baseboard having filing pins; of a clamp having gripping jaws for engaging said pins, and being provided with the extension I having the T-bar or cross-plate K, substantially as set forth.

9. In a file, the combination of the filing pins, a clamp having openings for the passage of said pins and being provided with upwardly inclined gripping jaws for impinging said pins, said jaws having sharpened edges, an extension on said clamp, and the T-bar on said extension, substantially as set forth.

10. In a file, the combination with the baseboard having filing pins; of the spring handle and journal bearings arranged near the lower end of said board and being provided with cams or inclines, against which said handle acts, substantially as set forth.

11. The combination with a plate having ears or straps forming journal bearings and being provided with perforated lips, a handle having its ends journaled in said journal bearings and provided with male dies adapted to enter said perforated lips, said plate having female dies below said perforations, substantially as set forth.

12. The combination of a plate having the ears or straps forming journal bearings and being provided with perforated lips held aloof from said plate and having beveled edges, and a handle having its ends journaled in said journal bearings and being provided with male dies adapted to enter said perforated lips, said plate having female dies below said perforations and being beveled on its outer edge, substantially as set forth.

13. The combination of the transferring sleeves adapted to fit upon the filing pins of

a file, a base plate or foot connecting said sleeves together at their lower ends, and a clamp having spring jaws adapted to fit upon and impinge said sleeves, substantially as set forth.

14. In a file, the combination with the base-board having filing pins, the guard pins B, B, and a shaft to which said pins B, B, are secured; of journal bearings for said shaft having rectangular notches for locking said pins B, B in position and a spring on said shaft for forcing said guard pins into said notches, substantially as set forth.

15. In a file, the combination with the base-board, having filing pins, of a clamp having gripping jaws for engaging said pins, and being provided with a rigid extension, adapted

to rest upon the papers for holding them down, substantially as set forth.

16. In a file, the combination with the base-board having filing pins, of a clamp having gripping jaws extending transversely of said base-board and adapted to engage said filing pins, the said gripping jaws being upwardly inclined and the said clamp having an extension extending longitudinally of said board and at an angle to said jaws, whereby the jaws will press such extension down upon the papers, substantially as set forth.

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