(No Model.)

J. S. VANHORN.

BILL AND LETTER FILE.

No. 337,213. Patented Mar. 2, 1886.

Fig. 1.

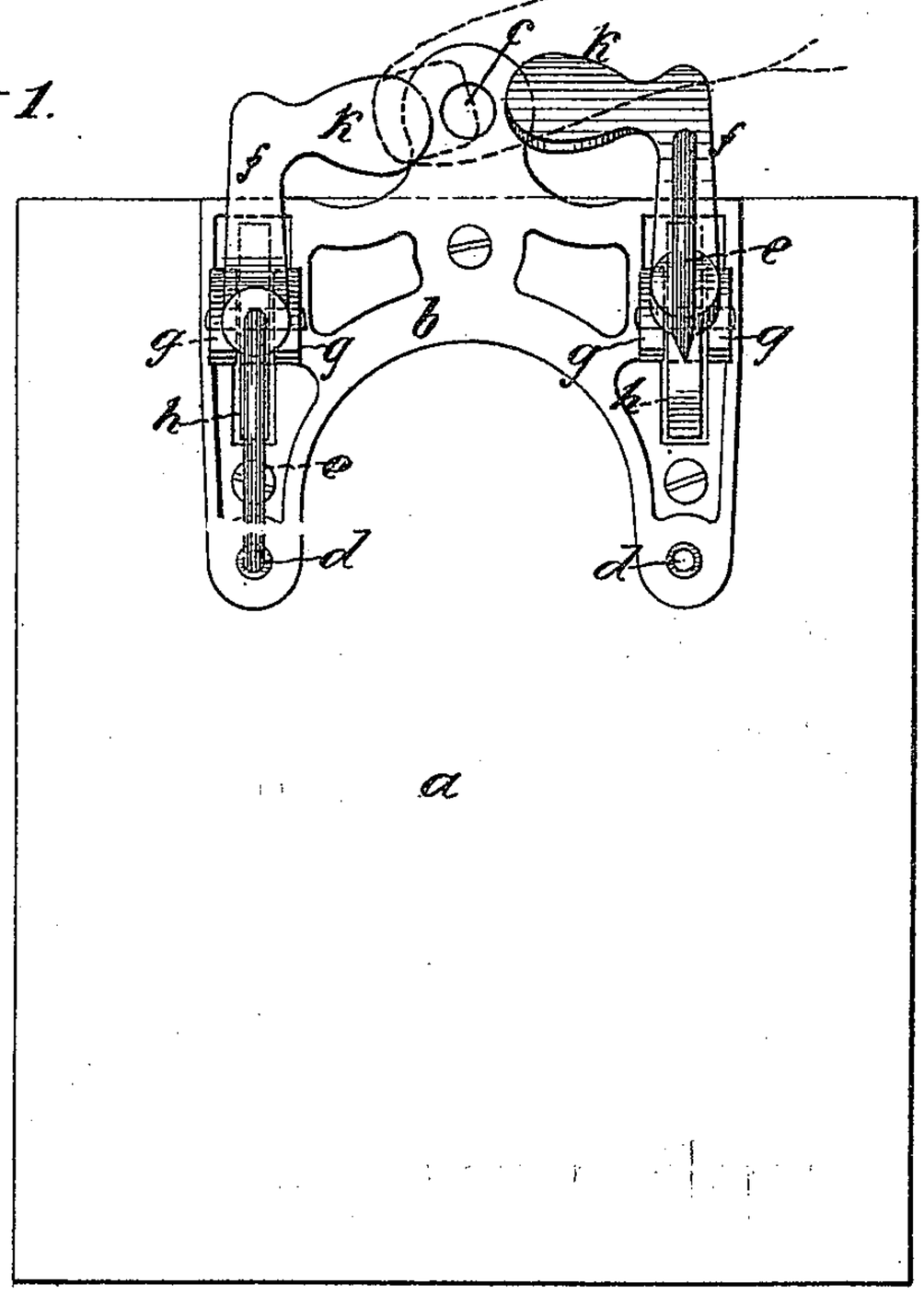
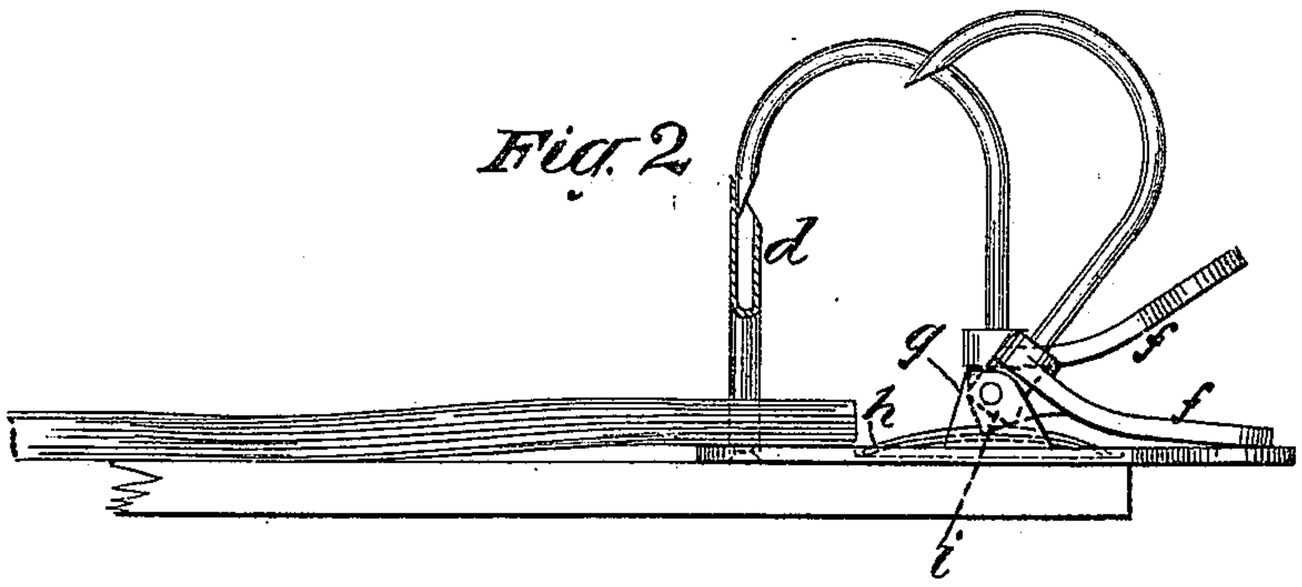


Fig. 2



WITNESSES

John Becker

Jno. E. Gavin

INVENTOR

Joseph S. Vanhorn

by Chas. M. Higgins

Attorney

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

JOSEPH S. VANHORN, OF JERSEY CITY, NEW JERSEY, ASSIGNOR TO WILLIAM H. WOGLOM, OF BROOKLYN, NEW YORK.

BILL AND LETTER FILE.

SPECIFICATION forming part of Letters Patent No. 337,213, dated March 2, 1886.

Application filed December 28, 1885. Serial No. 186,930. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH S. VANHORN, a citizen of the United States, residing at Jersey City, Hudson county, New Jersey, have invented certain new and useful Improvements in Bill and Letter Files, of which the following is a specification.

My invention applies to that class of files having fixed filing-needles on which the papers are filed, and movable transfer-needles which meet with the fixed needles and are separable therefrom, to permit the transfer and removal of the papers when required. A file of this class is shown in the patent issued to J. M. Keep, of June 12, 1883, No. 279,170, on which my invention is an improvement. In the Keep file, however, but a single filing and transfer needle is used, the transfer-needle projecting from a thumb-lever pivoted between ears on the base-plate, the lever having a cam-face which is pressed upon by a bow-spring, which serves to hold the needle in either its separated open position or in its closed position in contact with the filing-needle, according as the thumb-lever is depressed or released. In my invention I employ the same form of transfer-needle and thumb-lever with its cam and spring; but I employ a twin number of these parts, so as to make the file double, and I mount the same on a broad base-board provided with two parallel filing-needles to match with the double transfer-needles. The chief novelty of my invention consists, however, in having the thumb-levers prolonged toward each other with lateral thumb-pieces which approach or nearly meet at the middle of the base-board, so that in operating them the thumb of one hand can span and depress both levers at once, and thus raise both transfer-needles simultaneously; or either lever and needle can be operated separately as occasion requires, thus producing a very simple and convenient file.

I am aware that many files have been made with twin filing and transfer needles; but in these cases the transfer-needles are attached rigidly together to the same head or bar, or are otherwise operatively connected so that both can only be moved simultaneously and not either separately or simultaneously as in my improvement.

In the annexed drawings, Figure 1 presents a plan view of my improved file, and Fig. 2 is a side elevation thereof.

In the drawings, *a* indicates the base-board of the file, which may be made of a thin wooden board, or of heavy paper-board or other material.

b is the base plate or casting carrying the filing and transfer needles with their thumb-levers, &c., and which is fixed to the top end of the base-board, and is formed with the eye *c*, whereby the file may be hung up, as usual.

d d are the filing-needles, which are preferably of the tubular kind, with beveled points, with their open bases riveted into the arms of the base-casting *b* in the usual manner, as indicated in Fig. 2.

e e are the transfer-needles, which are preferably made of solid wire, and are straight at the base, parallel with the filing-needles, but curved in a semicircle at the top to meet with the hollow tip of the filing-needles, as fully shown in Figs. 1 and 2. The filing-needles are riveted at the base end in the fulcrum end of the thumb-levers *f f*, which are pivoted directly below the transfer-needles between little ears *g g*, which arise from the base-casting *b*.

In a recess between the ears on the base-casting is socketed a bow-spring, *h*, whose convex center bears on a cam-face, *i*, on the under side of the thumb-lever, the construction of these parts being the same as shown in the Keep patent referred to. Normally the thumb-levers are in their raised position, and the transfer-needles are swung over into contact with the filing-needles, as seen at the far side of Fig. 2; but when the thumb-levers are depressed the transfer-needles will be swung back and away from the filing-needles to permit the removal of papers, as seen on the near side of Fig. 2. In either case the springs *h*, acting on the cams *i*, will hold the transfer-needles in whichever of the said positions they may be set, as will be understood. The thumb-levers *f f* are directed outward, as usual; but heretofore they have been directed straight outward only, with the thumb or finger-plate directly on their ends; but in my improvement the ends of the thumb-levers are directed laterally toward each other, being formed

with lateral thumb-plates *k k*, which approach each other near the center of the base-casting *b*, over the eye *c*, leaving sufficient room for the nail on which the file is hung to project between them, as will be understood on reference to Fig. 1. It will therefore be seen on reference to Figs. 1 and 2 that while by the described construction each thumb-lever and transfer-needle is independent of the other, yet the thumb-levers are brought near enough to admit of a single thumb being placed on both levers at once, as indicated by dotted lines in Fig. 1, so that both levers may be depressed simultaneously with one action, thus raising both transfer-needles at once, and yet each lever can be depressed separately, when desired, to raise either needle alone. This is of great advantage in several respects, particularly for simplicity of construction and efficiency and convenience of action, and it insures the accurate register of the transfer with the filing needles, for, as each transfer-needle is independent of the other, each will close firmly against its own filing-needle when sprung over toward the same, and require no special adjustment with reference to the other, whereas, when both transfer-needles are affixed to the same lever or bar, or operatively connected together, one has to be bent or adjusted relatively to the other, so as to insure the simultaneous register of both with the hollow tips of the filing-needles, and they are more likely to get out of position by use than when made to act independently, as in my improvement. Furthermore, in case of bending or breakage of one of the transfer-needles it is easier to renew or replace the parts when they are separately formed than is the case when both needles are attached to and operated by the same part, as will be readily appreciated.

I prefer the manner of pivoting the transfer-needles shown, which, as before stated, is that shown in the Keep patent; but the transfer-needles may be mounted in any equivalent manner without departing from my invention, the essential feature of which consists in having each needle independent and operated by independent finger or thumb pieces, which approach each other, so as to be spanned and operated by one finger or thumb at one action or depression, and yet allow of the independent depression of each when desired.

What I claim is—

1. In a bill or letter file formed with twin filing and transfer needles, the combination, with independently-moving transfer-needles, of an independent-operating finger piece or lever connected to each transfer-needle, and prolonged or directed toward each other in close proximity, whereby both levers may be spanned and depressed simultaneously by one finger or thumb at one action, or may be operated separately, as desired, substantially as herein set forth.

2. The combination, in a file, with a base provided with two filing-needles, such as *d d*, of two independently-moving transfer-needles, such as *e*, levers *f f*, on which said transfer-needles are mounted, and lateral prolongations *k k* on said levers, substantially as and for the purpose set forth.

3. The combination, in a file, with a base having filing-needles *d d*, of the transfer-needles *e e*, the pivoted operating-levers *f f*, with cam *i* and spring *h*, and lateral approaching thumb-pieces *k k*, substantially as shown and described.

JOSEPH S. VANHORN.

Witnesses:
JNO. E. GAVIN,
CHAS. M. HIGGINS.