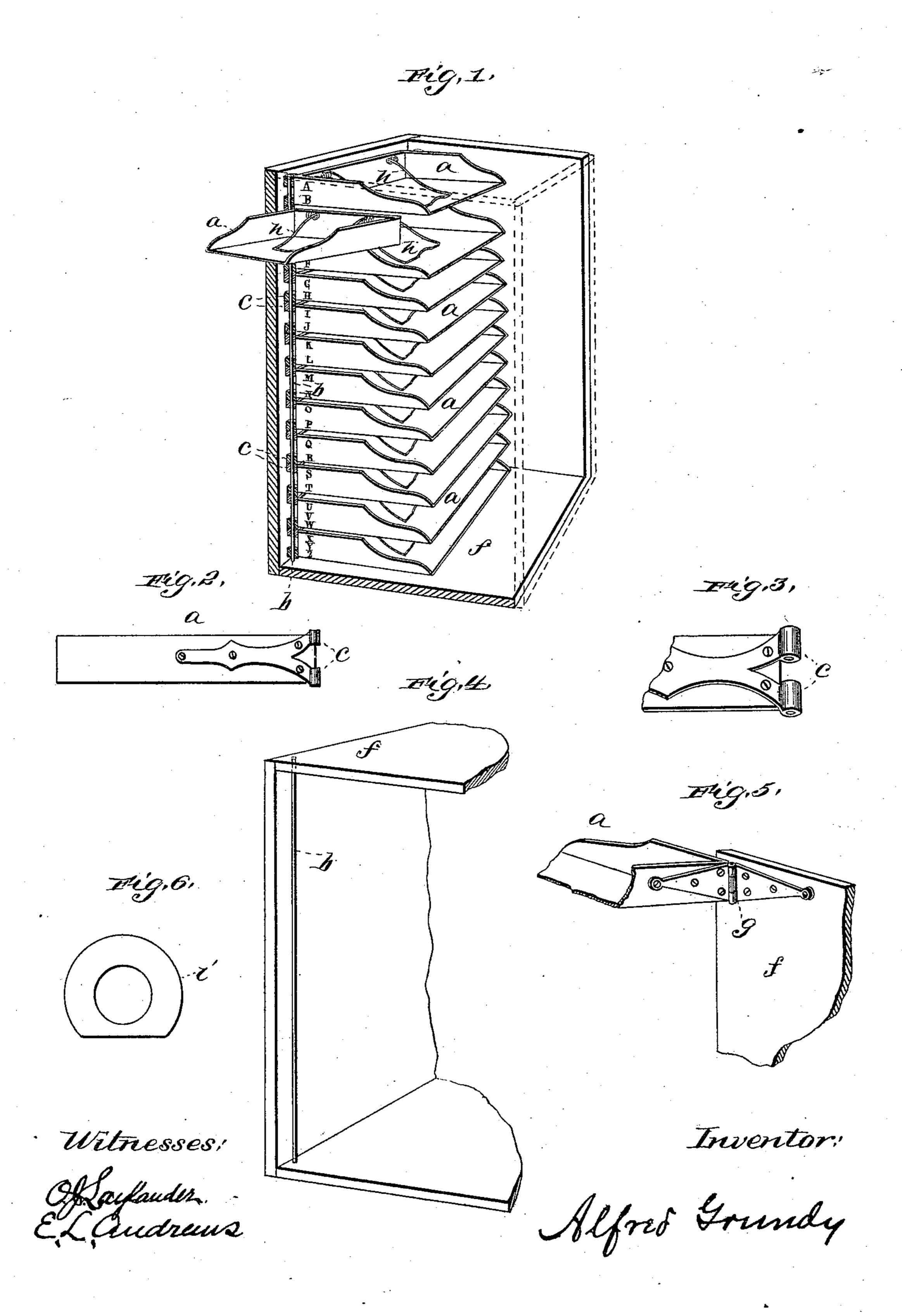
(No Model.)

A. GRUNDY. LETTER FILE.

No. 471,357.

Patented Mar. 22, 1892.



## United States Patent Office.

## ALFRED GRUNDY, OF CEDAR FALLS, IOWA.

## LETTER-FILE.

SPECIFICATION forming part of Letters Patent No. 471,357, dated March 22, 1892.

Application filed December 17, 1891. Serial No. 415,424. (No model.)

To all whom it may concern:

Be it known that I, Alfred Grundy, a citizen of the United States, residing at Cedar Falls, in the county of Black Hawk and State of Iowa, have invented a new and useful Letter-File, of which the following is a specification.

My invention relates to improvements in letter-files, in which a series of vertically-arro ranged trays are pivotally attached to a vertical rod or other fixture and severally rotate
on horizontal planes, the whole being inclosed
in a suitable case.

The objects of my invention are, first, to provide a cheap, dust-proof, convenient file for letters, bills, and other papers; second, to provide a means by which letters, bills, and other papers may be alphabetically arranged and securely held without disarrangement of other papers or the necessity of perforation; third, to provide a means of securing reasonable secrecy respecting letters, bills, and other papers and at the same time preserving a maximum accessibility and orderly arrangement. I attain these objects by the device illustrated in the accompanying drawings, in which—

Figure 1 is a vertical section of the entire file in perspective, showing one tray turned out. Fig. 2 is a view of the back of one of the trays, showing the means of attachment to pivot. Fig. 3 is an enlarged section of the hinge attachment, showing projection above and below tray. Fig. 4 is a vertical section of part of case, showing pivotal rod. Fig. 5 is a part of cross-section of a tray and side of case, showing attachment by ordinary strap-hinge. Fig. 6 is a view of the washer separating the hinge-fastenings.

40 Similar letters refer to similar parts throughout the several views.

The trays a are made of any suitable material and of any suitable size and form. On the back of each tray e is attached, in any suitable manner, a hinge-like fastening c, so arranged as to engage pivotally a vertical rod b. The rod b being suitably fastened in the top and bottom of the case f, as in Fig. 4, the hinge-fastening c being so arranged as to project a short distance above and below the back of the tray, as in Fig. 3, the projections being where the fastening c engages the rod b and in their vertical arrangement on the rod b, provides suitable interstices between the trays, allowing them to rotate without

contact. The independent action of the trays is secured by separating the fastenings c on the rod b by a thin washer i, Fig. 6, having a segment cut off the side next the side of the case, which engages the washer on the chord 60 of the remaining arc and prevents its turning. The trays a may also be attached to the side of the case f by means of ordinary straphinges g, as in Fig. 5, the interstices being secured by arrangement of the hinges. Each 65 tray is provided with any suitable form of spring-clamp h for securing letters or other papers and preventing their interfering with the movement of the trays. The case f is so constructed as to allow room for the rotation 70 of the trays, and the side through which the trays are rotated outward is inclosed by a suitable hinged or sliding door (not shown in the drawings) fitted with a suitable lock. The trays are lettered or numbered in a man- 75 ner to suit the convenience and business of the user.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, in a letter-file, of a series of hinge-like fastenings or arms forming the backs of and having attached trays with a vertical rod to which the arms are pivotally attached and on which they rotate out of a 85 box or case on horizontal planes, all substantially as and for the purpose described.

2. The combination, in a letter-file, of an inclosed box or case and a rod vertically arranged near a corner thereof having its ends 90 fixed in the top and bottom of the box and having pivoted thereon hinge-like arms bearing trays thereto attached fitted with spring-clamps, all substantially as and for the purpose set forth.

3. The combination, in a letter-file, of a hinge-like fastening c, constructed so as to engage pivotally a vertical rod b, and trays a a, to which the fastenings c are attached, all substantially as and for the purpose herein 100 described.

4. In a letter-file, the combination of hinge-like fastenings c, a vertical rod b, and a washer i, having a segmental portion cut off and separating the fastening c on the rod b, all substantially as and for the purpose described.

ALFRED GRUNDY.

Witnesses:

A. M. FIELDS, W. M. FIELDS.