(No Model.) 2 Sheets—Sheet 1.

P. H. YAWMAN.

METALLIC FILING CASE OR CABINET.

No. 435,877. Patented Sept. 2, 1890.

Fig. 1.
on line 1-1

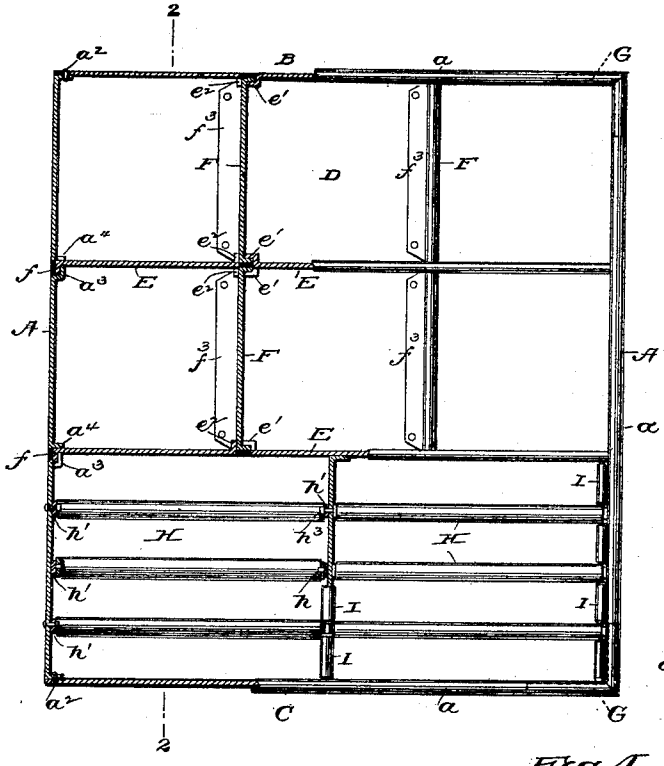


Fig. 2.
on line 2-2

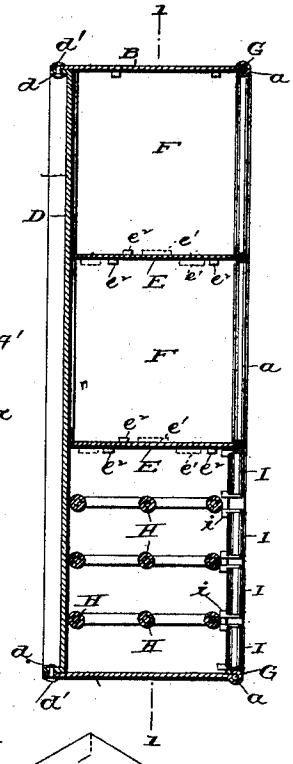


Fig. 3.

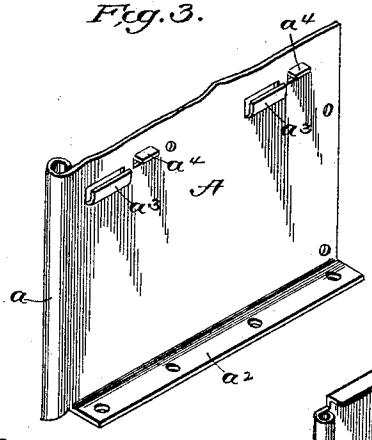


Fig. 4.

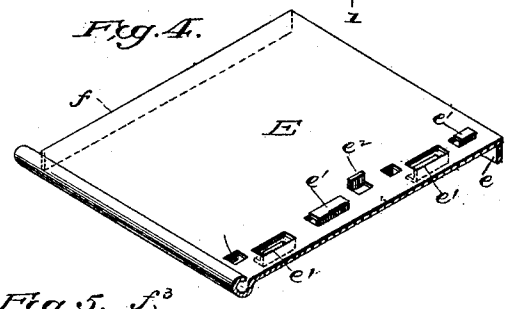
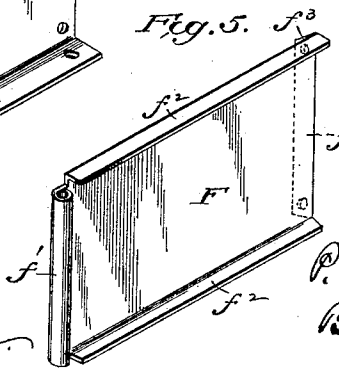


Fig. 5.



Witnesses:
W. W. Mortimer.
F. Stanley Emore.

Inventor:
P. H. Yawman
By Phil. T. Dodge Atty.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

(No Model.) 2 Sheets—Sheet 2.

P. H. YAWMAN.

METALLIC FILING CASE OR CABINET.

No. 435,877. Patented Sept. 2, 1890.

Fig. 7.

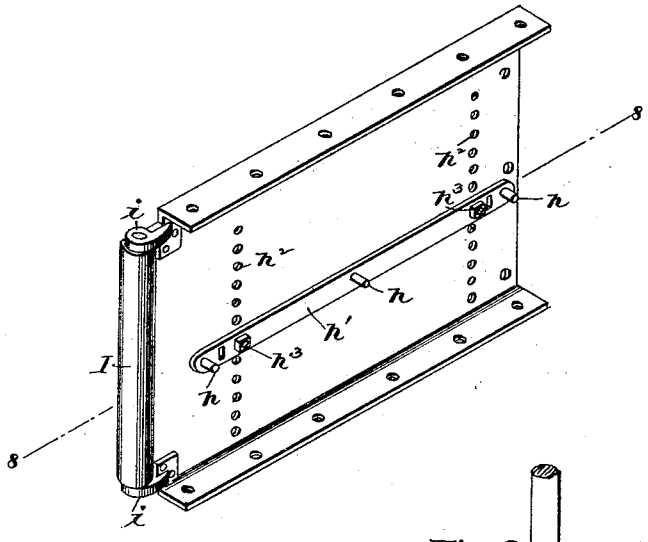


Fig. 6.

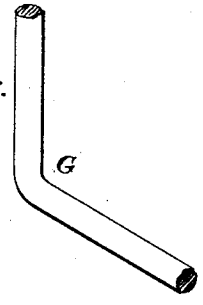
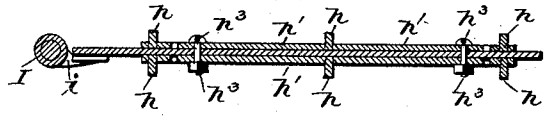


Fig. 8.
on line 8-8



Witnesses:

W. H. Mortimer

F. Stanley Chuore

Inventor:

P. H. Yawman

By Pliel T. Dodge

Atty

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

PHILIP H. YAWMAN, OF ROCHESTER, NEW YORK, ASSIGNOR TO THE OFFICE SPECIALTY MANUFACTURING COMPANY, OF NEW YORK.

METALLIC FILING CASE OR CABINET.

SPECIFICATION forming part of Letters Patent No. 435,877, dated September 2, 1890.

Application filed March 5, 1890. Serial No. 342,788. (No model.)

To all whom it may concern:

Be it known that I, PHILIP H. YAWMAN, of Rochester, in the county of Monroe and State of New York, have invented certain Improvements in Metallic Filing Cases or Cabinets, of which the following is a specification.

This invention relates to various improvements in the construction of metallic cases to receive books, papers, &c.

The objects of the invention are primarily to produce a strong, simple, and inexpensive case, the parts of which may be readily constructed in duplicate by machinery.

In the accompanying drawings, Figure 1 represents a front elevation of a case having my improvements embodied therein, a portion of the same being shown in vertical section on the line 1 1 of Fig. 2. Fig. 2 is a vertical cross-section on the line 2 2 of Fig. 1. Fig. 3 is a perspective view of one of the vertical end plates. Fig. 4 is a view of a portion of one of the horizontal shelves. Fig. 5 is a view of one of the vertical division-plates. Fig. 6 is a view of one of the angular tie-irons used in the corners of the case. Fig. 7 is a perspective view of one of the vertical division-plates with the roller-supports applied thereto. Fig. 8 is a horizontal section on the line 8 8 of the preceding figure.

The entire body of my case is constructed of sheet metal. It consists, essentially, of vertical end plates A A′, a top plate B, a base-plate C, a back plate D, horizontal shelves or divisions E, extending from side to side, and vertical division-plates F. The top, bottom, and end plates are each formed of a single sheet of metal of suitable thickness to give reasonable rigidity and each curled or rolled at the forward edge to form a round bead a. This bead gives to the case an ornamental appearance, prevents the metal from buckling or bending, and presents a round edge to prevent mutilation of the books or papers during their insertion or removal. The end plates are provided at the top and bottom with inwardly-turned horizontal flanges, which are seated against the surfaces of the top and bottom plates, respectively, and secured firmly thereto by rivets, screws, or equivalent fastenings a^2. The back plate, which may be made of a single piece or in sections, according to the size of the case, is provided along its horizontal and vertical edges with a rearwardly-turned flange d, as shown in the several figures. The plate is inserted into the frame from the rear and its flange secured to the sides, top, and bottom, respectively, by rivets d'.

In order to strengthen the case and tie the parts firmly together, I employ at each corner a strong angular rod, such as shown at G, Fig. 6, its two ends, which stand at right angles, being inserted one into the bead at the front of the vertical plate and the other into the bead at the front of the horizontal plate, as clearly shown in dotted lines in Fig. 1.

The parts already described constitute the frame-work or body of the case. Within this body I mount any required number of horizontal shelves or division-plates E, extending from side to side and from front to back. Each of these shelves E is commonly constructed in a single piece, its forward edge curled to form the rounded bead and its ends bent downward in the form of flanges f. These flanges are seated over and behind upright lips a^3, formed on the side plates by punching the metal inward from the outside, these lips serving not only to sustain the shelf, but also to tie the sides of the body inward against the shelves to prevent the body from spreading. The shelf is held down in engagement with the lips a^3 by overlying lips a^4, which are also formed by punching through the metal from the outside. The shelves are inserted by sliding them horizontally to their places from the front or rear of the case, and they may be held in place simply by the friction or by providing them at the rear edge with a downwardly-turned flange e, to be riveted or otherwise attached to the back plate.

The vertical division-plates F, by which the spaces between the shelves are divided into compartments or pigeon-holes, consist each of a single sheet of metal, such as shown in Fig. 5, its front vertical edge being curled to form a bead f', its upper and lower edges turned over to form horizontal flanges f^2 and its rear edge turned laterally to form a flange f^3. These plates are seated between and against the horizontal shelves and between the shelves and the top and bot-

tom plates of the case, and are secured in place by means of lips e' and e^2, punched through the shelves, these lips being in form and arrangement identical with the lips a^3 and a^4 on the end plates. Each of the shelves is provided, as shown in Figs. 1 and 4, with two sets of lips, one punched upward and the other downward, in order to hold the division-plates above and below them.

When the case is to receive books, I provide it with what are known as "roller-shelves"—that is to say, with a series of horizontal rolls H, arranged in sets, several in the same horizontal plane. These rolls are sustained at their ends, as shown in Figs. 7 and 8, by studs or pivots h, projecting from bars h', secured to the vertical plates of the case. These bars may form the ends of the roller shelves or frames.

Each of the vertical plates is provided, as shown in Fig. 7, with two vertical rows of holes h^2. Two plates or bars are applied in line with each other to opposite sides of the supporting-plate and secured thereto by bolts h^3, passing through the holes. By changing the bolts from hole to hole the height of the bars h' may be changed, and thus the distance between the series of holes modified to suit the size of thickness of the books to be introduced.

In order to prevent books from being chafed in their sides or edges, more especially large books inserted in horizontal positions, I propose to provide at the front of each of the division-plates a vertical roller I, sustained at its ends in ears or plates i, riveted to the vertical plate. I prefer to use a series of short rolls arranged one above another, as shown; but long rolls extending from top to bottom of the case may be employed.

Having thus described my invention, what I claim is—

1. In a metallic case, the frame consisting of the vertical side plates and the top and bottom plates connected thereto by inwardly-turned flanges and rivets, in combination with the back plate inserted within said frame and having its edges flanged in a rearward direction and secured by rivets, substantially as shown.

2. In a metallic case, the vertical side plates having lips punched inward therefrom, in combination with the division plates or shelves having their ends flanged and engaged with said lips, substantially as shown.

3. In a metal case, a vertical plate and a horizontal plate joined thereto, each curled into tubular form at one edge, in combination with an angular tie-iron having its ends inserted into the tubular portions of the respective plates.

4. A plate for a metal case, provided with two series of lips, as a^3 and a^4, punched therefrom, the one series standing perpendicular to and the other series substantially parallel with the surface of the plate, whereby they are adapted to engage and hold a second and flanged plate.

5. In a metal case, the shelf or division-plate E, having the flanges at its ends, in combination with the vertical sustaining-plates, each having integral therewith horizontal and also vertical lips, substantially as shown, whereby the shelf is sustained and its disengagement from the sustaining-lips prevented.

6. In a metal case, the combination of two parts at right angles to each other, one having a flange across its end and the other having lips parallel with its face to engage behind the flange and also lips perpendicular to its face to prevent the disengagement of the flange, as described and shown.

7. In a metal case, the horizontal shelves and vertical division-plates, in combination with the vertical rolls and their sustaining-ears attached to the vertical plates.

8. In a metallic case, the vertical plates provided with a series of holes at different heights, in combination with the horizontal rolls, their sustaining-bars, and the bar-sustaining bolts inserted through the vertical plates.

9. In a metallic case, the combination of a vertical plate, two roll-sustaining bars applied to opposite sides of said plate, a series of holes at different heights, and bolts each passing through the vertical plate and the two bars, substantially as shown.

In testimony whereof I hereunto set my hand, this 7th day of February, 1890, in the presence of two attesting witnesses.

PHILIP H. YAWMAN.

Witnesses:
FRED F. CHURCH,
A. A. DAVIS.