(No Model.)

# C. C. CHAMBERLAIN.

## BILL FILE.

No. 376,140. Patented Jan. 10, 1888.

Fig: 1.

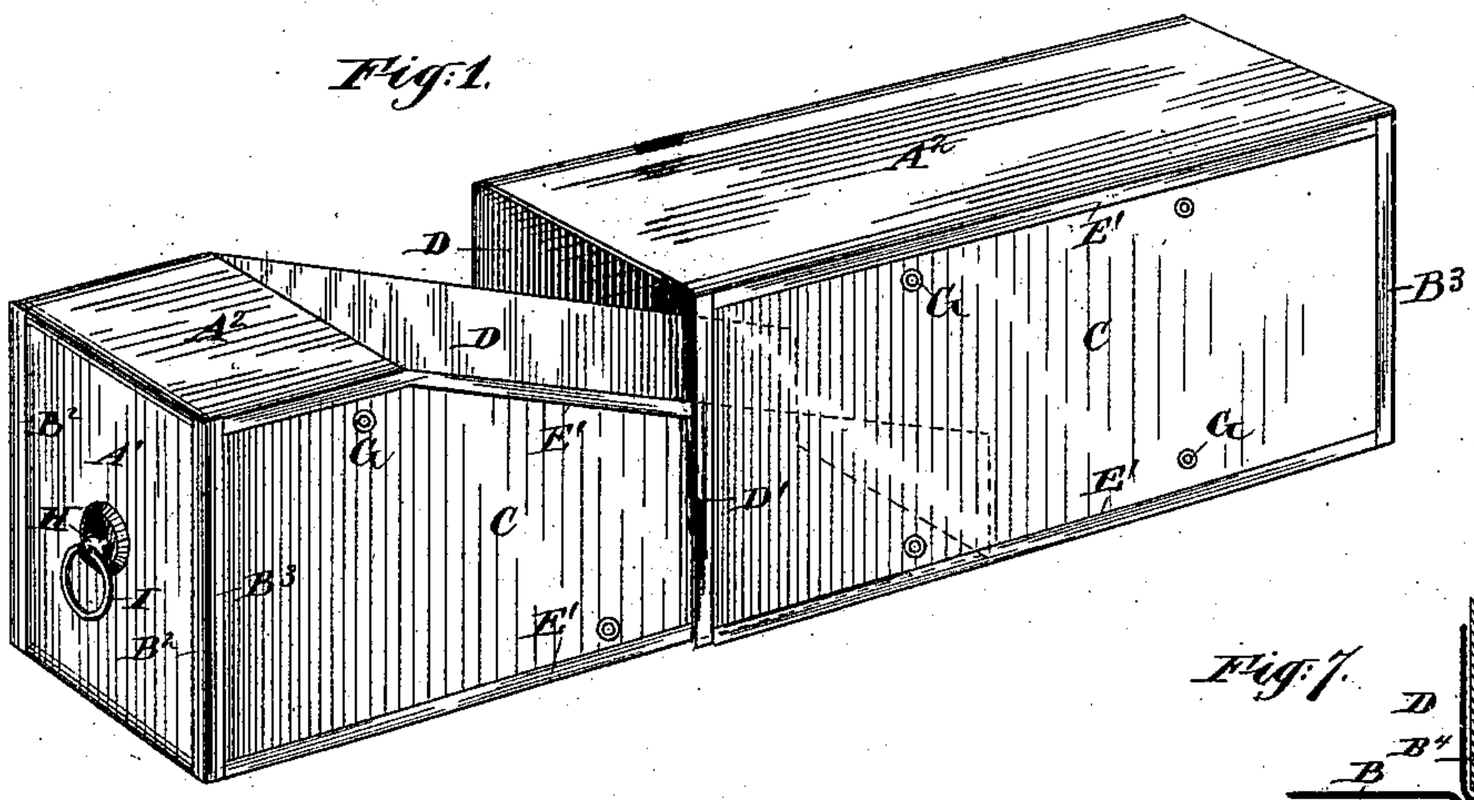



Fig: 7.

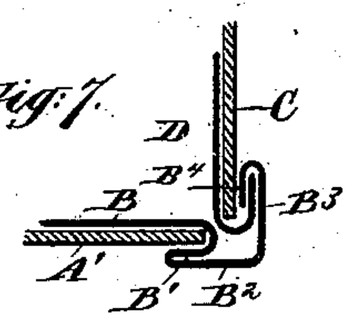



Fig: 2.

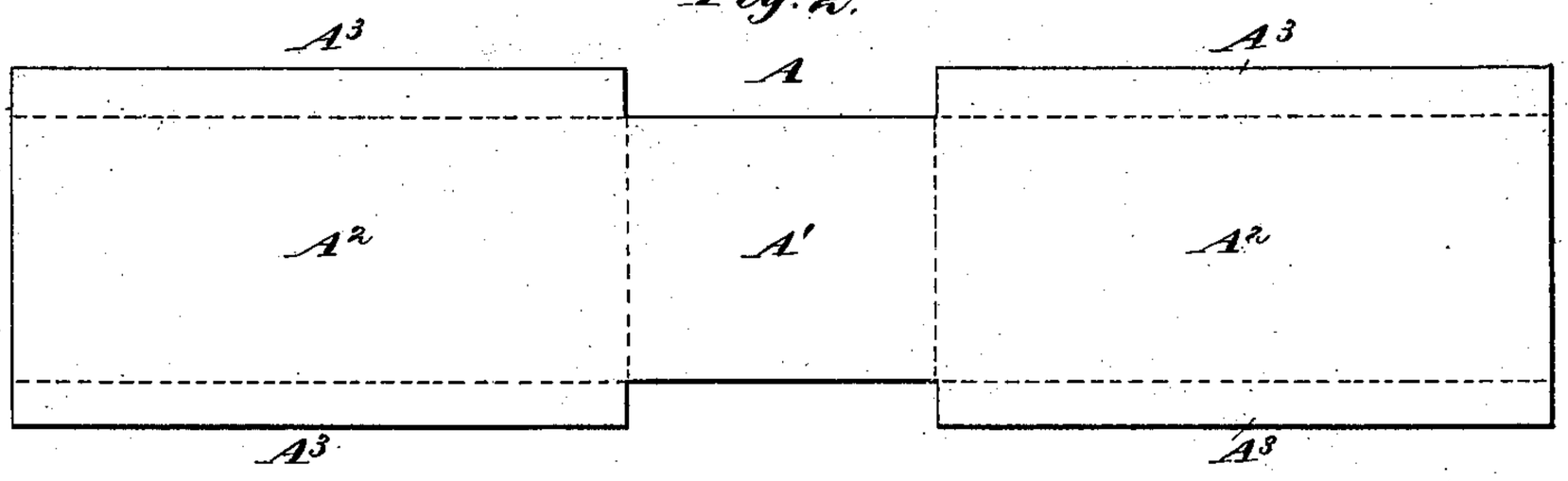



Fig: 4.

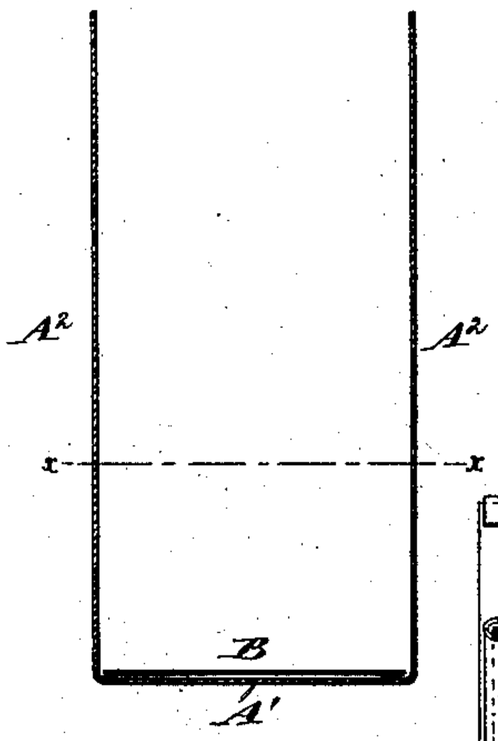



Fig: 3.

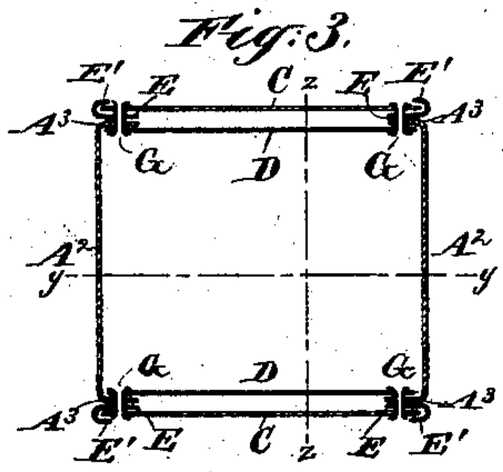
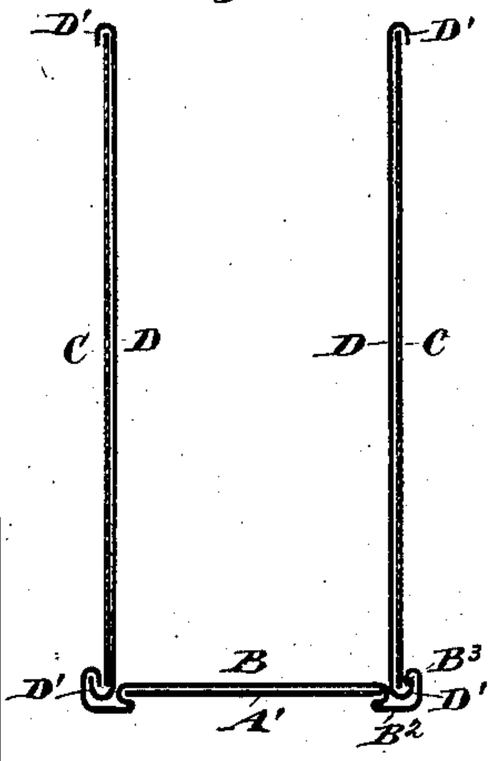



Fig: 5.



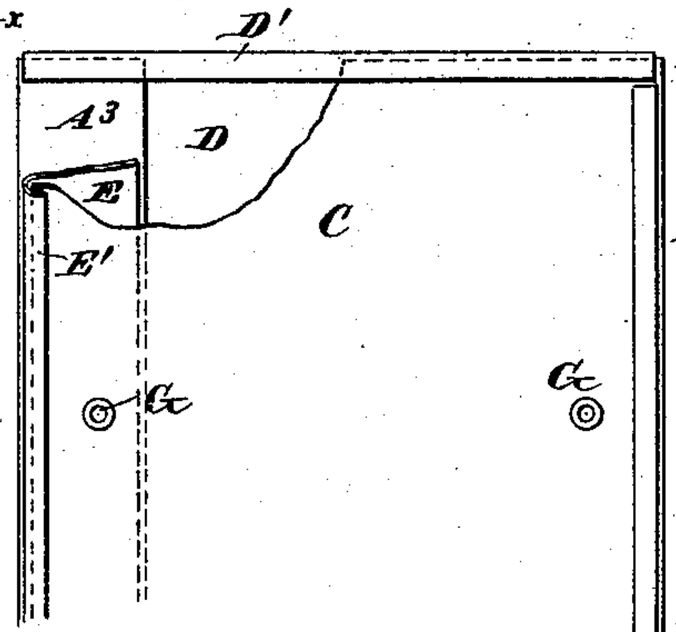




Fig: 6.

Witnesses:
Charles R. Seare,
H. A. Johnstone.

Inventor:
C. C. Chamberlain,
by his attorneys
Thomas Drew Sleeper

# UNITED STATES PATENT OFFICE.

CHARLES C. CHAMBERLAIN, OF PASSAIC, NEW JERSEY.

## BILL-FILE.

SPECIFICATION forming part of Letters Patent No. 376,140, dated January 10, 1888.

Application filed April 13, 1887. Serial No. 234,632. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES C. CHAMBERLAIN, of Passaic, in the county of Passaic, in the State of New Jersey, have invented a certain new and useful Improvement in the Construction of Bill-Files, of which the following is a specification.

I have in a patent issued to me, dated March 20, 1877, No. 188,588, set forth a construction of bill-file in two parts, one sliding within the other, each having four sides and one end, both made in part of tough paper-stock, preferably enameled board, with the closed end of each case re-enforced and stiffened by a metal plate. I have, after much experimenting, produced a further improvement.

In carrying out my present improvement I employ enameled board, Manila board, or other tough material of proper thickness, as before, and re-enforce and stiffen not only the ends, but also the sides of both the external and internal case. I lock the metallic sides and end of each case strongly together, and hold the whole by fastenings engaged in the paper material. In what I esteem the most complete form of the invention the edges of the paper-stock are also protected against being torn or abraded in use by folded strips of sheet metal.

The following is a description of what I consider the best means of carrying out the invention.

The accompanying drawings form a part of this specification.

Figure 1 is a perspective view showing the two cases partially separated. Fig. 2 represents the blank for the principal piece of enameled board in an extended condition. The lines upon which it is to be folded are indicated by dotted lines. Fig. 3 is a horizontal section on the line *x x* in Fig. 4. Fig. 4 is a vertical section on the line *y y* in Fig. 3. Fig. 5 is a vertical section on the line *z z* in Fig. 3. Fig. 6 is on a larger scale. It is a side elevation of the upper portion of the case, partially broken away to better show the construction. Fig. 7 is a vertical section showing a portion on a still larger scale.

Similar letters of reference indicate corresponding parts in all the figures where they occur.

The outer and inner cases are constructed alike, except that the inner is sufficiently smaller to apply within the outer in the well-known manner, and a portion is, as usual, cut away to allow an easier introduction and inspection of the contained papers. I will describe the construction of the outer casing.

Paper blanks are cut by hand or by machinery from sufficiently-large sheets of proper quality and creased to insure the folding with certainty along the proper lines. The paper material may be weakened along these lines by cutting partially through, if it shall be found expedient in any case. I prefer, ordinarily, to preserve the full strength of the material.

The letter A designates the entire blank, additional marks, as A′ $A^2$, &c., being used, when necessary, to indicate certain portions thereof. The end is marked A′. Two wings formed in one therewith are marked, respectively, $A^2$. Each wing $A^2$ has two flaps, $A^3$, of sufficient width to serve as a means for strongly securing the separate pieces, which are described further on, as applied to complete the remaining sides of the case.

Assuming the material to lie on the work-bench with its inner face upward, B is a metal re-enforce for the end. Its breadth coincides exactly with that of A′. Its length is sufficiently in excess of the length of A′ to afford material for peculiarly-formed folds. A portion about one-eighth of an inch in width is folded downward and backward upon itself, as indicated by B′. Beyond this a portion a little wider is folded outward, as indicated by $B^2$. This reaches outward beyond the plane of the sides. Beyond this another portion is folded upward at right angles, as indicated by $B^3$. Beyond this a portion, $B^4$, is folded inward and downward.

D D are rectangular pieces of metal of a width just equal to the corresponding sides of the case and of a length sufficiently in excess to allow for a fold, D′, at each end. In applying the parts together one fold, D′, is engaged in the narrow space between the folds $B^4$ and $B^3$. This engagement is effected by sliding or thrusting the part D D′ inward edgewise.

C C are rectangular pieces of the same material as A, applied in the positions represented. They extend from end to end of the case, lying immediately exterior to D, and are

embraced at each end by the folds D′ of the latter. A folded strip, E E′, of metal is applied on each edge of C, the exterior part, E′, being narrow.

In applying the parts together the flaps $A^3$ are received between the metal pieces D and the corresponding pieces of enameled board, C. The parts must be firmly secured in this position. The fastening may be effected by glue, shellac, rubber, or other strong cement, preferably water-proof, aided by rivets, wire staples, eyelets, or analogous metal fastenings. For ordinary purposes either of these fastenings alone may be sufficient. I have in my experiments secured the parts by eyelets G, firmly set in the ordinary manner, introducing a sufficient number along the edges of B C, extending through these parts, and also through the flaps $A^3$ and the edging metal E.

I is a ring serving as a handle. It is engaged in a swiveling stud, H, applied in the end A′ B, and serves in the same manner as the corresponding part in my previous patent referred to.

Modifications may be made in the details without departing from the principle or sacrificing the advantages of the invention. C and D may be tapered toward the open end of the inner case.

I prefer long fiber and well-sized material for the parts A C and the best charcoal-tinned iron for the metal parts B D; but cheaper material may serve with some success. I can use any fibrous material having sufficient strength and having also sufficient rigidity.

I do not in this application claim the peculiarly-folded end metals of themselves, irrespective of their special combination, such being made the subject of a claim in a separate application for patent, the serial number of which is 234,910.

I claim as my invention—

1. In a compound case of metal and fibrous material, the metallic end pieces, B, having folds B′, $B^2$, $B^3$, and $B^4$, and the separate metallic side pieces, D, having folds D′, engaged together and with the fibrous material A′ C, as herein specified.

2. The bill-file described, having a fibrous sheet cut and folded, as shown, to form the end A′, wings $A^2$, and flaps $A^3$, in combination with the end metal, B B′ $B^2$ $B^3$ $B^4$, and with the separately-formed fibrous sheets C C and side metal, D D, edging metal E E′, and fastenings G, all arranged to serve substantially as herein specified.

In testimony whereof I have hereunto set my hand, at New York, N. Y., this 25th day of March, 1887, in the presence of two subscribing witnesses.

CHAS. C. CHAMBERLAIN.

Witnesses:

ISAIAH GREENACRE,

ARTHUR JOHN HESS.