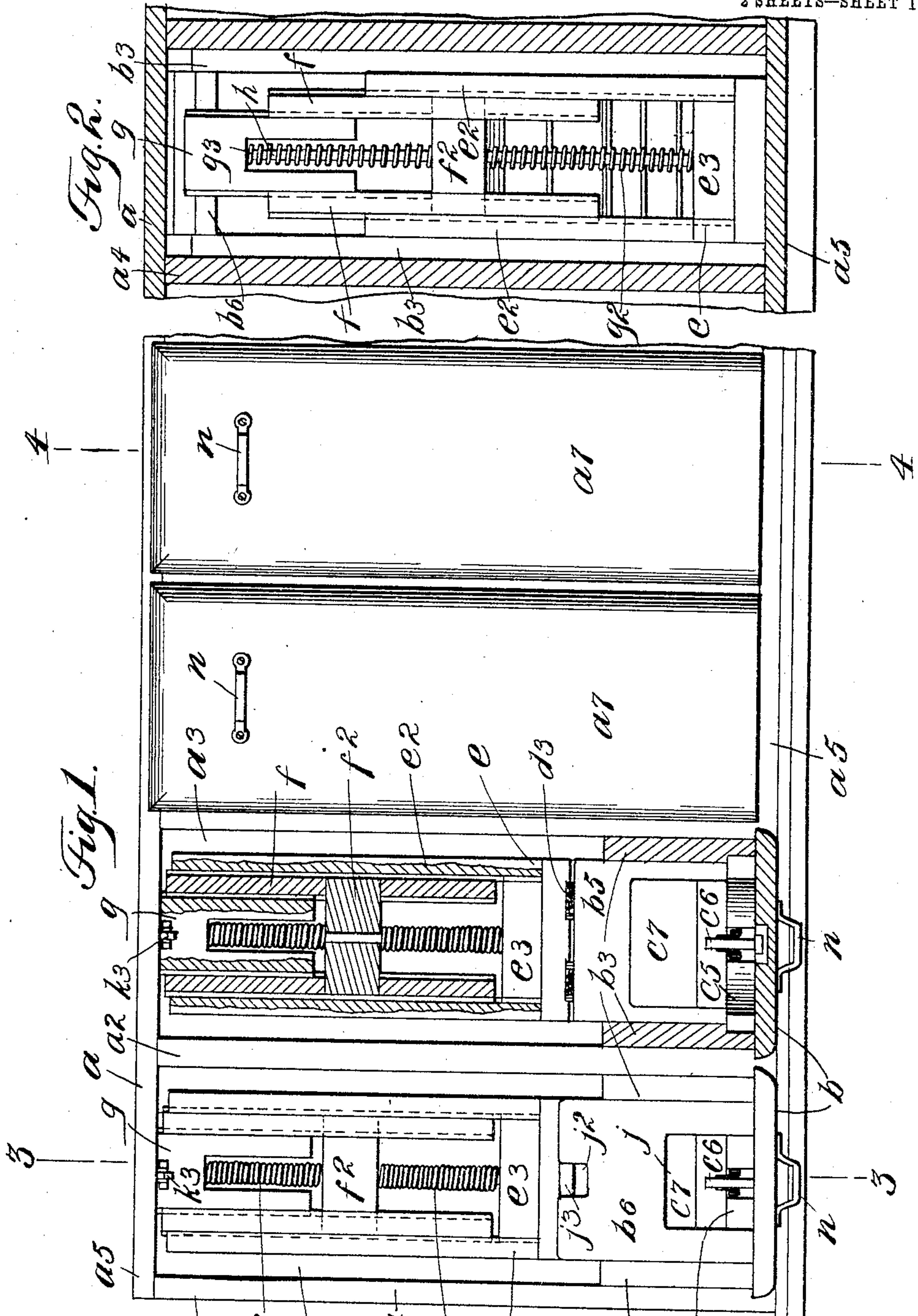


J. MACLACHLAN.

PAPER FILE.

APPLICATION FILED APR. 13, 1904.

2 SHEETS—SHEET 1.



WITNESSES

AB Grattlingly
F.A. Stewart

BY

John Mac Lachlan

Edgar Tate & Co.

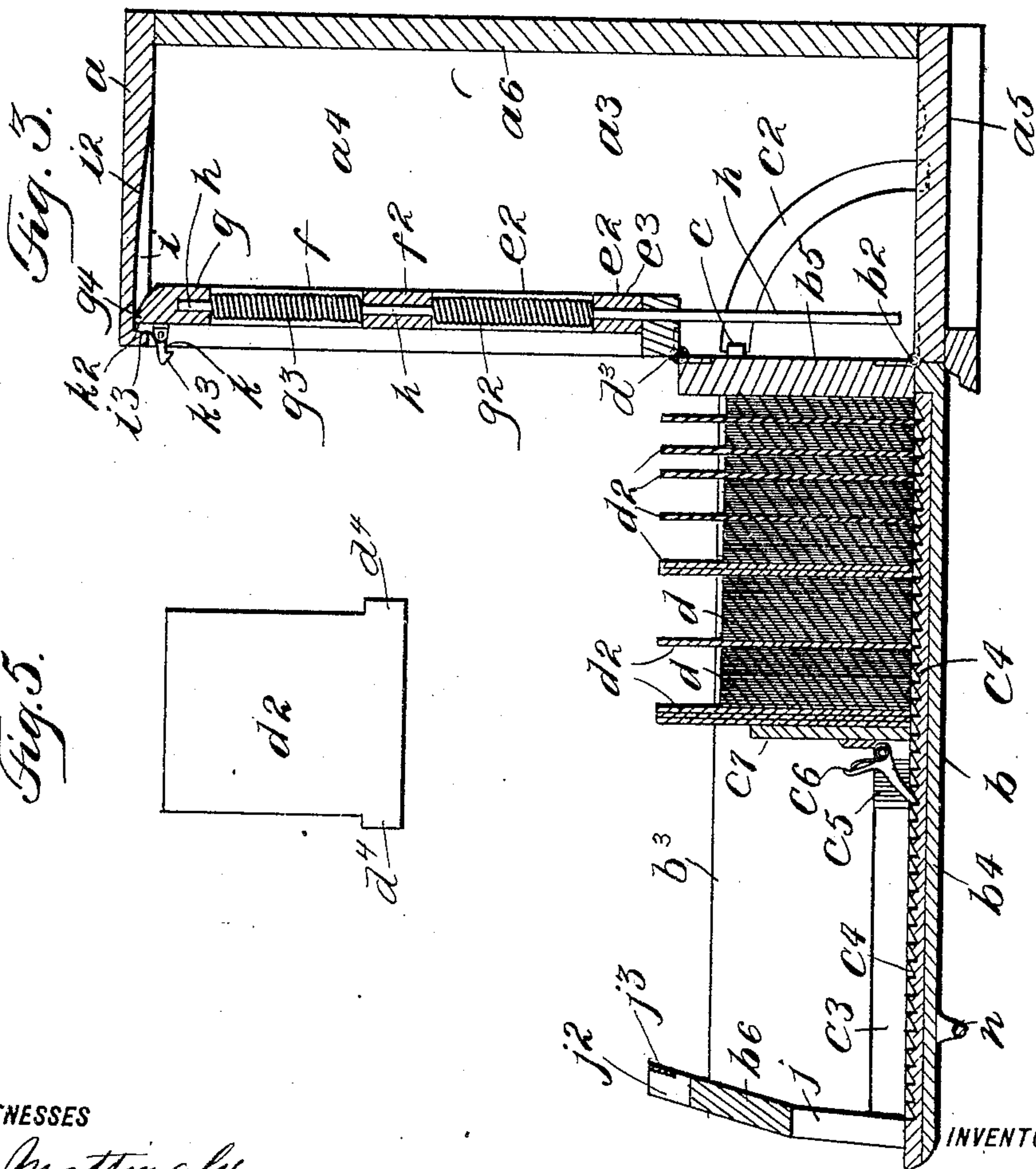
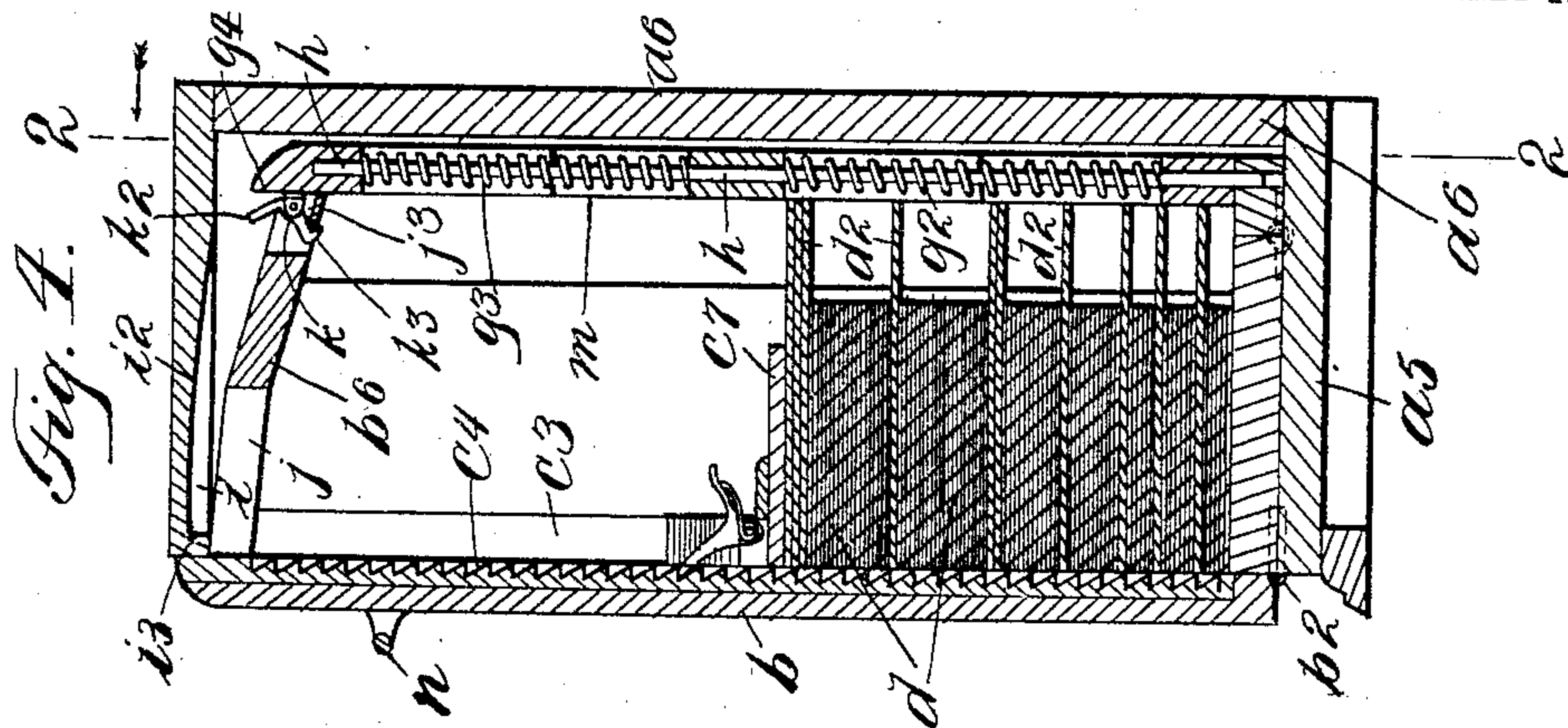
ATTORNEYS

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2 SHEETS—SHEET 2.



WITNESSES

A. B. Mattingly
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UNITED STATES PATENT OFFICE.

JOHN MACLACHLAN, OF JERSEY CITY, NEW JERSEY.

PAPER-FILE.

SPECIFICATION forming part of Letters Patent No. 779,950, dated January 10, 1905.

Application filed April 13, 1904. Serial No. 202,908.

To all whom it may concern:

Be it known that I, JOHN MACLACHLAN, a subject of the King of Great Britain, residing at Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Paper-Files, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to file boxes and cabinets for use in filing papers of various kinds and classes, such as letters, policies, invoices, and the like; and the object thereof is to provide a box-file for the purpose specified which may be used independently or separately or a number of which may be placed in or built in a cabinet or case, the box or box-file being provided with a hinged box-shaped door which opens forwardly and downwardly and is held when open in a horizontal position, the construction and arrangement being such that the papers within the box or box-file when the door is closed lie horizontally in the door, and when the door is open said papers stand on one edge in the door, a further object being to provide a box-file of the class specified in which the papers or documents are held in the door part of the box and securely retained in place in any position of the door; and with these and other objects in view the invention consists in a device of the class specified constructed as hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which—

Figure 1 is a front view of a part of a cabinet or case provided with a number of my improved box-files, the doors of two of said files being open and the construction of one of said files being shown in section; Fig. 2, a section on the line 2 2 of Fig. 4; Fig. 3, a central vertical section of one of the box-files with the door open or taken on the line 3 3 of Fig. 1; Fig. 4, a view similar to Fig. 3 with the door closed or taken on the line

4 4 of Fig. 1, and Fig. 5 a view of a partition-plate which I employ for separating and indexing the papers in the file and for similar purposes.

In the drawings forming part of this specification, reference being made to Fig. 1, I have shown a number of my improved box-files in a case or cabinet *a*, separated by a partition *a*², by means of which a plurality of compartments *a*³ are formed, each of said compartments forming a box having side walls *a*⁴ and top and bottom walls *a*⁵ and a back wall *a*⁶, the front thereof being open and provided with a hinged box-door *b*. The door *b* is hinged to the front of the bottom *a*⁵, as shown at *b*² in Figs. 3 and 4. The door *b* is composed of side walls *b*³, a front wall *b*⁴, a bottom end wall *b*⁵, and a top end wall *b*⁶, and said top end wall is curved or inclined, as shown in Figs. 3 and 4, so as to enter the box or compartment *a*³ when closed, as shown in Fig. 4. The bottom end wall *b*⁵ of the door *b* is provided with side catches or fingers *c*, which move in segmental grooves *c*², formed in the side walls *a*⁴ of the compartment or box *a*³ and by means of which the door *b* when opened is held in a horizontal position, as clearly shown in Fig. 3. The side walls *b*³ of the door *b* are provided with longitudinal grooves *c*³ adjacent to the front wall *b*⁴ thereof, and said front wall *b*⁴ is provided centrally with countersunk and longitudinally-arranged ratchet-teeth *c*⁴, and mounted in the groove *c*³ is a longitudinally-movable slide *c*⁵, provided with a spring-operated pawl *c*⁶, which is adapted to engage the ratchet-teeth *c*⁴, and the slide *c*⁵ is provided with a follower *c*⁷, between which and the bottom end wall *b*⁵ of the box-shaped door *b* the papers, policies, or other documents *d* are placed, and said papers, policies, or other documents are separated by partition-plates *d*², placed between the same for the purpose of indexing said papers, policies, or other documents or for any other purpose.

Hinged to the bottom end wall *b*⁵ of the box-shaped door *b*, as shown at *d*³, by means of spring-hinges is a yoke-shaped frame *e*, having parallel side members *e*² and in which is

mounted a supplemental slide or telescopic frame f , composed of parallel side bars connected by a cross member f^2 , and in the top end of which is mounted a slide g , and rigidly
 5 connected with the slide g is a rod h , which passes loosely through the cross member f^2 of the telescopic frame f and loosely through the cross head or member e^3 of the frame e , and between the parts e^3 and f^2 of the frames
 10 e and f is placed a spring g^2 , while between the part f^2 of the frame f and the slide g is placed a spring g^3 , and the spring g^2 serves at all times to force the frame f toward the top of the box or compartment a^3 , while the spring
 15 g^3 serves to force the slide g in the same direction.

In the top a^5 of the box or compartment a^3 is a groove or recess i , which ranges forwardly and backwardly and the top wall of
 20 which is curved longitudinally, as shown at i^2 , and the upper end of the slide g is beveled and provided with a nose g^4 , which is adapted to abut against a wall i^3 at the front end of the groove or recess i , and connected with
 25 the upper end of the slide g is a locking device consisting of a drop-pawl k , having an upwardly-directed finger k^2 and a forwardly and downwardly directed catch-head k^3 , and when the parts are in the position shown in Fig. 3
 30 the finger k^2 also strikes against the wall i^3 and the catch-head k^3 of said pawl is held in a forwardly-directed position.

The top wall b^6 of the box-door b is provided adjacent to the front b^4 of said box-door
 35 with a large opening j and at the side or edge thereof opposite the front wall b^4 with a central recess j^2 , having a transverse lock-strip j^3 , in connection with which the catch-head k^3 of the pawl k operates to lock the slide g to
 40 the top wall b^6 of the door b when the parts are in the position shown in Fig. 4.

The frames e , f , and g make up a back wall for the door b when said door is in a closed position, as shown in Fig. 4, this back wall
 45 being hinged to the bottom wall b^5 of said door, and said back wall, which is designated as a whole in Fig. 4 by the reference character m , securely holds all the papers, policies, invoices, or other documents in position.

50 It will be observed that the index cards or boards d^2 are provided at the bottom end thereof with laterally-directed lugs or projections d^4 , which fit in the grooves e^3 in the opposite side walls of the door b , and while said
 55 boards are free to move longitudinally of the door they are always held in the position shown in Fig. 3, and said boards project slightly above the side walls of the door b when the door is in a horizontal position, as
 60 shown in Fig. 3, and when the said door is closed, as shown in Fig. 4, the back wall of the door may abut against said boards, or there may be a slight space between the same, and in this position of the door all the papers or

documents rest in a horizontal position and 65 are held in proper form; but when the door is opened into the position shown in Fig. 3 the said papers or documents rest on one edge thereof and may be conveniently examined in the usual manner, and it will be apparent 70 that the follower c^7 , of which the slide c^5 forms a part, may be manipulated to any desired extent through the opening j in the top end member b^6 of the door b when the door is open, as shown in Fig. 3, or if the files or pa- 75 pers do not fill up said box-door the follower c^7 may be manipulated through the open top of the door when the latter is in a horizontal position.

Suppose the parts to be in the position shown 80 in Fig. 4. The door b may be drawn down into the position shown in Fig. 3 by catching hold of a handle n , secured to said door. In this operation the finger k^2 of the pawl k strikes the shoulder i^3 , as shown in Fig. 3, and 85 the slide g of the back wall m , which is made up of the parts e , f , and g , also strikes said shoulder, and the pawl is released from the upper end b^6 of the door, and the latter may be swung down into the horizontal position. 90 (Shown in Fig. 3.) When the door is closed, the head k^3 of the pawl k engages immediately with the lock-strip j^3 and locks the back wall m , consisting of the parts e , f , and g , to the back of the door, as clearly shown in Fig. 4, 95 and said back wall and door move backwardly into the box or compartment, as shown in Fig. 4, and in this operation the hinge-frame e and the telescopic frame f are forced downwardly by the springs g^2 and g^3 , while the part g re- 100 mains locked to the top b^6 of the door b , and when the door b is open, as shown in Fig. 3, the frame members e and f are forced upwardly and the springs g^2 and g^3 are placed under tension, as shown in said figure, and 105 these springs serve to aid in raising the door into the position shown in Fig. 4 and also to hold said door in this or in the closed position.

By means of my improvement, as hereinbefore stated, the papers in the file normally 110 rest in a horizontal position and are compactly and firmly held in this position and also prevented from sliding backward out of the box-door part of the file when the said door is closed, and the said papers are thus always 115 kept in proper form; but when the door is opened the papers or documents stand on their edges and may be conveniently examined, as in other files of this class.

In this application I have shown a number 120 of the boxes or box-files placed on a cabinet or case; but it will be apparent that, if desired, a single box or box-file may be made in this manner and may be placed on any suitable support or secured to a wall, and various 125 changes in and modifications of the construction herein shown and described and in the method of using my improved box-file may

be made without departing from the spirit of my invention or sacrificing its advantages, and I reserve the right to make all such alterations therein and modifications thereof as fairly come within the scope of the invention.

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

1. A file of the class described, comprising an upright box or case open at the front and having a box-shaped door hinged to the bottom thereof and adapted when opened to be held in a horizontal position, said door being provided with a back member which is hinged to the bottom end wall thereof and composed of separate longitudinally-movable and spring-operated parts, a locking device connected with the top part of the back member and adapted to engage the top end portion of the door when the latter is closed, and means whereby said parts will be separated when the door is pulled downwardly or opened, and the back member held within the box or case, substantially as shown and described.

2. A file of the class described, comprising an upright box or case open at the front and having a box-shaped door hinged to the bottom thereof and adapted when opened to be held in a horizontal position, said door being provided with a back member which is hinged to the bottom end wall thereof and composed of separate longitudinally-movable and spring-operated parts, a locking device connected with the top part of the back member and adapted to engage the top end portion of the door when the latter is closed, and means whereby said parts will be separated when the door is pulled downwardly or opened, and the back member held within the box or case, said door being provided with a longitudinally-movable follower, substantially as shown and described.

3. A file of the class described, comprising an upright box or case open at the front and provided with a box-shaped door which is hinged to the bottom thereof, the top end wall of said door being slanted inwardly and downwardly, and the bottom end wall thereof being provided with a back member for said door which is hinged thereto and composed of longitudinal movable and spring-operated parts, the upper end of the top part of said member being adapted to engage the top of the box or case when the door is opened and being also provided with a locking-pawl adapted to engage the top end portion of the door when the latter is closed, and to engage the top portion of the box or case at the front thereof when the door is pulled open, whereby said back member of the door is detached therefrom and

held within the box or case when the door is opened, substantially as shown and described.

4. A file of the class described, comprising an upright box or case open at the front and provided with a box-shaped door which is hinged to the bottom thereof, the top end wall of said door being slanted inwardly and downwardly, and the bottom end wall thereof being provided with a back member for said door which is hinged thereto and composed of longitudinal movable and spring-operated parts, the upper end of the top part of said member being adapted to engage the top of the box or case when the door is opened and being also provided with a locking-pawl adapted to engage the top end portion of the door when the latter is closed, and to engage the top portion of the box or case at the front thereof when the door is pulled open, whereby said back member of the door is detached therefrom and held within the box or case when the door is opened, and means whereby the door when opened is held in a horizontal position, substantially as shown and described.

5. A file of the class described, comprising an upright box or case open at the front and provided with a box-shaped door which is hinged to the bottom thereof, said door being provided with a back which is hinged to the bottom thereof and which is held within the box or case when the door is open, substantially as shown and described.

6. A file of the class described, comprising an upright box or case open at the front and provided with a box-shaped door which is hinged to the bottom thereof, said door being provided with a back which is hinged to the bottom thereof and which is held within the box or case when the door is open, and means whereby the door may be held in a horizontal position when open, substantially as shown and described.

7. A file of the class described, comprising an upright box or case open at the front and provided with a box-shaped door which is hinged to the bottom thereof, means for holding the door in a horizontal position when open, and means for holding papers in an upright position in said door when the latter is open and in a horizontal position when the latter is closed, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 9th day of April, 1904.

JOHN MacLACHLAN.

Witnesses:

F. A. STEWART,
C. E. MULREANY.