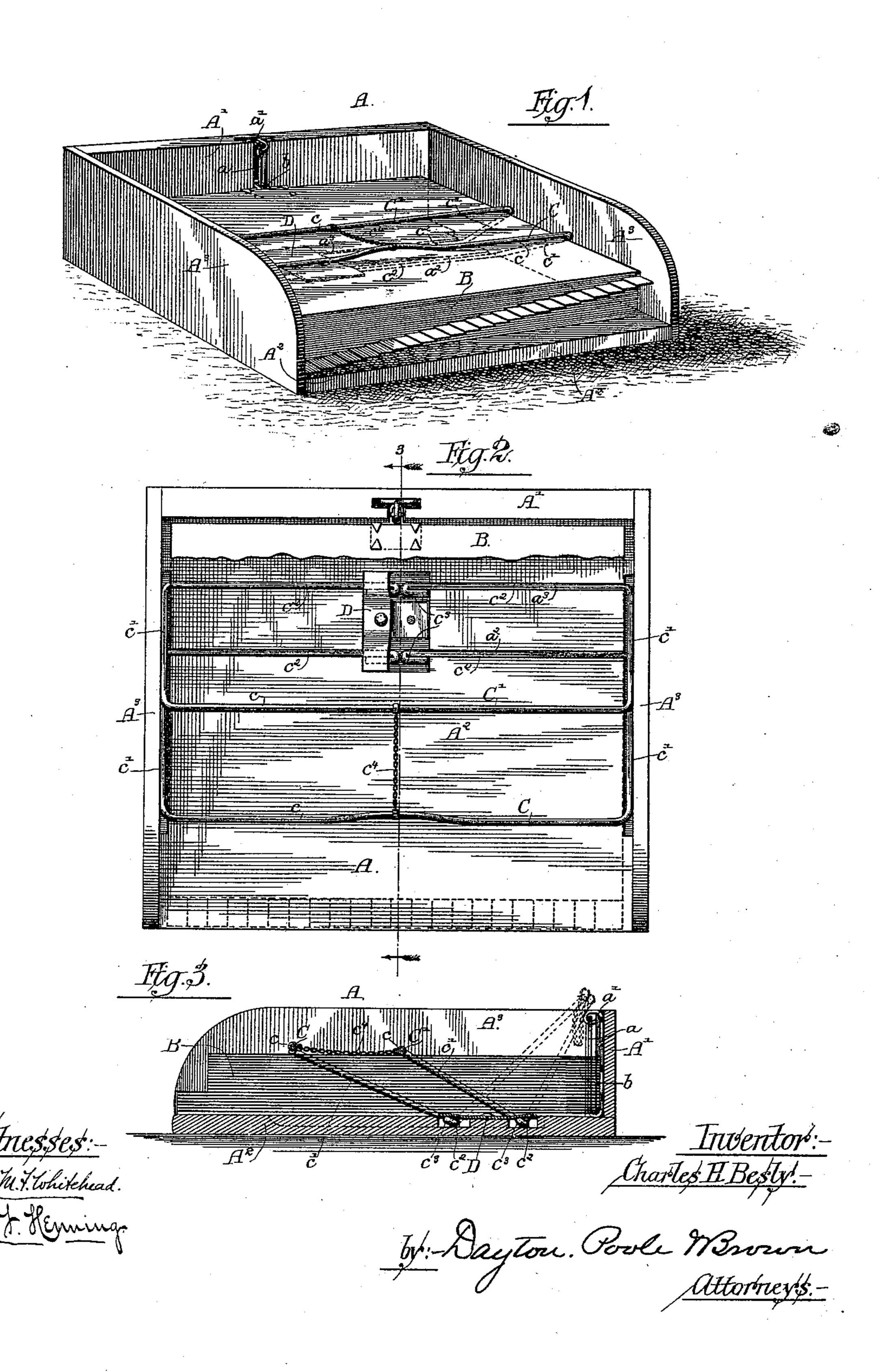
C. H. BESLY. PAPER FILE.

No. 490,707.

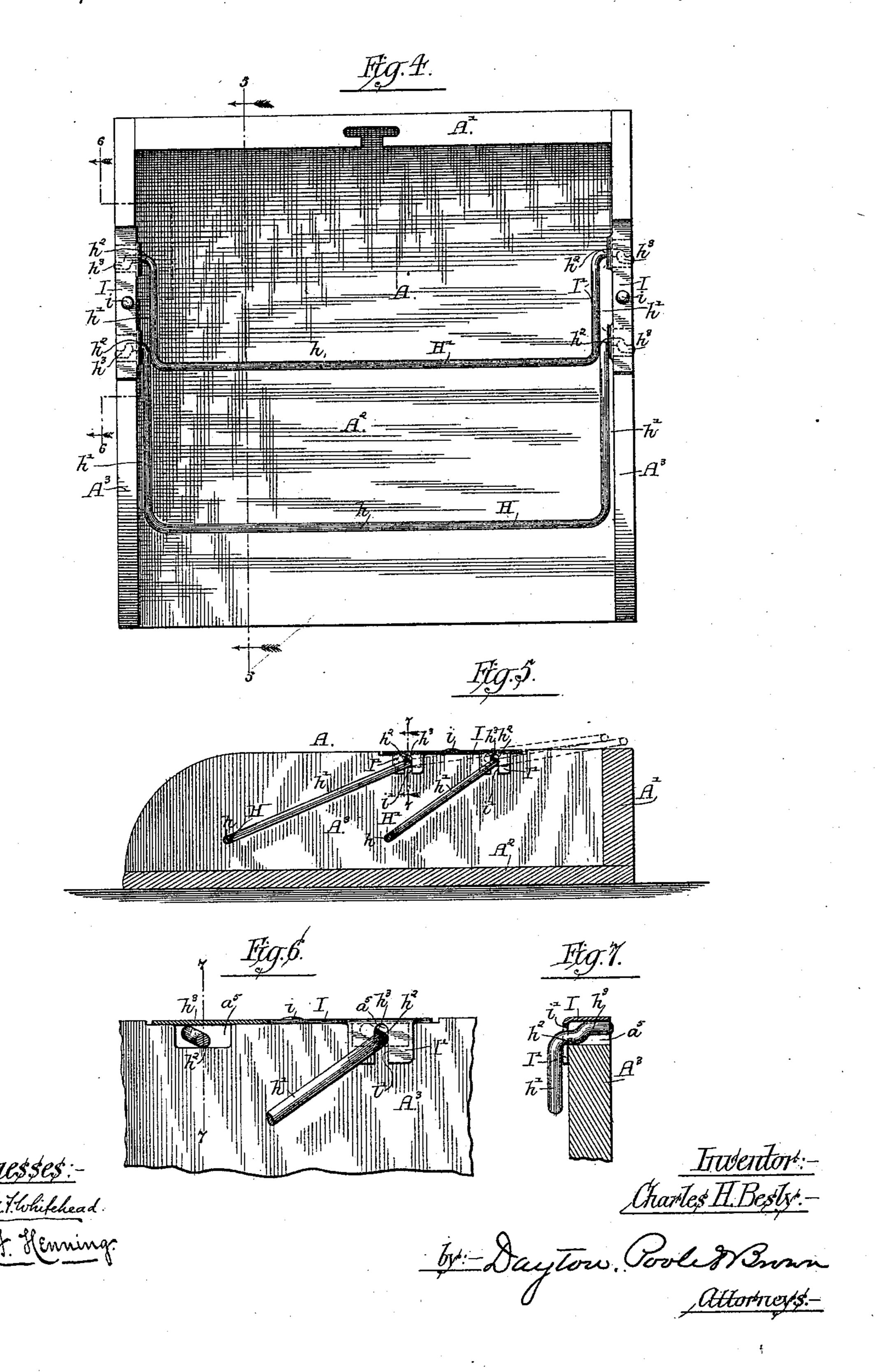
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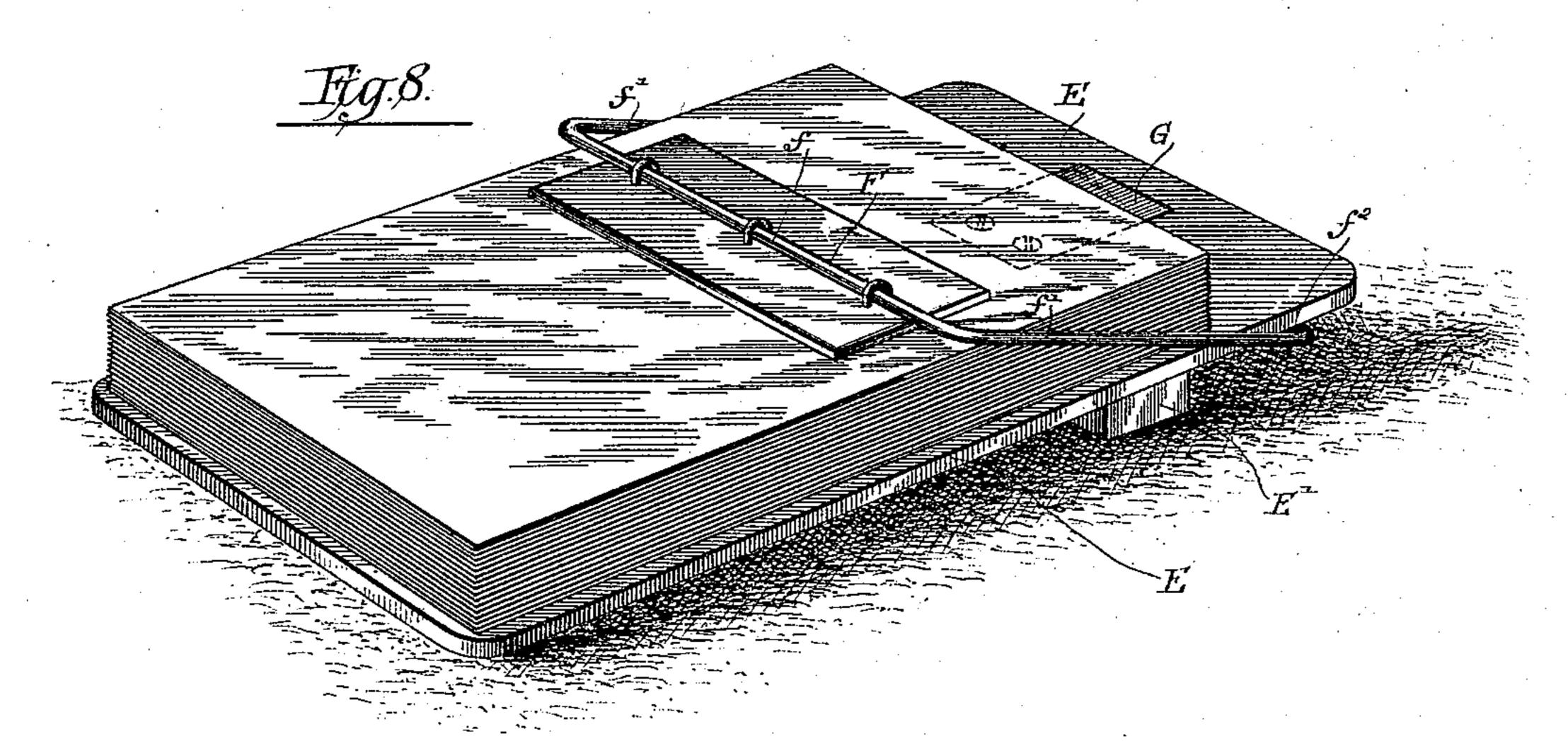
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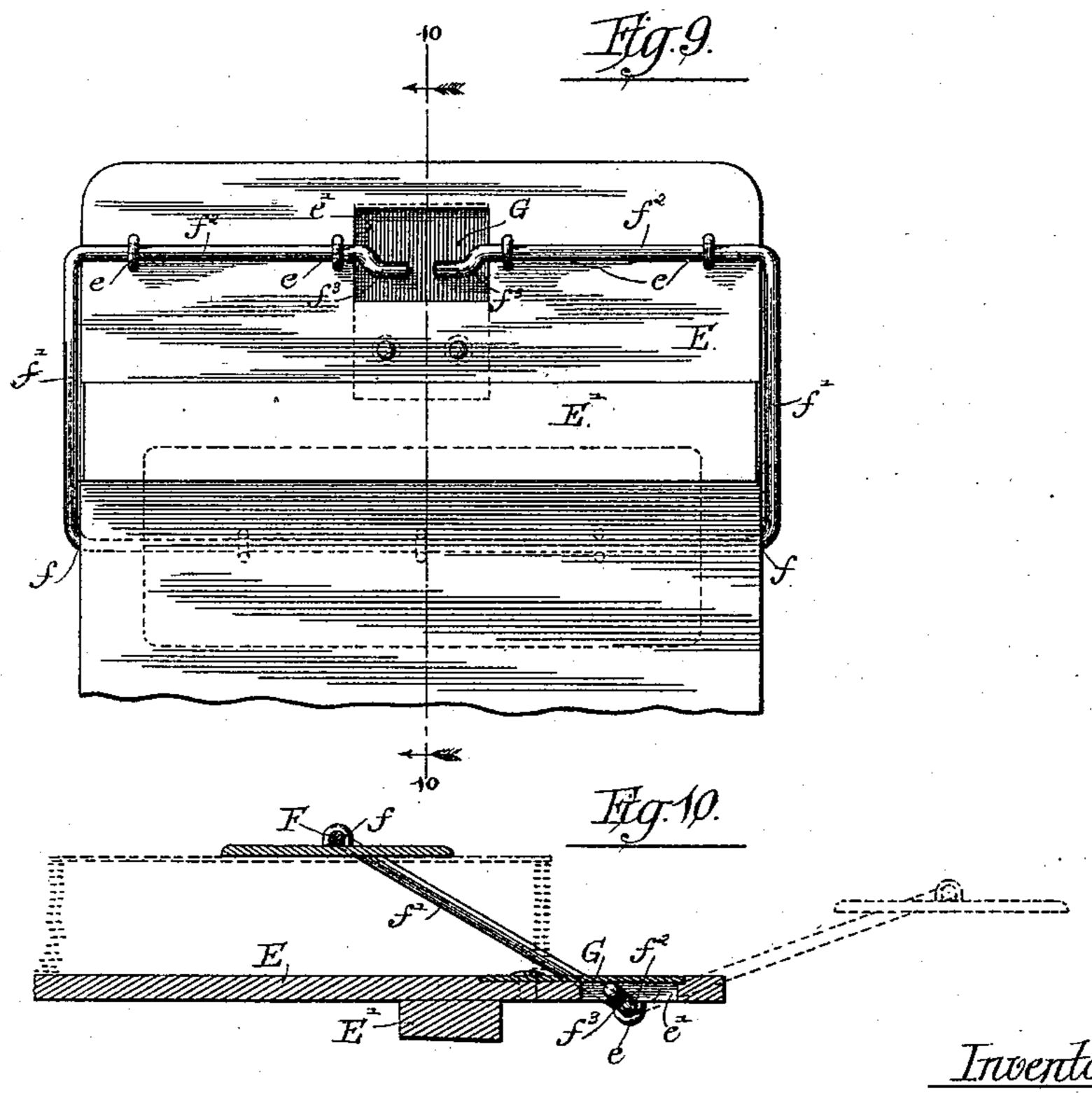


C. H. BESLY. PAPER FILE.

No. 490,707.

Patented Jan. 31, 1893.





Witnesses:-Vouistut Whitehead.

Inventor:Charles H. Besly:-

by:-Daytow. Poole V Brown Attorneys

United States Patent Office.

CHARLES H. BESLY, OF CHICAGO, ILLINOIS.

PAPER-FILE.

SPECIFICATION forming part of Letters Patent No. 490,707, dated January 31, 1893.

Application filed March 21, 1889. Serial No. 304,118. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. BESLY, of Chicago, in the county of Cook and State of Illinois, have invented certain new and 5 useful Improvements in Paper-Files; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, 1c which form a part of this specification.

This invention relates to presser or paperholding clamps for paper files or filing recep-

tacles.

The invention consists in the matters here-15 inafter described and pointed out in the ap-

pended claims.

In the accompanying drawings illustrating my invention: Figure 1 is a perspective view of a filing receptacle embodying my inven-20 tion. Fig. 2 is a plan view thereof with the papers removed. Fig. 3 is a vertical longitudinal section thereof with the papers in place, taken upon line 3-3 of Fig. 2. Fig. 4 is a plan view of the filing receptacle like 25 that shown in Figs. 1, 2 and 3 illustrating a somewhat different construction in the duplex presser. Fig. 5 is a vertical longitudinal sectional view taken upon line 5-5 of Fig. 4. Fig. 6 is an enlarged detail elevation of the 30 hinged connection between the pressers and receptacle, shown in Figs. 4 and 5. Fig. 7 is a detail section taken on line 7—7 of Fig. 6. Fig. 8 illustrates in perspective another form of my invention applied to a file having a flat 35 baseboard to support the papers. Fig. 9 is a plan view of the under part of the file shown in Fig. 8. Fig. 10 is a sectional view of the same taken upon line 10—10 of Fig. 9.

As illustrated in Figs. 1, 2 and 3, A is a fil-4c ing receptacle of the same general character as that shown in a prior application for patent, Serial No. 294,012, filed by me in the United States Patent Office, December 18, 1888. Said filing receptacle consists of a back 45 A', a bottom A² and sides A³ A³ and contains a series of index sheets or expansible index B the sheets of which are held in place within the receptacle by means of eyes b b on their rear edges engaging a holding rod a50 which is held in place within a vertical groove or recess of the back A' of the receptacle by

illustrated in Figs. 6 and 7 of said prior application hereinbefore referred to.

C C' indicate two spring pressers which are 55 hinged to the bottom A² of the receptacle and which are adapted to press upon the top of the index sheets B or upon the papers within the receptacle when such index sheets are absent, in the manner illustrated in Fig. 60 1. Said pressers may be thrown backwardly against the rear wall A' of the receptacle so as to entirely clear the index sheets or papers when it is desired to open or examine the same, or to insert other papers within 65 the file. The pressers C and C' are substantially alike and operate in the same manner, said pressers being arranged to act at separate points upon the papers in order to more securely hold the same in place. As far as 70 the novel features of construction in the pressers themselves are concerned, however, only a single presser may be employed, as will be hereinafter more fully explained.

Each of the pressers C and C' illustrated in 75 Figs. 1, 2 and 3, is hinged to the receptacle at or near the bottom of the latter, and consists of a metal rod or wire bent in the form of a rectangular ring to form a cross bar c arranged to extend across or over the papers, two arms 80 c' c' and two inwardly extending parts c^2 c^2 , the ends of which are brought together or near each other at the center of the bottom board A² beneath the papers. The pressers are hinged to the bottom board of the recep- 85 tacle by engagement of said parts c^2 c^2 therewith. For the purpose of affording a smooth surface on which the papers may rest the said bottom board is provided with transverse grooves a^2 a^8 in which the said end portions 90

 c^2 of the pressers are inserted.

D is a flat spring plate secured to the bottom of the receptacle, at a point between the ends of the pressers, and extending at its ends over the latter. The extreme ends of the wires 95 composing the parts c^2 c^2 of the pressers are bent or doubled upon said parts in the manner illustrated, to form in effect crank-arms c^{8} c^{8} adapted to bear against the under surface of the ends or arms of the spring plate D. 100 The crank arms thus formed, are disposed at such an angle with reference to the main parts of the presser, that the spring plate acting upon the arms will tend to hold the presser means of a holding device a' similar to that

firmly against the paper when said presser is in a forwardly inclined position, as illustrated in Fig. 1, and at the same time will act to throw or hold the presser in the opposite discretion or against the rear wall A' when the pressers are thrown by the hand backwardly away from the papers. The bottom board A' is of course recessed at a point beneath the plate D, to afford room for the movement of the crank-arms c^3 c^3 .

As far as the main features of the invention are concerned, the crank-arms c^3 c^3 may be made otherwise than by doubling the ends of the wire comprising the presser, but this cont5 struction is desirable and is herein claimed as a separate improvement. Its advantage is, that it renders unnecessary any specially constructed bearings for the parts c^2 c^2 of the pressers except simple grooves in the bottom 20 of the receptacle it being obvious that by reason of the bending of the said parts to form the crank-arms in the manner illustrated, the said parts c^2 c^2 are in bearing against the receptacle up to the extreme ends of the crank-25 arms, so that the downward pressure of the said spring merely tends to press the doubled ends of the wire against the opposing surface of the receptacle, instead of bringing a strain on the bearings of the said parts $c^2 c^2$, as would 30 be the case were the latter provided with crank arms made in the usual manner. As for instance, with the ends of the parts c^2 c^2 bent to form crank-arms, like those shown in Fig. 9, the downward pressure of the spring plate 35 would tend to depress the ends of the crank arms, and lift the outer ends of the parts $c^2\,c^2$ out of the grooves $a^2 a^3$ and it would become necessary to form bearings for the said parts $c^2 c^2$ completely surrounding or embracing the 40 same. Such for instance, as would be formed by inserting staples in the bottom of the receptacle in such manner as to extend over the said grooves. In the construction shown, the pressers are held in place by the pressure of 45 the spring plate against the doubled ends of the parts c^2 c^2 , without other fastening.

It follows from the construction described that the pressers may be thrown by hand either against the paper or away from the same and against the back of the receptacle and will be held by the spring in either position until again moved by the hand. The strength of the spring, or the length of the crank arms c^3 c^3 , will of course be so adjusted as to give suitable pressure upon the papers to hold the same in place in the ordinary handling of the receptacle.

The employment of two separate pressers, in the manner described, has the advantage of holding the papers at two separate points, thereby avoiding the necessity for the use of a separate press board, such as has heretofore been used. Such presser board is not only more expensive to make than a second wire presser, but is much in the way when the presser is thrown back to release the papers. It will be observed from the dotted lines in

Fig. 3 that the arms of the front presser Care made longer than those of the rear presser C' so that when the pressers are thrown back, 70 their cross-bars c c stand close to each other adjacent to the upper edge of the back wall A' of the receptacle and occupy practically no more room than would a single wire presser. If thought desirable the cross-bars cc of the 75 two pressers may be joined by a chain or cord c^4 (Figs. 1, 2 and 3) which may be grasped by the hand in manipulating the pressers. Such cord is not essential, however, because in lifting the pressers to raise them from the pa-80 pers, if the outermost presser C' is grasped and thrown backward the presser C will be engaged by and carried backwardly with said presser C', and in throwing forward the pressers, they may both be conveniently grasped 85 and moved together, inasmuch as they stand close to each other when thrown backwardly.

In Figures 4, 5, 6 and 7 is illustrated a construction wherein the ends of the presser instead of being bent inwardly and hinged to 90 the bottom of the receptacle, are turned outwardly and hinged at the upper edges of the side pieces of the receptacle, the pressers in this case being acted upon by separate spring plates. In said Figs. 4, 5 6 and 7 is shown a 95 receptacle A like that illustrated in Figs. 1, 2 and 3 and consisting of a rear wall A', a bottom A² and sides A³ A³. In this instance two metal pressers H H' are employed each of which consists of a metal rod h extending 100 over or across the papers, and arms $h'\,h'$ connected at their ends to said rod h in any suitable manner, but herein shown as made integral therewith. The inner ends of said arms h' are bent outwardly at right angles to the 105 said arms to form pivots h^2 h^2 the ends of which pivots are further bent to form crankarms $h^3 h^3$.

I is a spring plate which is secured at its middle by a screw i or otherwise to the up- 110 per edge of each side wall A3 of the receptacle, said plate being connected solely at its central part to the receptacle and having its ends free to form springs. In the side walls of the receptacle, beneath the ends of said 115 plate, are formed recesses a^5 a^5 within which the crank-arms h^3 h^3 of the presser are located when the parts are placed together. Said plate I is provided near its ends with wings or flanges I' I' which are bent down over the 120 said recesses a^5 at the inner faces of the side walls, and are provided with vertical slots i'i' within which the outwardly bent parts h^2 h^2 of the presser are inserted. The crankarms h^3 h^3 of the pressers rest in contact with 125 the under surface of the plate I, and said crank arms are placed at such angle that the plate tends by its pressure upon said crank arms to throw the presser either against the papers or against the rear part of the recep- 130 tacle and away from the papers in accordance with the position in which the pressers are placed. The notches $a^5 a^5$ may be of sufficient width to receive the crank-arms h^3 , as

3

clearly shown in Fig. 6, and the slots i'i' serve to hold the pivotal parts h^2h^2 of the pressers centrally within the slots as the pressers are turned, in an obvious manner. The flanges I'I', furthermore, serve to cover the side openings of the said notches a^5a^5 . The arms h'h' of said pressers HH' are made of such relative length that when both pressers are thrown backwardly the cross-bars hh of the pressers will come close to each other and preferably adjacent to the upper edge of the back wall A' of the receptacle as before so that both pressers will be entirely out of the way in handling the receptacle or the papers therein.

It will be understood from the above description that a main feature of my invention is embraced in a construction wherein two separate spring pressers are used in the place 20 of a single presser heretofore employed; and another main feature consists in making the arms of one of said pressers shorter than those of the other presser, so that when the pressers are swung backwardly away from 25 the papers the cross-bars of the pressers will be nearer together than when the pressers are in contact with the papers. Two separate pressers arranged and constructed in the manner described may be made in detail in 30 many different ways and may be employed in connection with a filling receptacle constructed as above shown or otherwise. It will be entirely obvious for instance, that if the sides and back wall of the receptacle 35 shown in Figs. 1, 2 and 3 are removed, the pressers therein illustrated will operate in the same manner as when the said sides and back wall are present.

The particular construction present in the 40 pressers shows in said Figs. 1 to 7 embracing pivot rods attached to or forming part of the presser arms, and provided with crankarms engaged by a flat spring plate or plates secured to the receptacle or base-board, is also 45 of great advantage as affording a simple and cheap form of spring presser which will not easily get out of order and which is very durable. This feature of construction may be applied as well in a file having a single presser, 50 as in one having two pressers as illustrated in Figs. 1 to 7 and this feature as well as other details of construction which are capable of use on a single presser is herein claimed without restriction to its use in connection 55 with two pressers.

To illustrate the advantages of the features of construction last above referred to, and which are adapted for use in connection with a single presser, I have shown, in Figs. 8, 9 and 10, a file having a flat base board upon which papers rest, and a single presser connected therewith. In this instance E is a flat base-board provided near its upper end with a cross piece or cleat E'. F is a wire presser which is bent to form a cross piece f and arms f' f' and is hinged at the inwardly bent end portions f^2 f^2 of said arms beneath the base

board near the upper end of the latter, by means of staples e e engaging said parts $f^2 f^2$ in the manner illustrated. The presser is 70 hinged at such point that its cross-piece fmay be placed in position either to rest across the upper ends of the papers upon the board or thrown backwardly clear of the same, as indicated in dotted lines in Fig. 10. At the 75 center of the file board, adjacent to the ends of the wire presser F, a hole e' is made through said board, and over the said hole is placed the end of a flat metal spring G which is secured to the upper surface of the board, in 80 the manner clearly shown in the drawings, Fig. 6. The ends of the parts $f^2 f^2$ are bent to form crank-arms $f^3 f^3$ which enter the said hole e' and bear against the under surface of the spring G, in the manner clearly shown 85 in the drawings. Said crank arms are disposed at such angle that the action of the spring thereon will tend to force the presser against the papers and thereby hold or clamp the same upon the board when the presser is 90 placed in contact with the papers, as illustrated in full lines in Figs. 1 and 6. When the presser is lifted clear of the papers and thrown backwardly into the position shown in dotted lines in Fig. 10, however, the spring 95 acts upon the crank arms in such manner as to hold the presser away from the papers, as will be readily understood from the illustration.

I claim as my invention:

1. In a paper file the combination with a receptacle or base board for the papers, of two or more spring pressers each consisting of a cross-bar and two arms supporting said cross-bar, the arms being connected with the body of the file and projecting therefrom in the same direction when the pressers are in bearing upon the papers, the cross-bars of the pressers having such bearing upon the papers at two different and separated places.

2. The combination, with a receptacle or base-board, of two or more hinged pressers each consisting of a cross-bar and two arms supporting the same, and a spring or springs actuating said pressers, the arms of one presser being shorter than those of the other so that the cross-bars of the pressers will be nearer each other when said pressers are folded backwardly than when in operative position, substantially as described.

3. The combination with a receptacle or base-board of a hinged presser consisting of a cross-bar extending transversely of the receptacle or base-board and provided with two arms, having inwardly extending pivot rods, which have hinged or pivotal connection with the receptacle or base-board and are provided at their inner ends with eccentric crankarms located adjacent to each other at the center of the base-board or receptacle, and a spring attached to the base-board or receptacle and acting by pressure upon both of said crank-arms, substantially as set forth.

4. The combination, with a recessed recep-

tacle or base-board, of a hinged presser consisting of a cross-bar and two arms supporting the same, said arms being provided with pivot-rods having crank-arms, which crank arms are located within the recesses of the receptacle or base board and a spring or springs attached to the receptacle or base-board acting upon the said crank-arms, and covering said recesses substantially as described.

5. The combination, with a recessed receptacle or base-board, of a hinged presser consisting of a cross-bar and two arms supporting the same, said arms having inwardly extending pivot rods provided with crankarms, which crank arms are located within the recesses of the receptacle or base board and a spring or springs attached to the receptacle or base-board acting upon the said crank-arms, and covering said recesses, sub-

stantially as described.

6. The combination, with a base-board, of a hinged presser consisting of a cross-bar and two arms supporting the same, said arms being provided with inwardly extending pivot-rods which are hinged to the base-board and terminate near each other, and are provided with crank-arms at their adjacent

ends, and a spring acting upon both of said crank-arms, substantially as described.

7. The combination, with a base-board provided with a transverse groove, of a presser consisting of a cross-bar and two arms supporting the same, said arms being provided with inwardly extending pivot rods inserted in the said groove and provided with crankarms, and a spring or springs secured to the base-board and acting upon said crank-arms, substantially as described.

8. The combination with a base-board provided with a transverse groove, of a presser consisting of a cross-bar and two arms supporting the same, said arms being provided with inwardly extending pivot rods inserted in the said groove and provided with crank-45 arms, formed by doubling the ends of the pivot rods, and a spring or springs secured to the base-board and acting upon said crank-arms, substantially as described.

In testimony that I claim the foregoing as 50 my invention I affix my signature in presence of two witnesses.

CHARLES H. BESLY.

Witnesses:

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C. CLARENCE POOLE,
HARRY COBB KENNEDY.