No. 640,155. Patented Dec. 26, 1899.

# C. H. BESLY & T. J. SULLIVAN.

## DROP FILE CABINET.

(Application filed Apr. 12, 1899.)

(No Model.)

Fig 1

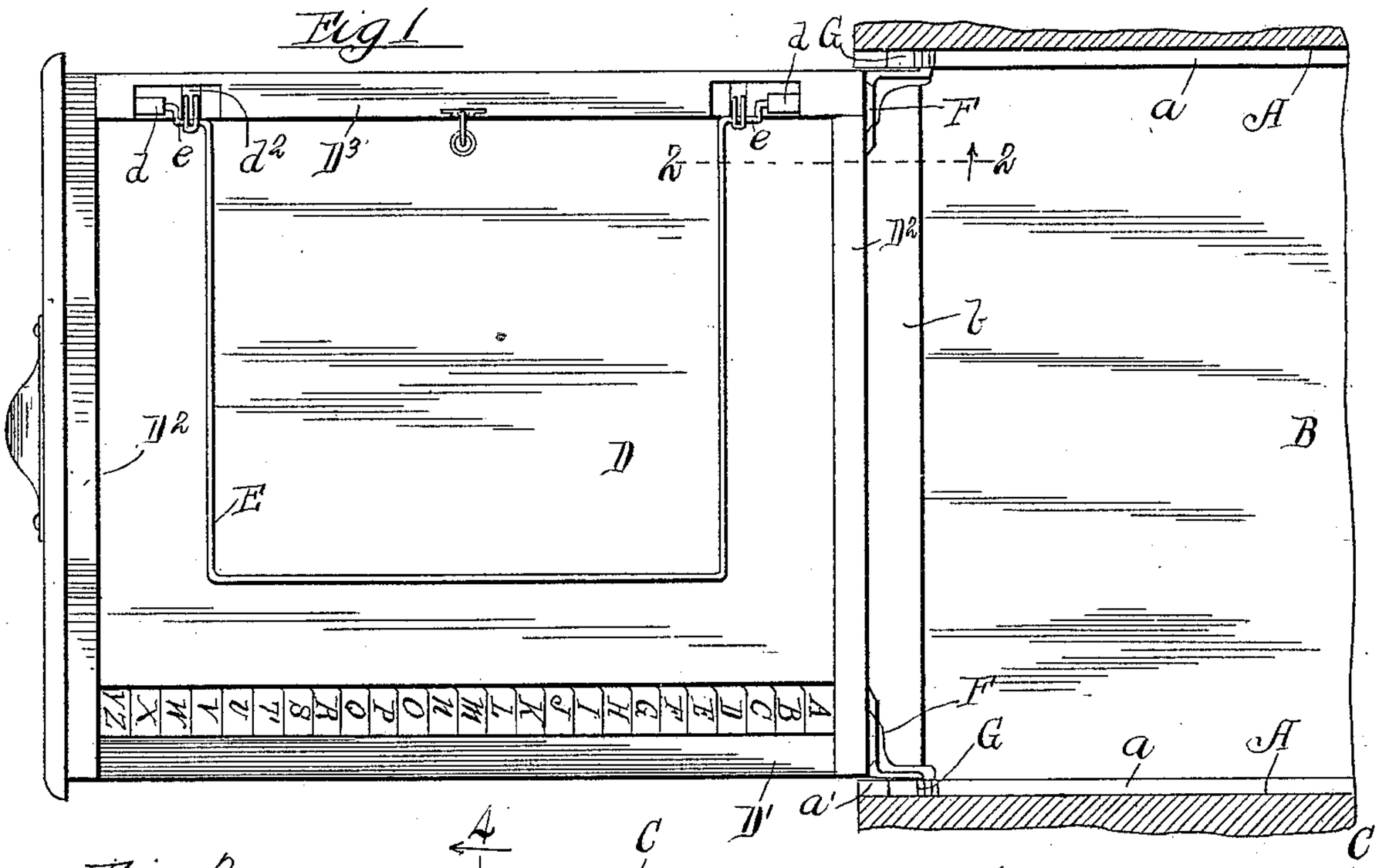


Fig 2

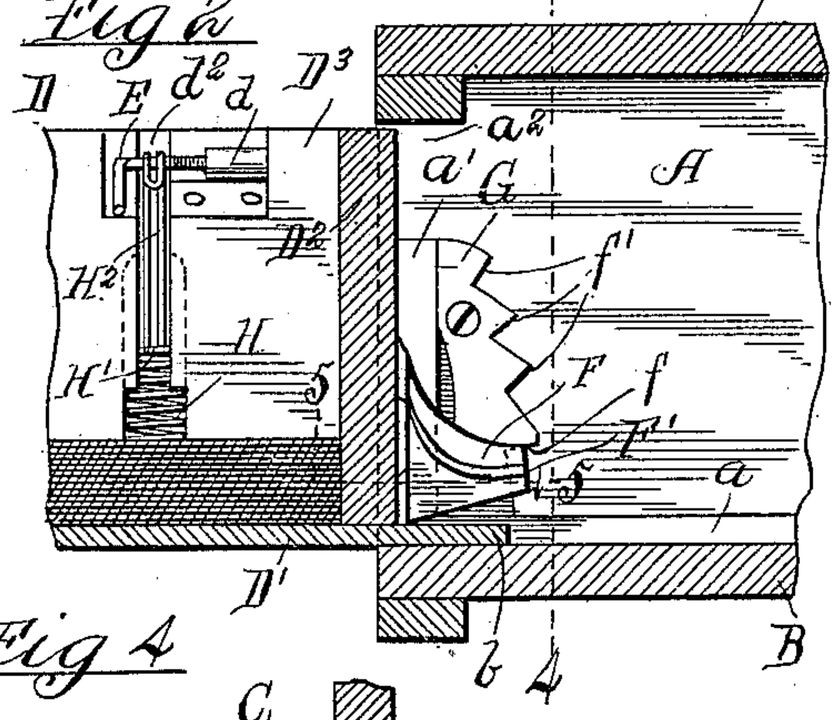


Fig 3

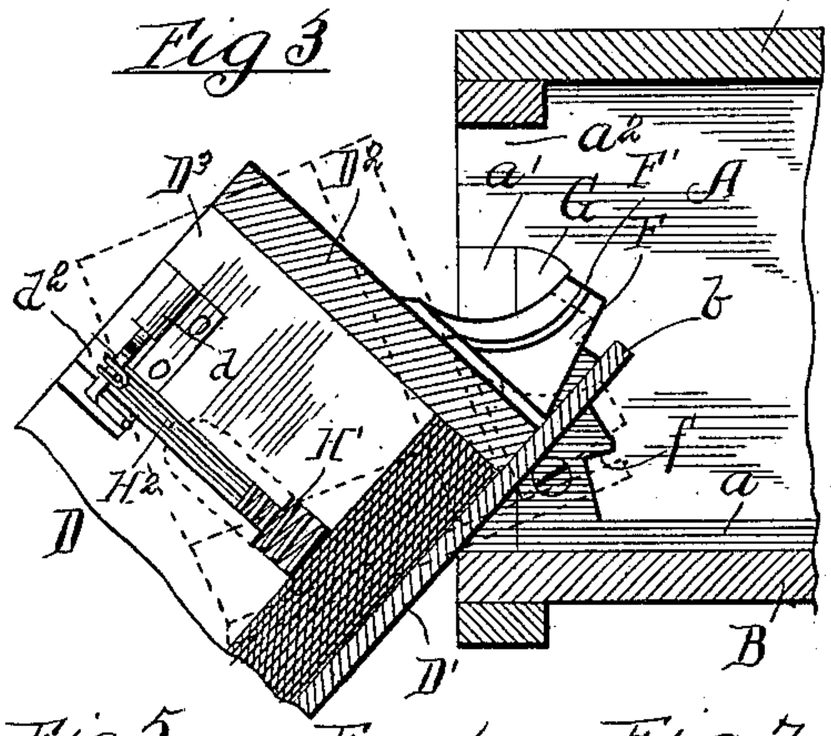


Fig 4

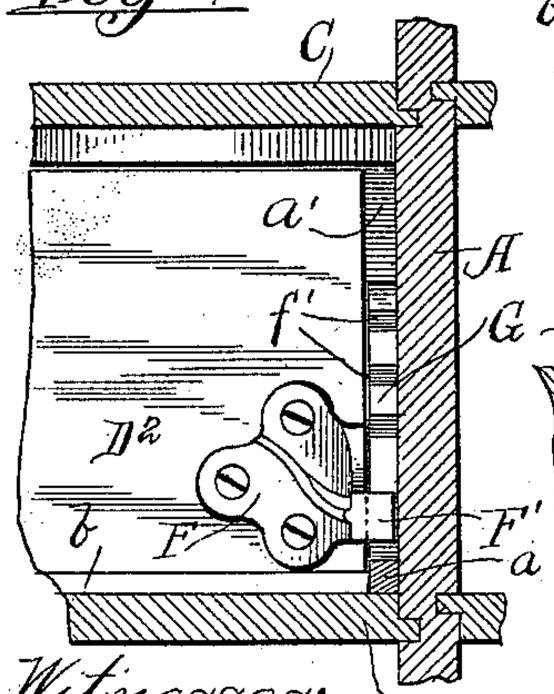


Fig 5

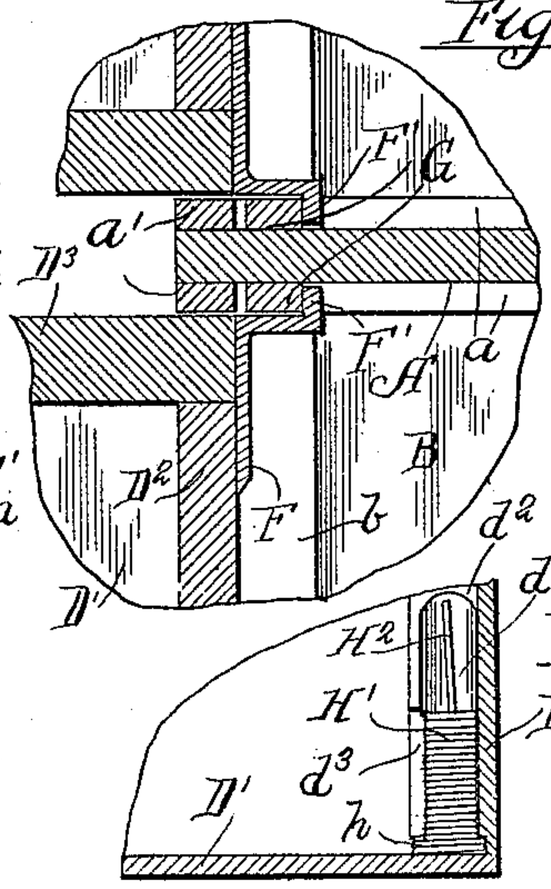


Fig 6

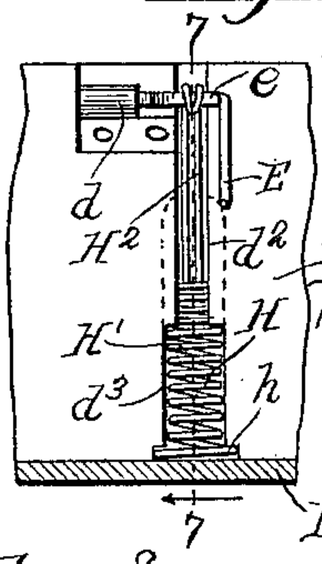


Fig 7

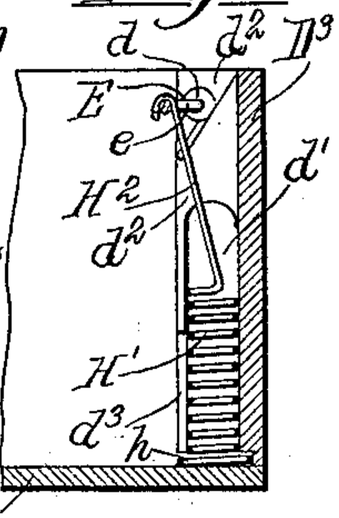


Fig 8




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by Poole & Brown their Attys

# UNITED STATES PATENT OFFICE.

CHARLES H. BESLY AND TIMOTHY J. SULLIVAN, OF CHICAGO, ILLINOIS.

## DROP FILE-CABINET.

SPECIFICATION forming part of Letters Patent No. 640,155, dated December 26, 1899.

Application filed April 12, 1899. Serial No. 712,684. (No model.)

*To all whom it may concern:*

Be it known that we, CHARLES H. BESLY and TIMOTHY J. SULLIVAN, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Drop File-Cabinets; and we 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, which form a part of this specification.

This invention embraces improvements in filing-cabinets for documents of that class known as "drop file-cabinets" or those provided with a plurality of cells or compartments and a plurality of filing cases or receptacles which when withdrawn from the compartments of the cabinet need not necessarily be entirely detached therefrom, but may be engaged by a supporting device adapted to hold said cases or receptacles in convenient position.

The invention also embraces an improved construction in the pressing or holding device of a filing-cabinet, this feature of the invention relating more especially to a presser-actuating spring and means for securing the same in its operative position.

In the drawings, Figure 1 is a plan section taken through one of the cells of a cabinet, with the drawer withdrawn. Fig. 2 is a detail section taken on line 2 2 of Fig. 1. Fig. 3 is a view taken on the same line, but showing the drawer in an inclined position. Fig. 4 is a vertical section taken on line 4 4 of Fig. 2. Fig. 5 is a horizontal section taken on line 5 5 of Fig. 2. Fig. 6 is a view in elevation of the side of a drawer with index-leaves removed. Fig. 7 is a vertical section taken on line 7 7 of Fig. 6. Fig. 8 is a fragmentary view similar to that shown in Fig. 7, with the presser-actuating spring released.

As shown in said drawings, A A designate the side walls of a cell or compartment belonging to a filing-cabinet of ordinary construction, B the bottom wall, and C the top wall thereof.

D designates a sliding drawer or receptacle of the usual form provided with a plurality of index-leaves between which the letters or documents are filed. Said drawer comprises a bottom wall D′, front and rear walls $D^2$ $D^2$, and a side wall $D^3$, the wall opposite last-mentioned wall being omitted to permit ready access to the index-margin of the index-leaves as common in such devices.

E designates a spring-actuated presser or bail, which is pivotally connected in suitable bearing *d*, located at the margin of the side wall $D^3$, and adapted to engage the filing-sheets with a yielding pressure to hold the same and the contained papers in place.

A main object of our invention is to provide means for holding the drawer or receptacle D at various positions or angles when said drawer is withdrawn from its cell to render the same convenient of access for the removal and insertion of papers or documents. For this purpose the drawer is provided at the rear side or end thereof with one or more rigidly-attached laterally-projecting studs or lugs, which are adapted to engage either one of a plurality of shoulders or notches located at one or both of the sides of the cell and in the path of said lug or lugs in such manner as to intercept the same when the drawer has been almost completely withdrawn from the cell and lock the drawer from farther outward movement and hold it at a desired angle with respect to the cell-walls.

In the construction illustrated the drawer is provided on the rear face of its rear wall, on each side thereof and adjacent to its bottom margin, with rearwardly-extending brackets F F, secured rigidly thereto by screws or the like means. Said brackets are provided on their rear ends with laterally-directed studs or lugs F′ F′, which project slightly beyond the sides of the drawer. To accommodate said lugs, the cell is made of slightly-greater width than the drawer and is provided on the opposite sides of its bottom wall with guide-strips *a a*, which engage the side edges of the drawer and hold the same from lateral movement in the cell. G G designate locking-plates secured to the side walls of the cell, at the front margin thereof, said plates being located in position for contact therewith of the lugs F′ of the brackets as the drawer is drawn outwardly and arrest the movement of the drawer when the rear edge of the drawer is adjacent to the front of the cabinet. Said plates are located a short distance inside of the end of the side wall, and filling pieces or

strips $a'$ are located between the plates and the edges of said walls to give a finished appearance thereto. The strips $a'$ are of such thickness as to engage the side walls of the drawer when the latter is contained within the cell. Said plates are provided on their lower ends with downwardly-facing shoulders $f$, which are disposed in the plane of the lugs F′ of the locking-brackets and are occupied by said lugs when the drawer is in the position shown in Fig. 1. Said shoulders receive the upward pressure of the rear end of the drawer, due to the weight thereof in the part on the opposite side of the line of support of the drawer upon the bottom wall of the cell and serve to lock the same rigidly in a horizontal position at a level thereof. Said plates are also provided in their rear margins with other shoulders $f'$, adapted to receive the lugs F′ of the brackets when it is desired to incline the drawer to bring the outer side thereof in a plane below the level of the cell. This arrangement is desirable when the drawer is located at such height as to make it inconvenient of access to the user when supported horizontally. The lug F is shown in full lines in Fig. 3 as occupying the extreme upper notch or shoulder $f'$, so that said drawer is disposed at the greatest inclination to the horizontal, while the dotted lines in said figure show the lug as engaging an intermediate notch or shoulder and with the outer end of the drawer occupying an intermediate angular position. The bottom wall of the drawer extends rearwardly beyond the rear wall thereof, as shown at $b$, so as to afford ample support therefor when the drawer occupies a horizontal position and with the lugs F′ engaging the lowermost notches or shoulders $f$ of the locking-plates. The locking-plates may obviously be of other form than herein shown and otherwise located, as found most convenient in each particular construction—as, for instance, said plates may be set into the walls and suitable grooves or recesses formed in the wall to receive the holding-lugs F′. Moreover, the same results will obviously be secured if the notches $f$ and $f'$ be formed in suitable recesses in the walls.

The construction above described affords a convenient means for locking the drawer in rigid relation to the cell when the former is withdrawn sufficiently to afford easy access to the contents of the drawer, so that said drawer need not be detached from the cabinet and the weight of the same thrown upon the user. Moreover, such construction obviates the liability of the contents of the drawer being disarranged, as might occur if the same were completely withdrawn from the cabinet.

The locking-plates are made of less vertical height than the cell, so that spaces $a^2$ are left between said plates and the upper wall of the cell for the passage of the lugs F′ when the drawer is being withdrawn from or inserted into its cell. When it is desired to remove the drawer from the cell, it is first withdrawn to a position slightly inside of that shown in Fig. 2 or with the lugs F′ in rear and out of contact with the locking-plates. The drawer is then inclined, as shown in Fig. 3, to raise the rear end thereof and attached lugs above the level of the locking-plates, when they may be withdrawn through the space $a^2$. The insertion of the drawer is of course a reversal of the operation of removal just described.

Referring now to our improved presser-bail-actuating springs and means for connecting the same with the wall of the drawer and the bail, these parts are constructed as follows: Said springs, which are designated as a whole by the letters H H, are each made from a single piece of wire and each consists of a spiral portion H′, one end of which is adapted to be attached to the wall of the drawer, and a shank portion $H^2$, which is adapted to be connected at its outer end with a crank $e$, formed in the bail just inside of its pivotal bearing $d$ on the rear wall of the drawer. Said springs are located in vertical grooves or recesses $d'$, formed in the front face of the rear wall of the drawer. The inner ends of said recesses are of sufficient width and depth to receive the spiral portions of the springs, while the outer ends of said recesses, which contain the shanks of the springs, have the form of narrow grooves $d^2$. The larger parts of the recesses are made of sufficient length to accommodate the springs when the latter are expanded, as occurs while the bail is being thrown backwardly. As a means for attaching the springs to the wall of the drawer and preventing the same from rising in said recesses when under tension, shoulders $h$ are provided at the inner ends thereof, which engage downwardly-facing shoulders formed at the lower ends of the recesses by enlarged portions $d^8$ of said recesses. Said shoulders $h$ are formed by enlarging the coil or coils at the lower end of each spring. Said springs serve to hold the bail in its operative position and also to hold the same in its retracted position when the cranks $e$ are swung to positions behind the pivotal axis of the bail. The openings of the inner or enlarged ends of the recesses $d'$ are made the full width of said recesses, as shown at $d^3$, to permit the passage of the spring laterally therethrough, while the openings for the remaining portions of the recesses are made of sufficient width only to permit the passage of the shanks of the springs therethrough. Said widened portions of the recess are of slightly-greater length than the length of the spring when disconnected from the bail and contracted, as shown in Fig. 8. This construction and arrangement enable the spring and connected shank to be easily inserted in place and to be removed laterally from the recesses $d'$ when for any reason such removal is desired.

A main feature of our invention is embraced in the construction which includes means on the drawer and cabinet adapted for engagement when the drawer is withdrawn

from the cabinet and to sustain the drawer at the front of the cabinet, such interlocking consisting of two interlocking parts, one on the cabinet and the other on the drawer, and one of which is multishouldered, or provided with a series of notches or shoulders, either one of which may be engaged with the other part to vary the angular position of the drawer, the part on the cabinet in the instance illustrated being the locking-plate and the part on the drawer being the laterally-projecting lug which engages said locking-plate. The same general results may, however, be obtained by a reversal of the said construction illustrated where the multishouldered part is in the drawer and the projection engaged therewith is attached to the cabinet.

We claim as our invention—

1. The combination with a sliding drawer and a cabinet provided with a compartment adapted to receive said drawer, of interlocking parts upon said drawer and cabinet adapted for engagement when the drawer is drawn out of the compartment and when said drawer is in different angular positions.

2. The combination with a sliding drawer and a cabinet provided with a cell or compartment adapted to receive said drawer, of interlocking parts on the drawer and cabinet, one of which is multishouldered to sustain the drawer at varying angular positions when withdrawn from the cabinet.

3. The combination, with a sliding drawer and a cabinet provided with a compartment adapted to receive said drawer, of a multishouldered locking-plate attached to the side wall of said compartment near the front end thereof, and a lug on the rear end of said drawer adapted to engage said locking-plate.

4. The combination with a sliding drawer and a cabinet provided with a cell or compartment adapted to receive said drawer, of a locking-plate attached to the wall of said cell at the front end thereof, and a rearwardly-directed bracket on the rear end of said drawer provided with a laterally-directed lug which projects beyond the drawer and is adapted to engage said locking-plate.

5. The combination with a sliding drawer or cabinet provided with a compartment adapted to receive said drawer, said drawer being provided with a laterally-projecting lug and the side wall of the compartment having a plurality of downwardly-facing locking-shoulders and above said shoulders with a space to permit the passage of the lug in removing the drawer from the cabinet.

6. The combination with a sliding drawer and a cabinet provided with a compartment adapted to receive said drawer, of a multishouldered locking-plate attached to the side wall of said compartment near the front end thereof, and a lug on the rear end of said drawer which projects beyond the drawer and is adapted to engage said notch or shoulder of the locking-plate, said locking-plate terminating below the top of the compartment to afford a space for the passage of the lug in removing the drawer entirely from the cabinet.

7. The combination with a sliding drawer and a cabinet provided with a cell or compartment adapted to receive said drawer, said cell being made of greater width than the drawer, and provided at the sides of its bottom wall with guide-strips which engage the sides of said drawer, multishouldered locking-plates on the side walls of said compartment near the front end thereof, and laterally-directed lugs on the rear end of said drawer adapted to engage said locking-plates.

8. The combination with a sliding drawer and a cabinet provided with a compartment adapted to receive said drawer, said cell being made of greater width than the drawer and provided at the sides of its bottom wall with guide-strips which engage the sides of said drawer, multishouldered locking-plates on the side walls of said compartment near the front end thereof, laterally-directed lugs on the rear end of said drawer, and filling-strips of wood secured to the side walls of the compartment outside of said locking-plates, adapted to engage said locking-plate, said locking-plates and filling-strips being made of less vertical length than the height of said compartment to provide spaces between the plates and the upper wall of the compartment for the passage of said lugs when the drawer is removed from or inserted into the compartment.

9. The combination with a sliding drawer and a cabinet provided with a compartment adapted to receive said drawer, of a locking-plate on the side wall of said compartment near the front end thereof provided with a downwardly-facing shoulder, and a rearwardly-extending bracket on the rear end of the drawer provided with a laterally-directed lug adapted to engage said shoulder of the locking-plate, the bottom wall of said drawer being extended rearwardly beyond the plane of the rear wall of the drawer to afford attachment for said bracket.

10. The combination with a filing-receptacle and its presser-bail, said receptacle being provided on its rear wall with a laterally-opening recess, of an expansive coiled spring located in said recess and connected at its upper end with said bail, said spring having at its lower end an enlarged part constituting a shoulder adapted to engage a downwardly-facing shoulder at the lower end of said recess, the lateral opening of said recess at the lower end thereof being made of such size as to permit the spring to be withdrawn therefrom and inserted thereinto when said spring is disengaged from the bail and in its contracted condition.

11. The combination with a filing-receptacle and its presser-bail, said receptacle being provided in its wall with a laterally-opening recess, a bail-actuating spring consisting of an expansive spiral coil and an attaching-

shank, said shank and coil being made from a single piece of wire.

12. As a new article of manufacture, a bail-actuating spring consisting of an expansive spiral coil and an attaching-shank, said shank and coil being made from a single piece of wire, and a coil or coils at the lower end of said spring being enlarged to constitute an annular upwardly-facing shoulder.

13. The combination with a filing-receptacle and its presser-bail, said receptacle being provided in its wall with a laterally-opening recess, of a bail-actuating spring consisting of an expansive spiral coil, and an attaching-shank, said shank and spring being made from a single piece of wire and the coil or coils at the lower end of said spring being enlarged to constitute an annular upwardly-facing shoulder adapted to engage an opposing shoulder in the recess.

In testimony that we claim the foregoing as our invention we affix our signatures, in presence of two witnesses, this 29th day of March, A. D. 1899.

CHARLES H. BESLY.
TIMOTHY J. SULLIVAN.

Witnesses:
WILLIAM L. HALL,
CHARLES W. HILLS.