E. G. DAY.

FILING DEVICE.

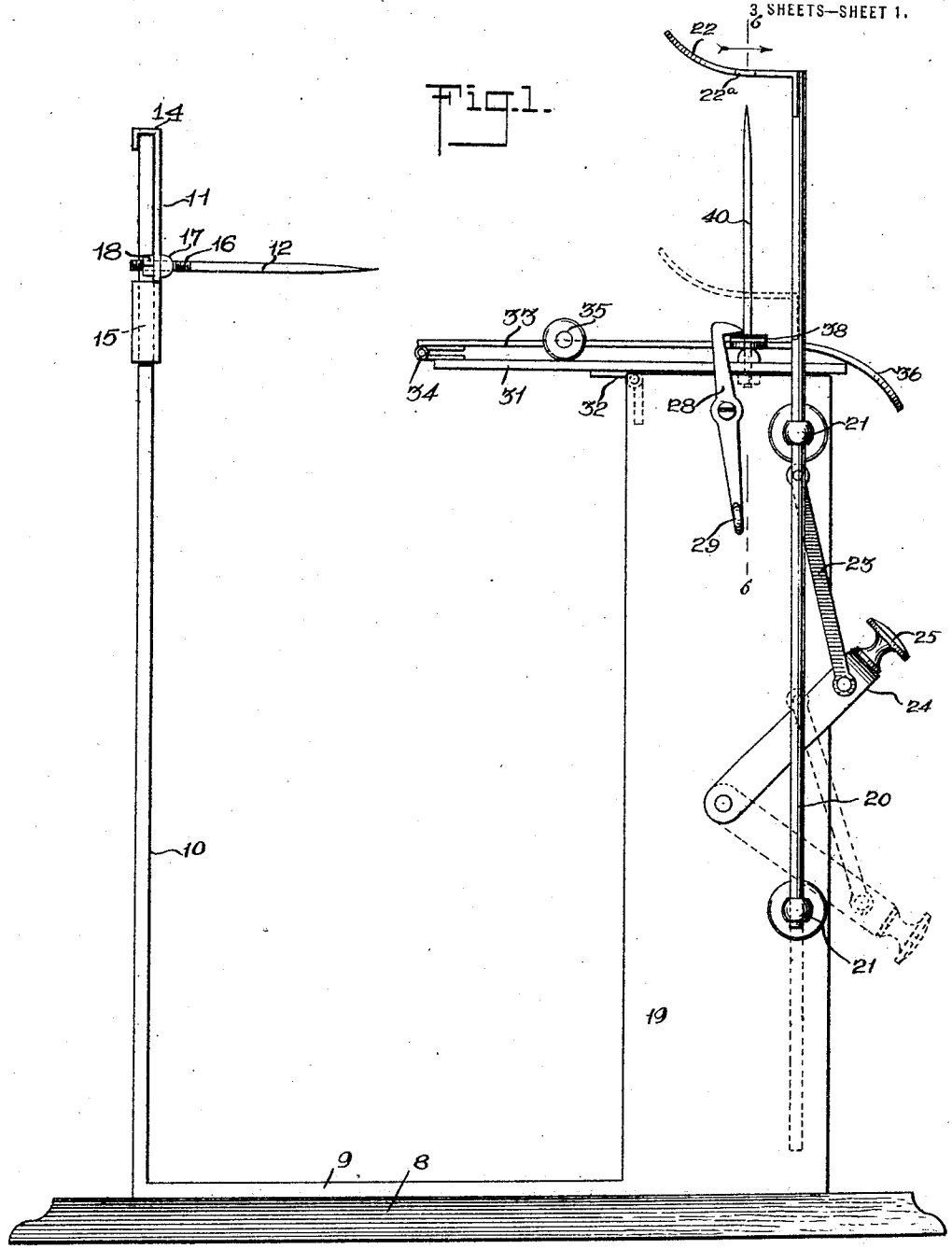
APPLICATION FILED FEB. 23, 1921.

1,411,959.

Patented Apr. 4, 1922.

3 SHEETS—SHEET 1.

Fig. 1.



WITNESSES

William P. Goebel

W. Harrison -

INVENTOR

E. G. DAY

BY Munn & Co

ATTORNEYS

E. G. DAY.

FILING DEVICE.

APPLICATION FILED FEB. 23, 1921.

1,411,959.

Patented Apr. 4, 1922.

3 SHEETS—SHEET 2.

Fig. 2.

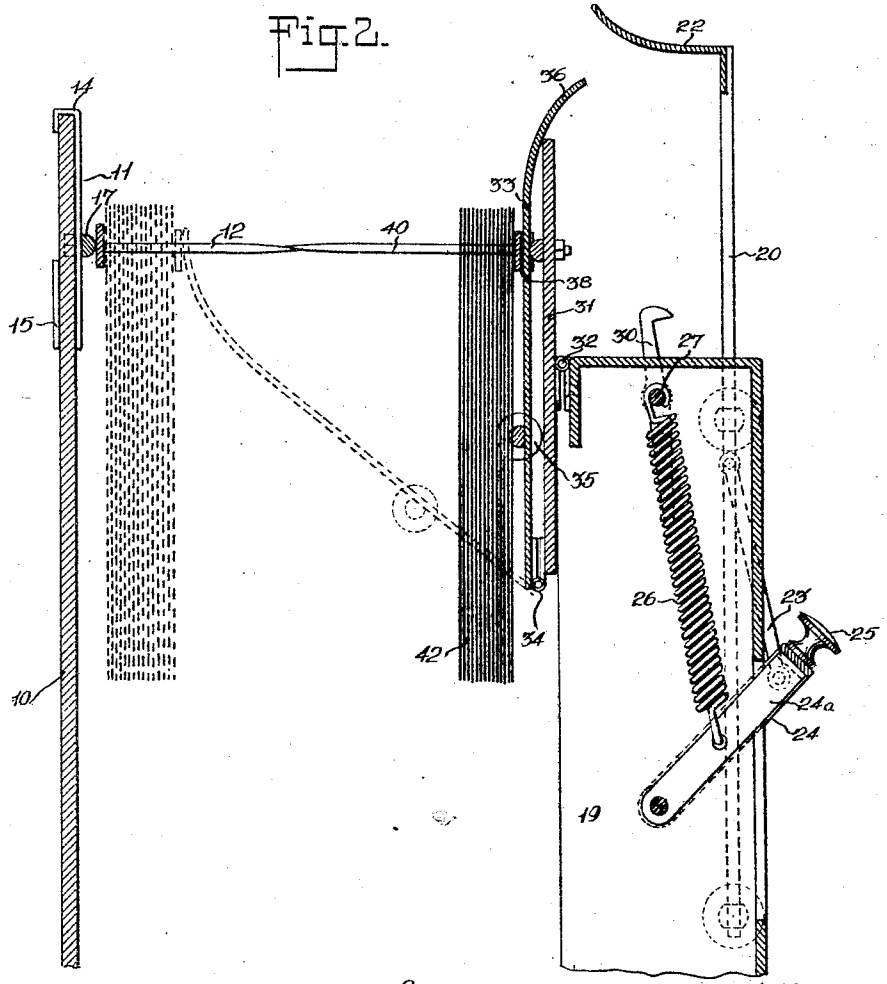
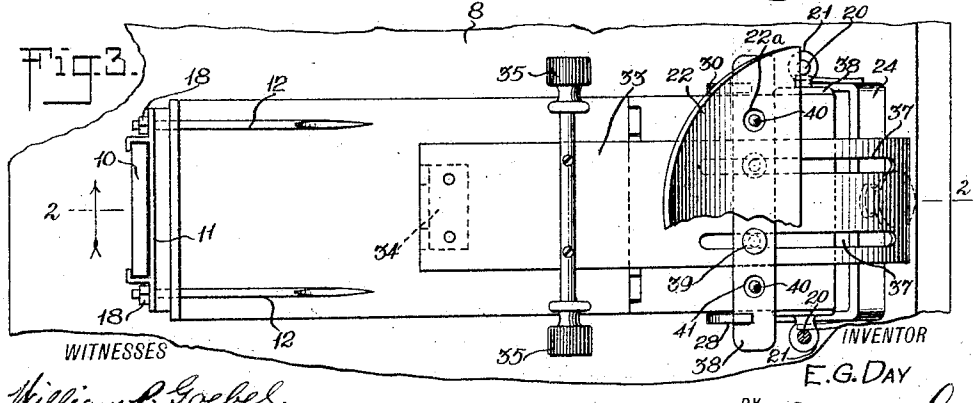


Fig. 3.



WITNESSES

William P. Goebel.

W. Harrison.

INVENTOR

E. G. DAY

BY Munn & Co

ATTORNEYS

E. G. DAY.

FILING DEVICE.

APPLICATION FILED FEB. 23, 1921.

1,411,959. **Patented Apr. 4, 1922.**

3 SHEETS—SHEET 3.

Fig. 4.

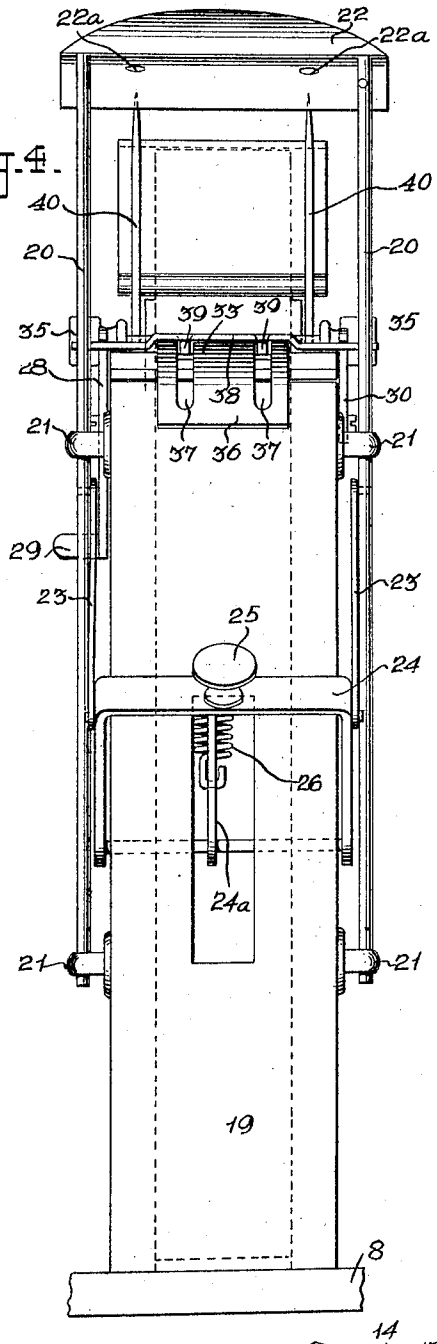


Fig. 5.

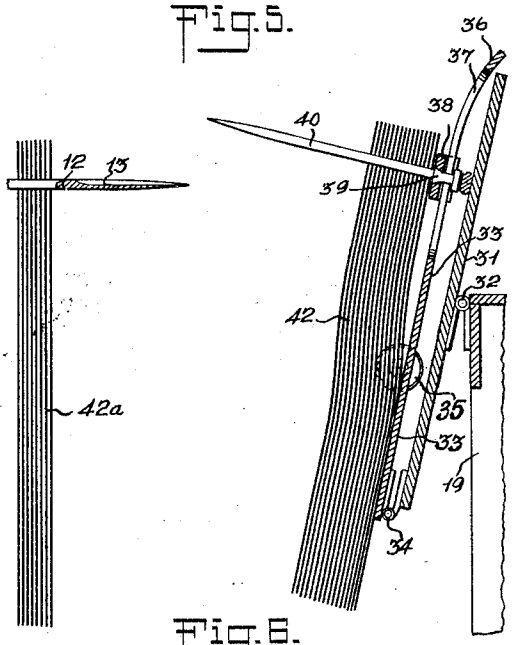


Fig. 6.

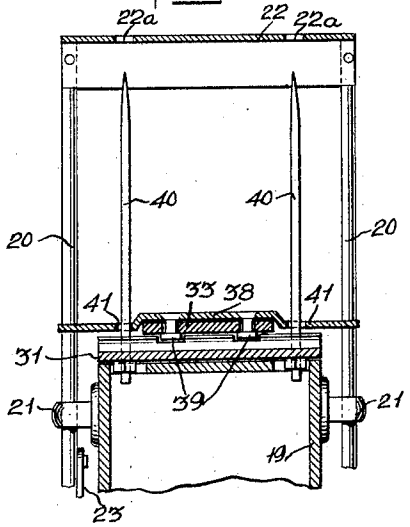
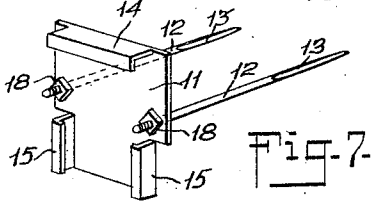


Fig. 7.



WITNESSES

William P. Goebel.

W. Harrison

INVENTOR

E. G. DAY

BY Munn & Co

ATTORNEYS

UNITED STATES PATENT OFFICE.

EUGENE GAYLORD DAY, OF BLOOMFIELD, NEW JERSEY.

FILING DEVICE.

1,411,959. Specification of Letters Patent. Patented Apr. 4, 1922.

Application filed February 23, 1921. Serial No. 447,237.

To all whom it may concern:

Be it known that I, EUGENE G. DAY, a citizen of the United States, and a resident of Bloomfield, county of Essex, and State of New Jersey, have invented a new and Improved Filing Device, of which the following is a full, clear, and exact description.

My invention relates to filing devices, and more particularly to devices for filing flat papers such as bills, notes, receipts, and the like, my more particular purpose being to facilitate the ease and precision with which such papers may be filed, and to hold the papers securely in position after they are filed.

My device further contemplates provision whereby a number of bills or the like may be accumulated together in a bunch and this bunch filed as a unit, or in which the bills may be filed separately.

In addition my invention contemplates quite a number of improvements in filing devices for improving the general efficiency thereof.

Reference is made to the accompanying drawings forming a part of this specification, and in which like reference characters indicate like parts throughout the several figures.

Figure 1 is a side elevation of my improved filing device showing the same with its movable parts in their respective normal positions.

Figure 2 is a fragmentary central vertical section through the same.

Figure 3 is a fragmentary top view of the device partly in plan and partly in section.

Figure 4 is a front elevation of the mechanism shown in Figure 1.

Figure 5 is a fragmentary section, showing certain parts appearing in the upper portion of Fig. 2 but in slightly different positions from those specified by the corresponding parts in said figures.

Figure 6 is a section on the line 6—6 of Figure 1 looking in the direction indicated by the arrow.

Figure 7 is a perspective of a pair of filing needles and a plate for supporting same upon one of the standards.

Mounted upon a base board 8 is a base plate 9 of metal provided with a portion 10 extending upwardly and constituting a standard. Mounted adjacent the upper end of this standard is a plate 11 of sheet metal. A pair of filing needles 12 extend through holes in this plate 11 and are provided with slots 13, as shown more particularly in Figure 7. The plate 11 is provided with edge portions 14, 15 bent into channeled form as shown, and used for holding the plate 11 upon the top of the standard 10, as may be understood from Figures 1 and 7. The filing needles 12 are each provided with a threaded portion 16, and fitted upon this threaded portion is a hemispherical nut 17 and a nut 18 of ordinary form. By means of the two nuts 17, 18 the general position of the filing needle may be adjusted relatively to the plate 11, and consequently to the standard 10.

The base plate 9 is further provided with a portion 19 made of sheet metal and extending upwardly so as to form a standard. A pair of sliding bars 20 are mounted on opposite sides of the standard 19 and extend through eye bearings 21. A yoke 22, provided with holes 22^a as indicated at Figures 1 and 6, is mounted upon the sliding bars 20 and extends from one of these bars to the other. Pivotally connected with the sliding bars 20 are two pitmans 23, these pitmans being also pivotally connected to a lever 24 of substantially U form. This lever is provided with a knob 25 serving as a handle whereby the lever may be swung upwardly at the will of the operator. When the lever is swung upwardly the pitman 23 pushes the sliding rods 20 upwardly and when the lever 24 is swung downwardly, the sliding rods 20 are moved vertically downward. A retractile spring 26 is connected at one of its ends with a cross pin 27, as shown more particularly in Figure 2, and is connected at its opposite end with an arm 24^a, the latter being connected rigidly with and practically forming a part of the lever 24. The spring 26 is for the purpose of retracting the lever 24 into its upper or normal position, as indicated in Figure 2, after each depression of the lever. Thus the spring 26 by restoring the lever 24 to its normal position, necessarily restores into normal position the various numerous parts controllable by the lever 24 as above described.

Mounted upon one side of the standard 19 is a pawl 28 provided at its lower end with a thumb piece 29. Another pawl 30, somewhat similar to the pawl 28 is mounted upon the opposite side of the standard 19, but is not provided with a thumb piece. Located above the pawls 28, 30 is a rocking

plate 31, the latter being connected with the standard 19 by a hinge 32, as indicated more particularly in Figures 1 and 2. A swinging plate 33 is connected with the rocking plate 31 by a hinge 34, and is adapted to swing relatively to this rocking plate. The swinging plate 33 carries a pair of rockers 35. The parts are so arranged that the rocking plate 31 and swinging plate 33 may together as a unit be rocked relatively to the standard 19, and the swinging plate 33 may be swung relatively to the rocking plate 31 while this rocking plate is in position. The swinging plate 33 is provided with a lip 36 curved slightly as indicated in Figure 5. The swinging plate is further provided with a pair of slots 37 as shown in the right hand portion of Figure 3. Extending across the swinging plate 33 is a slide 38 carrying a pair of guide pins 39 which extend through the slots 37. Thus the slide 38 is movable in the general direction of the length of the swinging plate 33. A pair of needles 40 are mounted upon the rocking plate 31 and extend laterally therefrom through holes 41 in the slide 38, as shown more particularly in Figures 3 and 6.

A number of bills or other papers to be filed are shown at 42, and at 42^a are a number of similar bills or papers which have already been filed.

The operation of my device is as follows: The operator stands facing the lever 24 and with his left hand places the bill or other paper to be filed squarely under the yoke 22, the face of the paper being downward and the heading toward the operator. Next the operator grasps the knob 25 and swings the lever 24 downwardly. This causes the yoke 22 to move downwardly, as indicated by dotted lines in Figure 1, so that the needles 40 for the time being stationary, are thrust through the paper and through the holes 22^a. This leaves the bill or other paper impaled upon the needles 40. Any number of other bills or papers can be treated the same way and thus added successively, the lever 24 being retracted into its normal position after each of its downward swinging movements. Thus a considerable number of bills 42 or other papers may be accumulated upon the needles 40. This done the rocking plate 31 is shifted, as indicated in Figure 5, so that the points of the needles 40 are brought adjacent the points of the needles 12, but so as to slightly overlap the same, the points of the needles 40 now resting in the slots 13. This movement being finished, the apparatus appears as indicated in full lines in Figure 2, the rocking plate 31 and the swinging plate 33 each now being vertical.

The operator next grasps the lip 36 and swings the swinging plate 33 in an anticlockwise direction according to Figure 2. In doing this the slide 38 slides along the needles 40, 12 to the left according to Figure 2, so that the bills or papers 42 are transferred from the needles 40 to the needles 12, as indicated by dotted lines in Figure 2. The swinging lever 33 is shown by dotted lines in this figure as in its extreme position to the left. This done the swinging lever 33 is brought back to its normal position relatively to the rocking plate 31 as indicated in full lines in this figure. During this movement of the swinging lever 33, the slide 38, is moved relatively to the swinging lever 33 as will be understood by comparison of dotted and full lines in the figure just mentioned. The slide 38 presses the papers uniformly and evenly back into position so as to effectively transfer these papers from the needles 40 to the needles 12 as above described.

The bills or other papers having been transferred, the rocking plate 31, carrying the swinging plate 33 parallel with it, is now rocked back into its normal position, or in other words rendered horizontal, as indicated in Figure 1. The device is now ready for a repetition of the process just described.

I do not limit myself to the precise mechanism shown, as variations may be made therefrom without departing from the spirit of my invention.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is as follows:

1. A filing device comprising a pair of standards disposed parallel with each other, filing needles mounted upon one of said standards and extending laterally therefrom, a rocking plate journaled upon the other of said standards, a swinging plate journaled upon said rocking plate and adapted to swing relatively thereto, needles carried by said rocking plate for the purpose of receiving a bill or paper to be filed, said needles being brought substantially into alignment with said first mentioned needles when said rocking plate is rocked into one of its normal positions, a slide mounted upon said swinging plate and having a sliding engagement with the needles carried by said rocking plate, so that by actuating said swinging plate papers or bills may be transferred from said needles carried by said rocking plate to said first mentioned needles, and means controllable at the will of the operator for impaling papers upon said needles carried by said rocking plate.

2. A device of the character described comprising a standard, needles mounted thereupon and extending laterally therefrom, another standard, a rocking plate journaled upon said last mentioned standard, a swinging plate journaled upon said rocking plate

and provided with slots, needles mounted upon said rocking plate and extending through said slots, said last mentioned needles being so arranged that when said rocking plate is rocked into one of its positions, the needles carried by said rocking plate are brought substantially into alignment with said first mentioned needles, mechanism carried by said swinging plate for transferring bills from the needles carried by said rocking plate to the needles carried by said first mentioned standard, and means controllable at the will of the operator for impaling bills or the like upon said needles carried upon said rocking plate.

3. A device of the character described comprising a standard, needles carried by the standard, a lever mounted on said standard, a retractile spring connected with said lever, pitmans connected with said lever, slide rods connected with said lever and slidable by movements thereof, and a yoke mounted upon said slide rods and movable relatively to said needles for the purpose of impaling papers or the like thereupon, said yoke being provided with openings through which said needles may extend.

4. A device of the character described comprising a standard, a plate made of sheet metal and provided with edge portions bent to engage said standard so as to detachably hold said plate thereupon, filing needles carried by said plate and adjustable relatively thereto, and means controllable at the will of the operator for transferring bills or the like to said needles.

5. A device of the character described comprising a pair of filing needles, means for supporting the same, a rocking plate, means for supporting said rocking plate, a swinging plate mounted upon said rocking plate and arranged to swing relatively thereto, said swinging plate being provided with slots, needles carried by said rocking plate and extending through said slots, said needles being so positioned that when said rocking plate and said swinging plate each occupy a predetermined definite position, said needles carried by said rocking plate are brought substantially into alignment with said first mentioned needles, and means controllable at the will of the operator for guiding bills or the like from said last mentioned needles to said first mentioned needles when said swinging plate is swung relatively to said rocking plate.

6. A device of the character described, comprising a standard, a lever mounted thereupon and free to swing relatively thereto, pitmans connected to said lever, sliding rods pivotally connected with said pitmans, bearings for slidably supporting said sliding rods, a yoke carried by said sliding rods, a rocking plate disposed adjacent said yoke and so mounted as to have a plurality of normal positions, needles carried by said rocking plate for the purpose of receiving bills or the like to be filed, other needles supported independently of said rocking plate and so positioned that when said rocking plate is in one of its normal positions said yoke can be depressed in order to force the bills or the like upon said first-mentioned needles, and means controllable at the will of the operator for transferring said bills or the like from said first mentioned needles to said second-mentioned needles.

EUGENE GAYLORD DAY.