S. H. DODSON.

FILING APPLIANCE.

APPLICATION FILED AUG. 18, 1911.

1,168,611.

Patented Jan. 18, 1916.

2 SHEETS—SHEET 1.

Fig. 1.

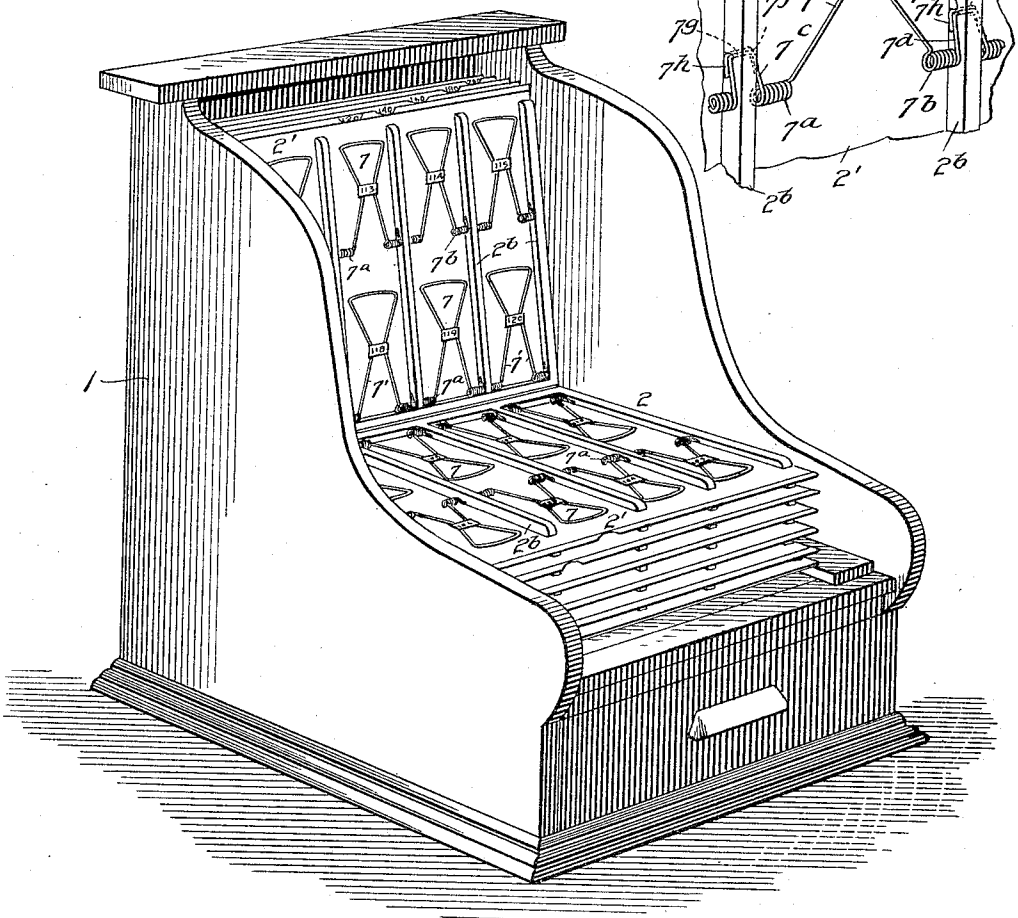


Fig. 6.

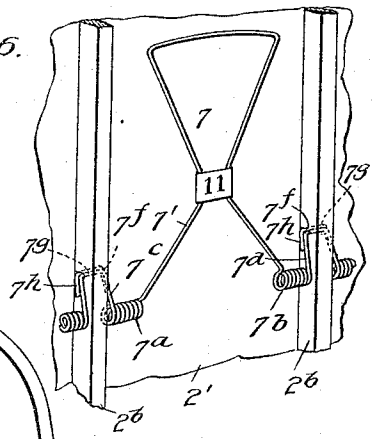
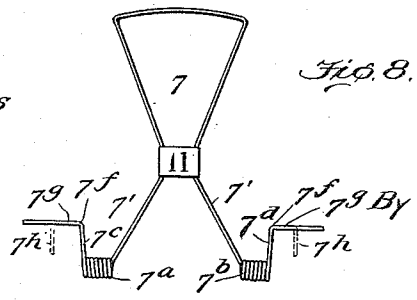


Fig. 8.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 3.

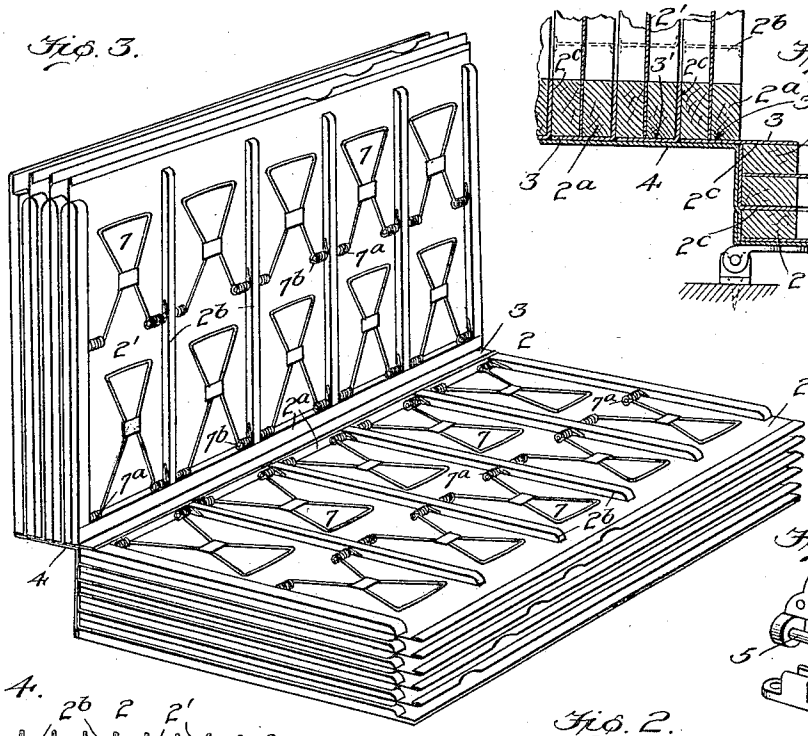


Fig. 5.

Fig. 7.

Fig. 4.

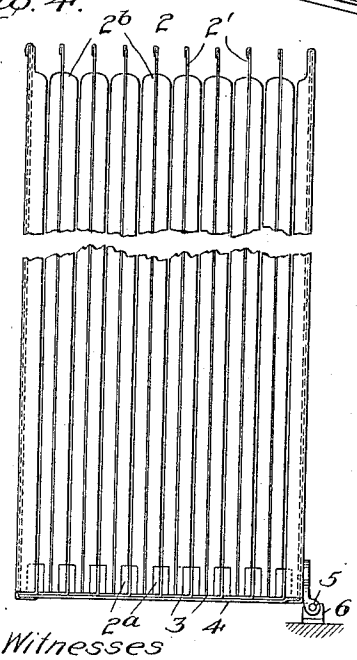
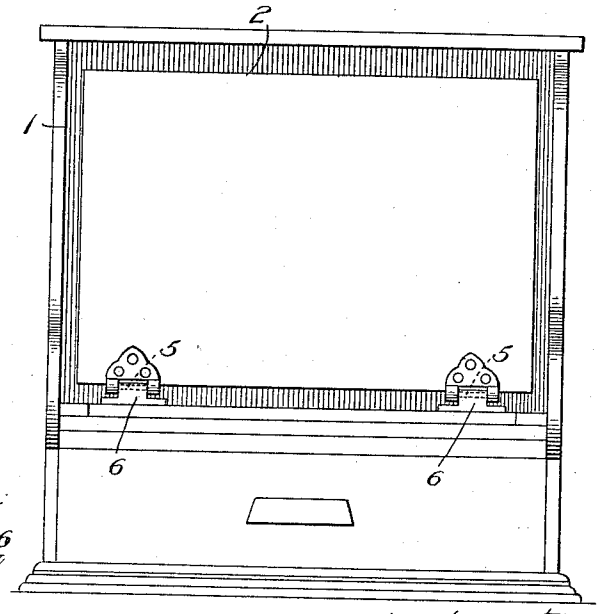


Fig. 2.



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UNITED STATES PATENT OFFICE.

SAMUEL H. DODSON, OF DES MOINES, IOWA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE McCASKEY REGISTER COMPANY, OF ALLIANCE, OHIO, A CORPORATION OF OHIO.

FILING APPLIANCE.

1,168,611. Specification of Letters Patent. Patented Jan. 18, 1916.

Applictaion filed August 18, 1911. Serial No. 644,871.

To all whom it may concern:

Be it known that I, SAMUEL H. DODSON, a citizen of the United States, residing at Des Moines, in the county of Polk, State of Iowa, have invented new and useful Improvements in Filing Appliances, of which the following is a specification.

This invention relates to improvements in filing appliances, more particularly to devices adapted to hold a series of bills or like papers.

One of the objects of my invention is to provide improved means for hinging and operating the various leaves or frames.

Another object of my invention is to provide an improved clip for holding bills, slips, or paper on the frames or leaves.

Other objects of my invention will be made apparent in the following description of a mechanism embodying my invention which I have herein selected purely for the purpose of illustration.

Figure 1 is a perspective view of a filing appliance embodying my invention. Fig. 2 is a front view of same. Fig. 3 is a perspective view of the series of leaves or frames removed from the cabinet. Fig. 4 is an edge view of the series of leaves folded up or together. Fig. 5 is a sectional view taken through the inner or connected parts of the leaves, some of which are represented in upright position and others in horizontal position. Fig. 6 is a perspective view of a part of one of the leaves illustrating the manner of applying the improved bill clamps or clips thereto. Fig. 7 is a detail view in perspective illustrating the separable hinge or connection by which the set of leaves or frames is pivotally connected with the cabinet. Fig. 8 is a detached view, in elevation, of one of the bill clamps or clips.

In the drawings, 1 represents a cabinet or case of any suitable character for supporting the leaves or frames.

2 indicates as an entirety a series of frames or leaves which are preferably spaced apart as represented. Each of these leaves consists of a back or plate 2′, along the lower edge of which are arranged suitable base bars 2^a 2^a, one on each side of the leaf.

2^b are spaced partition or separating strips extending at right angles to the base bars 2^a 2^a, and on opposite sides of the back plate 2′. Two partition strips which lie directly opposite to each other on a back plate may be secured in position by nails or brads, as shown in Fig. 5, or in any other suitable manner.

To the rear surface 2^c of the rear base bar 2′ of each frame is secured a strip of flexible material 3. This may be of strong canvas. It is extended across the lower edge of the next adjacent frame or leaf and secured thereto at 3′, whereby the frames are swingably connected to each other.

4 is a strip of flexible material, it may be a single strip secured to the under surface of the series of leaves or frames in such manner as to strengthen the swingable flexible connection between each frame and the next adjacent frames to it in the series. It will be noted that when the series of leaves or frames are in vertical position, each leaf other than the one in front of the series is supported from the lower rear corner of the leaf or frame in front of it. The front leaf of the series is preferably suitably mounted so as to swingably support the series as an entirety. For illustration, I have shown this to be accomplished by means of a pair of pivot pins or bearing rods 5, 5, secured to the front leaf, each of which is arranged to be supported in a bearing block 6, carried by the cabinet. These bearing blocks are so formed that the pivot rods 5 may be readily inserted therein or detached therefrom for the purpose of permitting the series of frames to be readily mounted in the cabinet or withdrawn therefrom.

In devices of this class it is of great importance to economize space as much as possible and to reduce the weight of the frames to the lowest point consistent with their strength and durability. It is to be noted that the method of swingably connecting together the leaves which I have herein disclosed requires but a very small amount of space.

7 are bill clamps or clips. Each of these consists of a strand of wire 7′ forming a looped clamping or bearing portion and with the ends of the wire coiled laterally from one end thereof as indicated at 7^a, 7^b, to form springs. The free ends of the wire at 7^c, 7^d, extend beyond the adjacent coil and each is carried at right angles to the coil to a point 7^f from which it is bent at right angles and at 7^g carried laterally through the adjacent partition or separating strip 2^b.

Its free end may be again bent at right angles to the section 7^g which extends through the separation strip 2^b as indicated at 7^h, if desired to prevent too easy detachment of the clip. It will be noted that by thus mounting the bill clamps or clips, the coil springs may move out away from the adjacent surface of the back 2′ of the frame which carries them so as readily to receive and properly hold in position on the frame a large number of slips. If but a small number of slips are filed beneath one of my improved clips, the coils will furnish the necessary pressure to hold the slips in place without moving away from the back plate. Should a larger number of slips be placed under one of the clips than can be accommodated by the coils themselves and still have the entire clip lie flat upon the slips, the coils are free to move away slightly from the back plate 2′, and thereby insure that the clip will properly engage and hold in place the slips. Where the free end of the wire of each clip is carried through the separating strip and then bent backward so as to prevent ready detachment, should it be desired for any purpose to remove the clip, this may be accomplished by straightening out this bent back portion 7^h until it is in line with the section 7^g, and thereby permit ready detachment.

The construction and mounting of the spring clip 7 is such that the coils 7^a, 7^b of each clip may move bodily away from the adjacent surface of the back plate, in order to accommodate the filing of slips of paper therebeneath. Whatever the said coils may rest upon or bear against serves as a stop for the bodily movement of the coil toward the back plate and insures that the spring action of the coil will tend to cause the upper end of the clip to press against whatever is beneath it. Whatever the position of its coils relative to the back plate, the upper end of the clip may be pulled back any reasonable distance and when released it will fly back toward the plate which carries it under the action of the coils of the spring.

One end 7^h of a spring clip may be directed beneath the portion 7^c or 7^d of an adjoining spring clip on the opposite side of the partition or separation strip 2^b between them. Where this is done the action of the part 7^c or 7^d of one clip against the end 7^h of another will tend to prevent a too free bodily movement of adjoining coils thus controlled relative to the back plate of the frame.

It will be seen that the portions of the clip which are mounted in the supporting strips 2^b, these being the free ends of the clips, are located between the axis of the coils 7^a 7^b and the clamping or bearing portion of the clip—the part that rests against the slips or other articles to be held—, this construction and arrangement facilitating and insuring the operations of the clip already described.

I am aware of the fact that it has heretofore been proposed to fasten clips having coiled ends somewhat similar to mine, by carrying the free ends of the wire of which the clips were formed through passageways in the back plates 2′, but I have found that the spring which I have herein disclosed is much more readily attached and detached and that it will readily accommodate itself to the proper holding of more slips than is the case with any one of the earlier constructions of which I am aware.

8 are tab holders carried by the bill clamps, they being used for indexing purposes in the manner well known in this art.

To those skilled in the art of making filing appliances of the class described, many alterations in construction and widely differing embodiments and applications of my invention will suggest themselves, without departing from the spirit and scope thereof. My disclosures and description herein are purely illustrative and are not intended to be in any sense limiting.

What I claim is:

1. In a device of the class described, a series of frames, each hinged to the next adjacent panel by a strip of flexible material secured to rear side of the forward frame and extending beneath the edge of the next rearward frame.

2. In a device of the class described, a series of frames spaced apart, and each having a bar extending along the rear side of its lower edge, a strip of canvas secured to the rear surface of the bar on one frame, and secured to the lower edge of the next adjacent frame, whereby the frames are hinged to each other, spaced transverse bars on the frames and spring clips between said bars.

3. In a device of the class described, a series of frames, each hinged to the next rearward frame by a strip of flexible material secured to the rear of the forward frame and to the lower edge of the next rearward frame and a strip of like material, extending wholly over the entire lower edge of all of the frames and outside the first named strips.

4. In a device of the class described, a frame, comprising a plate and a plurality of partition strips arranged on one surface thereof, and a spring clip formed of wire having coils near the opposite ends thereof, and the free ends of the wire beyond said coils each being mounted in one of said partition strips on the plate.

5. In a device of the class described, a frame, comprising a plate and a plurality of partition strips arranged on one surface

thereof, and a spring clip formed of wire having coils near the opposite ends thereof, and the free ends of the wire beyond said coils each being mounted in one of said partition strips on the plate, and the coils of said clip being bodily movable in normal operation relative to said plate.

6. In a device of the class described, a frame, comprising a plate and a plurality of partition strips arranged parallel to each other on one surface of said plate, and a spring clip formed of wire and having coils near the opposite ends of said wire and means connecting said coils to the frame and permitting their movement bodily relative to said frame in normal operation.

7. In a device of the class described, the combination of a frame comprising a plate and a plurality of partition strips arranged parallel to each other on one surface of said plate, a plurality of spring clips formed of wire each having coils near the opposite ends thereof and the adjoining free ends of the wire of two adjacent clips being extended through a passage common to both in one of said partition strips.

8. In a device of the class described, the combination of a frame comprising a plate and a plurality of partition strips arranged parallel to each other on one surface of said plate, a plurality of spring clips formed of wire each having coils near the opposite ends thereof and the adjoining free ends of the wire of two adjacent clips being extended through the partition strip between them and the free end of the wire of one clip being arranged under the adjacent portion of the other clip on the opposite side of the partition strip and between the coil and the free end of the wire forming the latter clip.

9. In a device of the class described, a plate, a clip arranged in front of the plate formed of wire with a clamping and bearing portion and spring coils extending laterally from one end thereof and with free ends of wire continued beyond the coils and extending upward substantially coplanar with the clamping portion and then outward substantially parallel with the axis of the coil but eccentric thereto, and strips attached to the plate in which the free ends of the clip are mounted.

10. In a device of the class described, a plate, a holding clip arranged in front of the plate, formed of wire and constructed to have a clamping or bearing portion arranged to rest against the articles to be held, a pair of spring coils and laterally extending free ends, such ends being located between the axis of the coils and the said clamping or bearing portion of the clip, and supports in which the said free ends of the clip are mounted.

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Witnesses:
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."