

**1,048,023.**

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# UNITED STATES PATENT OFFICE.

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FILING DEVICE FOR ACCOUNT-SLIPS, &c.

1,048,023.

Specification of Letters Patent.

Patented Dec. 24, 1912.

Application filed June 2, 1910. Serial No. 564,566.

*To all whom it may concern:*

Be it known that I, CONRAD W. ZIMMER, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented new and useful Improvements in Filing Devices for Account-Slips, &c., of which the following is a specification.

This invention relates to a filing device which is more particularly designed for use by store keepers for filing account or sale slips. Filing devices of this general character usually comprise a case, a plurality of vertically swinging leaves arranged in the case and adapted to be turned, and clips or holders arranged on the leaves and adapted to hold the account slips.

One of the objects of this invention is to provide simple, efficient and inexpensive means whereby the leaves when in use are supported in the case, so that they are spaced comparatively far apart and permit of freely turning the same for exposing different accounts, while upon removing these leaves from the case the same may be compacted or stacked closer together and thus occupy less room in a safe which receives the same.

Another object of my invention is to so mount the leaves in a case that the same will always occupy a central position in the same and not be liable to bind or become displaced while turning the leaves forward or backward.

My invention has the further object to so construct the leaves and pivotally support the same that a comparatively large number of such leaves may be placed in a given sized case and still permit these leaves to be readily shifted relatively to each other without interference.

In the accompanying drawings: Figure 1 is a vertical longitudinal section of a filing device embodying my invention, the section being taken in line 1—1, Fig. 2 but showing some of the leaves in an upwardly turned position and some in a downwardly turned position. Fig. 2 is a top plan view of the filing device showing all of the leaves in a downwardly turned position. Fig. 3 is a vertical section of several of the leaves in an upright position and showing their pivoted ends spaced comparatively far apart as they would be while in the case. Fig. 4 is a side elevation of a plurality of leaves and the flexible connecting member on one side of the same showing the leaves stacked or

packed closely together. Fig. 5 is a fragmentary horizontal section, on an enlarged scale, taken in line 5—5, Fig. 3 looking upwardly.

Similar letters of reference indicate corresponding parts throughout the several views.

The case forming the support of my improved filing device comprises two upright longitudinal side pieces or walls A, A, an upright rear wall or back B, an inclined bottom C arranged between the side pieces and extending from the rear wall downwardly toward the front edges of the side walls, and a vertically swinging front wall D which is pivoted at its lower end to the lower front end of the inclined bottom and adapted to be swung either into an upright position, as shown by dotted lines in Fig. 1, so as to serve as a lid for covering and protecting the leaves, or into a horizontal forwardly projecting position, as shown by full lines in Fig. 1, in which the leaves are uncovered and the front wall serves as a desk on which the account slips may be written out. If desired, this case may be mounted on top of a base E which contains a drawer *e* for holding money or for other purposes.

Each of the leaves F is preferably constructed of a sheet of metal and is provided on its front and rear sides with a plurality of clips *f* of any suitable construction whereby the account slips of different customers may be fastened in batches or piles on the flat sides of these leaves in a manner common to this type of filing devices.

At its opposite longitudinal edges each leaf is provided with binding or stiffening means which not only strengthen the leaf and keep the same in shape but also operate as spacers for keeping the flat surfaces of adjacent leaves out of contact from each other. Each of these binders preferably consists of a strip or bar G of wood provided with a longitudinal groove on its inner side in which the adjacent longitudinal edge of one of the leaves is secured by means of nails *g*, as shown in Figs. 2 and 5, or by any other suitable means.

At its lower or rear edge each leaf is secured to a horizontal pintle or pivot rod H which extends transversely across the case above the inclined bottom thereof. The leaf is preferably secured to its pintle or pivot rod by providing the lower or rear end of the leaf with a curl or sleeve *h* which re-

ceives the central part of said pintle. This curl is so constructed that in the upright position of the leaf the same projects tangentially upward from the front side of the pintle. When the leaves are stacked in an upright position in the case with their lower ends supported next to the inclined bottom of the case, each leaf is arranged somewhat below the leaf next in rear of the same.

By connecting the lower end of each leaf tangentially with the front side of its pintle it is possible to stack the several leaves much closer while in an upright position in the case, inasmuch as the pintle of each leaf is arranged below and in line with the leaf next in rear of the same, as shown in Fig. 3.

The opposite ends of the pintle or pivot rods of the several leaves are connected by two flexible connecting members *I* which are arranged parallel with each other and on opposite sides of the leaves above the bottom of the case. Each of these flexible connecting members is preferably constructed in the form of a chain each link of which is composed of two side bars *i* arranged close together at one end of the link, while at the other end they are separated or spread apart, and receive between them the closely arranged ends of the bars of an adjacent link. The closely arranged ends of the bars of each link are provided with openings or circular perforations *j* while the opposite ends of these bars are provided with longitudinal slots *k*. The adjacent spread ends of one link and the contracted ends of an adjacent link are pivotally connected with each other and with the adjacent end of one of the leaves by extending the end of the pintle of the respective leaf through the longitudinal slots of one of these links and the circular opening of the other link. The two links of the connecting member which cooperate with each end of a pintle may be held against longitudinal movement thereon by any suitable means but preferably by reducing the end portion *l* of the pintle which passes through the links so as to form an inner shoulder *m* which bears against the inner side of the spread end of one of the links, and a screw nut *m*<sup>1</sup> applied to the threaded outer end of said reduced part *l* and forming an outer shoulder which bears against the outer side of the spread part of the respective link. This screw nut may be prevented from becoming loose or detached from the pintle by riveting the outer end of the latter or by any other suitable means.

For the purpose of preventing the pintles and connecting members from unduly wearing the parts of the bottom and side walls with which these members engage, these parts are protected by metal wearing strips *n*, as shown in Figs. 1 and 2.

At their lower or front ends the connect-

ing members are free or unattached to the case but at their upper or rear ends the same are connected with the front ends of two suspenders *o* which are connected at their upper ends to the bottom of the case by screws *o*<sup>1</sup> or otherwise and thus serve to hold the connecting members and the leaves pivotally mounted thereon in position on the bottom.

Owing to the suspension of the connecting members at their upper ends the weight of the leaves and associated parts causes the same to slide down the inclined bottom and always hold the connecting members taut while at the same time permitting the connecting members to be deflected upwardly upon turning any leaf from an upright to a reclining position and to automatically take up the slack in the connecting members when the leaf is restored to its upright position.

The suspenders preferably consist of chains or similar flexible members and are permanently connected with the bottom but are detachably connected with the connecting members so as to permit the latter and the leaves to be removed from the case and placed in a safe for greater security when the filing device is not in use. This detachable connection preferably consists of hooks *p* arranged at the lower ends of the suspenders *o* and engaging with eyes or links *p*<sup>1</sup> on the pintle of the rearmost leaf, as shown in Figs. 1 and 2.

For the purpose of causing the leaves to always hang in a central position in the case the suspenders are secured to the case so that they incline in opposite directions. In the preferred arrangement, shown in Fig. 2, the suspenders converge upwardly and are secured at their upper ends to the bottom of the case at points inwardly from the line of the connecting members, whereby the weight of the leaves and connecting parts causes the same to constantly tend to assume a central position in the case, thereby avoiding undue rubbing of the connecting members against the side walls of the case and preventing interfering with the free movement of the leaves.

Upon detaching the suspenders from the connecting members the latter together with the leaves may be removed from the case and pressed together more compactly than they are in the case so that they take up less room when placed in a safe or vault. This contracting of the leaves for storage or expanding for facilitating use of the same is possible owing to the slotted connection between the several links of each connecting member and the pintles or pivot rods of the leaves.

By passing each pintle at its opposite ends through openings in a link of each connecting member the corresponding links of both

connecting members forming a pair are always retained in a definite position relatively to the companion pintle, whereby the associated pintle and links are prevented  
 5 from getting awry and the leaves from becoming cramped and bound, thereby permitting free and easy manipulation of the leaves at all times.

I claim as my invention:

10 1. A filing device comprising a support, a pair of flexible connecting members arranged on said support, suspending members connected at their lower ends with the upper ends of the connecting members while  
 15 their upper ends are connected with said support so that the suspending members incline in opposite directions, and leaves connected with the connecting members.

20 2. A filing device comprising a support, a pair of flexible connecting members arranged on said support, suspending members detachably connected at their lower ends with the upper ends of the connecting members while their upper ends are connected  
 25 with said support so that the suspending members incline in opposite directions, and leaves connected with the connecting members.

30 3. A filing device comprising a support, a pair of flexible connecting members arranged parallel on said support, a pair of

upwardly converging suspending members connected at their lower ends with said connecting members while their upper ends are connected with said support, and leaves con- 35  
 nected with the connecting members.

4. A filing device comprising a support, a pair of connecting members arranged parallel on said support and each having a plurality of links each of which is provided at 40  
 one end with a circular opening and at its opposite end with a longitudinal slot, pintles or rods each arranged in the opening of one link and the slot of an adjacent link, and leaves connected with said pintles. 45

5. A filing device comprising a support, a pair of connecting members arranged parallel on said support and each having a plurality of links each of which consists of two longitudinal bars arranged close together at 50  
 one end of the link, while at the other end they are separated or spread apart, and receive between them the closely arranged ends of the bars of an adjacent link, pintles connecting adjacent links, and leaves connected 55  
 with said pintles.

Witness my hand this 31st day of May, 1910.

CONRAD W. ZIMMER.

Witnesses:

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