E. J. VALENTINE.

CLIP.

APPLICATION FILED DEC. 20, 1909. RENEWED OCT. 12, 1911.

1,067,288.

Patented July 15, 1913.

2 SHEETS—SHEET 1.

Fig. 1.

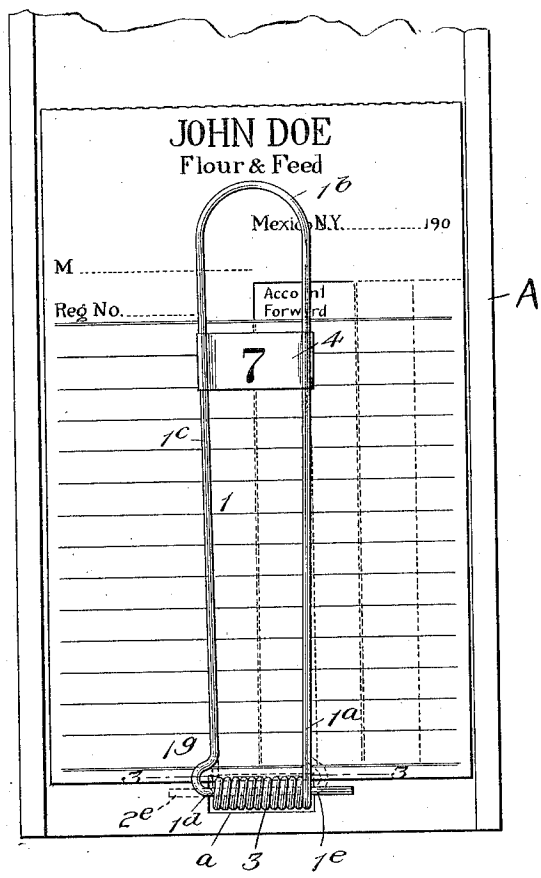


Fig. 2.

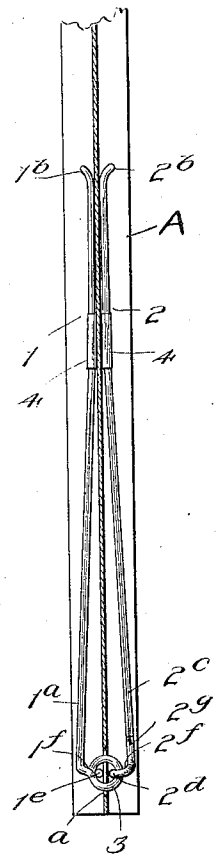
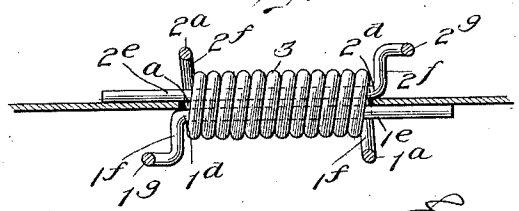


Fig. 3.



Witnesses.

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2 SHEETS—SHEET 2.

Fig. 4.

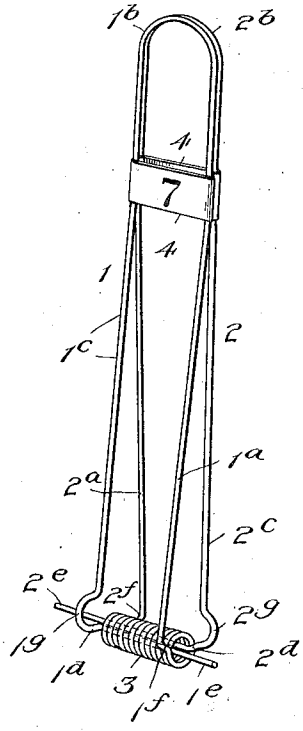
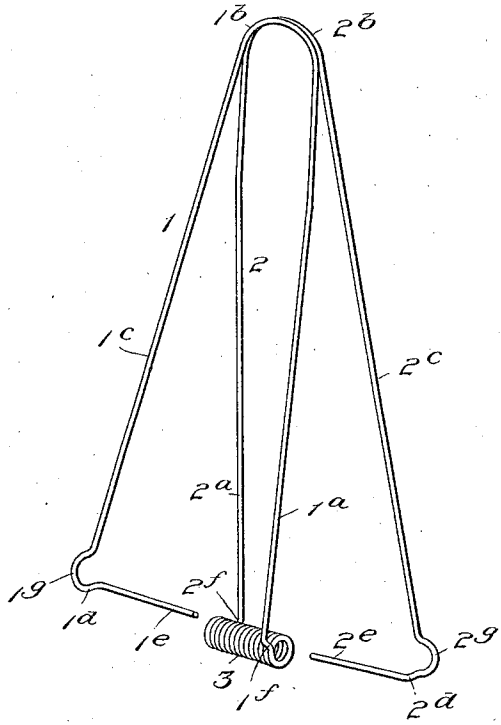


Fig. 5.



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UNITED STATES PATENT OFFICE.

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CLIP.

1,067,288. Specification of Letters Patent. Patented July 15, 1913.

Application filed December 20, 1909, Serial No. 534,206. Renewed October 12, 1911. Serial No. 654,338.

To all whom it may concern:

Be it known that I, ERNEST J. VALENTINE, a citizen of the United States, residing at Alliance, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in and Relating to Clips, of which the following is a specification.

This invention relates to clips or securing devices for securing papers, paper slips, documents and the like in position on a plate or leaf.

The invention is particularly adapted for filing appliances comprising a series of leaves which are movable relatively to each other.

The invention consists in producing a clip or clips that is or are simple in construction and readily applied and removed from the leaf of a filing appliance.

The invention also consists in forming from a single piece of wire a pair of spring-operated clips adapted to be supported upon the opposite faces of a filing appliance leaf and to be normally pressed against the opposite faces of such leaf, whereby slips of papers or documents may be held in position on either or both of the said faces.

For the purpose of illustration I have, in the accompanying drawings, shown and herein described one form of clip or clamping device embodying my invention.

Figure 1 is a front elevation of a portion of a leaf for a filing appliance showing a clip embodying my invention. Fig. 2 is a section through the leaf showing the clips on the opposite faces of the leaf in side elevation. Fig. 3 is a transverse section through the leaf and clips on the line 3—3 of Fig. 1. Fig. 4 is a perspective view of the clips detached from the leaf or support. Fig. 5 is a view similar to Fig. 4 showing parts of the clips distorted to more clearly illustrate their construction and manner of attaching to and detaching from a support.

In the drawings, A indicates a portion of a leaf for a filing appliance, it being understood that the said appliance may comprise a plurality of such leaves, each carrying one or more clips upon their opposite faces. The leaves may be supported in a suitable housing or casing in any usual and preferred manner.

In the most useful application of the invention the leaves are supported so that they may be moved from one position to another whereby both faces thereof may be brought into convenient position for the insertion of and removal of the papers from behind the clips on either face.

1, 2 indicate a pair of clips arranged upon opposite faces of the leaf A and preferably having a common coil 3 which operates to keep the clips 1 and 2 normally pressed against the faces of the said leaf. The clips 1 and 2 and the coil 3 are formed from a single piece of wire which is bent to form these parts to carry out their functions of securing papers to the leaf, as well as to coöperate with the faces of the leaf to permit its attachment to and detachment therefrom.

The coil 3 may be arranged within an opening *a* formed therefor in the leaf A. Preferably the convolutions of the coil extend equally from either face of the leaf. The wire or wires leading from the opposite ends of the coil 3 are extended upward to form legs 1^a, 2^a on opposite sides of the leaf A. The legs 1^a, 2^a, extend upwardly far enough to properly support the slip or slips of paper intended to be inserted between the clips 1 and 2 and the adjacent faces of the leaf and are each bent, substantially as shown at 1^b, 2^b, and extend downwardly forming legs 1^c, 2^c. It will thus be seen that the legs 1^a and 1^c comprise the clip 1 which operates to secure slips or papers on one face of the leaf A and that the legs 2^a and 2^c comprise the clip 2 which operates to secure slips or papers on the other face of the said leaf.

The legs 1^c, 2^c are each bent at their lower ends at substantially right angles thereto, as indicated at 1^d, 2^d, respectively, to form bars 1^e, 2^e, which latter extend longitudinally through the coil 3 in opposite directions. A portion of each of the bars 1^e, 2^e, on one or both sides of the coil 3, lies in engagement with the adjacent face of the leaf, and coöperates therewith to support and maintain the coil 3 and the clips 1 and 2 in proper position upon the leaf A.

Each of the legs 1^a, 2^a and 1^c, 2^c are preferably bent laterally to form horizontal supports, as shown at 1^f, 2^f, upon which supports the lower edges of the slip or slips rest when filed behind the clips. Each of the legs 1^c, 2^c may be provided with a looped portion 1^g, 2^g, respectively.

By removing the bars 1^e, 2^e endwise, the clips may be removed from the leaf and a new one replaced without the use of tools.

Among the advantages of my invention it

will be seen that I have produced a clip or pair of clips formed from a single piece of wire which is bent and shaped to coöperate with the faces of the leaf, without the necessity of being permanently secured thereto, to support the clips and coil and to give spring tension to the clips, whereby the latter maintain the slips to be filed in position on the leaf and permit their ready insertion and removal therefrom.

It will be noted that each of the clips, loops or retaining portions on each side of the leaf is a closed skeleton figure; in fact the slips introduced between the clips or retaining portions may at their lower edges engage the lower end of this closed figure and be supported in position on the leaf while other slips are being introduced or removed from behind the adjacent clip or retaining portion, the extent of contact between the slips and the lower end of the adjacent clip or retaining portion being sufficient to prevent undesirable shifting of the slips relative to the clip or retaining portion when the upper end of the latter is operated for the purpose of permitting the introduction or removal of slips from behind the clip or retaining portion.

4, 4 indicate plates one for each clip, and preferably having upon its front face an index letter or numeral or classified heading. In order to secure each plate in position its opposite ends are preferably bent around the adjacent legs of the clips 1 and 2.

To those skilled in the art of making apparatus 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 as claimed. My disclosures and the description therein are purely illustrative, and are not intended to be in any sense limiting.

What I claim is:

1. In a filing appliance, the combination of a slip holding leaf formed with an opening and means for securing papers to said leaf, the said means comprising a pair of clips and a coil common to said clips and arranged in said opening, one end of each clip being connected to said coil and its opposite end being arranged to engage the adjacent face of the leaf upon opposite sides of the opening therein and coöperating with the corresponding end of the other clip to support the coil in the opening.

2. In a filing appliance, the combination of a slip holding leaf formed with an opening and means for securing papers to said leaf, the said means comprising a pair of clips and a single coil common to said clips and arranged in said opening, one end of each clip being connected to said coil and its opposite end being arranged to engage the adjacent face of the leaf upon opposite sides of the opening therein and coöperating with the corresponding end of the other clip to support the coil in the opening.

3. In a filing appliance, the combination of a slip holding leaf formed with an opening and means for securing papers to said leaf, the said means comprising a pair of clips and a coil common to said clips and arranged in said opening, the said clips and coil being formed from a single piece of wire, and the free ends of the clips being arranged to extend through the coil and engage the opposite faces of said leaf at opposite sides of the opening therein.

4. In a filing appliance, the combination of a leaf formed with an opening and means for securing papers on opposite sides of the leaf, the said means comprising a pair of clips, one for each side of the said leaf, and a coil interposed between the said clips and arranged in the opening formed in the said leaf, the said coil being connected with both of said clips whereby the latter are pressed against the opposite faces of the leaf, the free end of each clip extending longitudinally through the coil and having bearing with the adjacent face of the leaf at opposite sides of the opening, whereby both legs of each clip swing on axes substantially coincident with each other and the said free end maintains the coil in said opening.

5. In a filing appliance, the combination with a movable leaf, of means for securing a plurality of sets of papers to the opposite sides of said leaf comprising a coil having extensions leading from its opposite ends and arranged upon opposite sides of said leaf, each of said extensions being bent intermediate its length to form a clip and the free end of each of said extensions extending within the said coil and coöperating with the adjacent face of the leaf to maintain the coil in position thereon.

6. In a filing appliance the combination with a movable leaf, of means formed from a single piece of wire for securing a plurality of papers to the opposite sides of said leaf comprising a coil having extensions leading from its opposite ends and arranged upon opposite sides of said leaf, each of said extensions being bent intermediate its length to form a clip and the free end of each of said extensions extending within the said coil and coöperating with the adjacent face of the leaf to maintain the coil in position thereon.

7. The combination with a leaf for a filing appliance, of means for securing thereon a plurality of sets of papers, comprising a coil having extensions leading from its opposite ends, each of said extensions having an upwardly extending leg and bent intermediate its length to form a downwardly extending leg, and the free end of the downwardly extending leg being bent

to form a bar which extends through the said coil and coöperates with the adjacent face of the leaf to maintain the coil in position thereon.

8. The combination with a file leaf having an opening therethrough, of means for retaining slips, papers, or the like on opposite sides of said leaf, consisting of a spring wire passing through said opening in the leaf and having retaining portions on opposite sides of the leaf, the opposite ends of the wire being arranged on opposite sides of the leaf and in engagement therewith and parts of the wire engaging with parts of the leaf to hold said retaining portions from shifting thereon.

9. The combination with a file leaf having an opening therethrough, of means for retaining slips, papers, or the like on opposite sides of said leaf, consisting of a single piece of spring wire passing through said opening in the leaf and having retaining portions on opposite sides of the leaf, each of said retaining portions being a closed skeleton figure and the opposite ends of the wire being extended on opposite sides of said leaf across said opening therethrough and having engagement with opposite faces of said leaf near opposite sides of said opening therethrough, respectively.

10. The combination with a file leaf having an opening therethrough, of means for retaining slips, papers or the like on opposite sides of said leaf, consisting of a single piece of spring wire bent on opposite sides of said leaf, respectively, to form clips or retaining portions, a section of said wire passing through said leaf opening and connecting together said clips or retaining portions, and the opposite ends of said wire having engagement on opposite sides of said leaf, respectively, with said section of the wire which connects said clips or retaining portions together, thereby forming closed skeleton loops on opposite sides of said leaf, respectively, and the opposite ends of said wire being held in engagement with the opposite sides of said leaf, respectively, adjacent to said closed loops.

11. In a filing appliance, the combination of a support formed with an opening and means for securing a set of papers to either or both sides of said support comprising a coil arranged in said opening and having extensions leading from its opposite ends, each of said extensions being bent intermediate its length to form a clip, and the free end of each extension being bent to engage the adjacent face of the support on a line substantially coincident with the axis of the said coil at the opposite ends thereof, the free end of one clip coöperating with the free end of the other clip to maintain the coil in the opening.

12. A leaf, and a clip formed from a single piece of resilient wire having a plurality of convolutions intermediate its ends, a section of said wire extending in one direction from one end of said convolutions and engaging said leaf for support and a section of wire extending from the other end of said convolutions and bent to form up and down legs, normally pressed toward said leaf for holding papers or slips thereon, and said down leg being bent at substantially right angles and arranged within and extended through said convolutions and engaging the leaf for support, and means for connecting the up and down legs together intermediate their upper and lower ends.

13. The combination with a leaf having an opening therethrough, of a bill holding device formed from a single piece of resilient wire and comprising a section bent to form up and down legs connected together at their upper ends and arranged on one side of said leaf, a coil to one end of which one of said legs is connected, the other leg being bent at substantially right angles and extended longitudinally through said coil and arranged to engage the leaf for support, there being a section of said wire connected with the other end of the coil and extended through said opening in said leaf for engagement with said leaf on its opposite side.

In testimony whereof I affix my signature, in the presence of two witnesses.

ERNEST J. VALENTINE.

Witnesses:
HENRY F. POLLOCK,
HARRY J. HICK.

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