R. W. FLOURNOY, JR.

PAPER HOLDING CLIP.

APPLICATION FILED JUNE 22, 1918.

1,359,243. Patented Nov. 16, 1920.

Fig. 1.

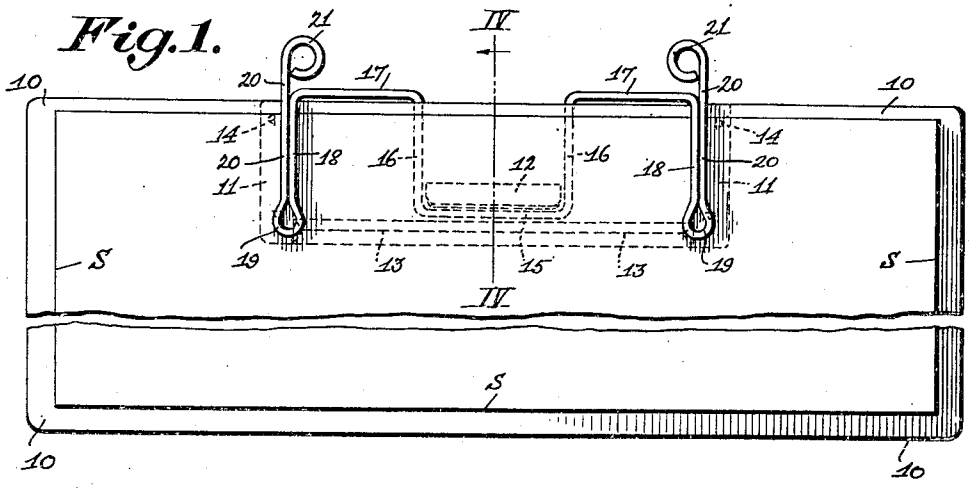


Fig. 2.

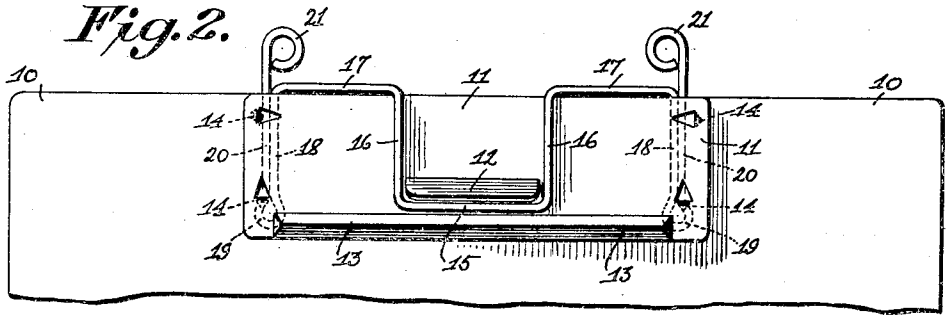


Fig. 3.

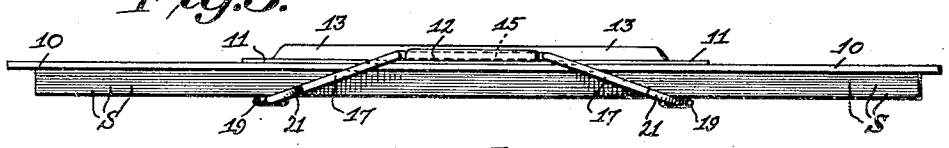


Fig. 4.

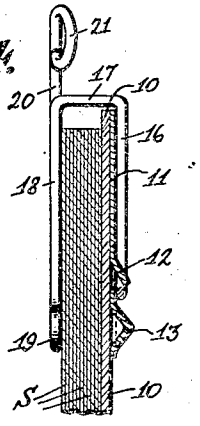
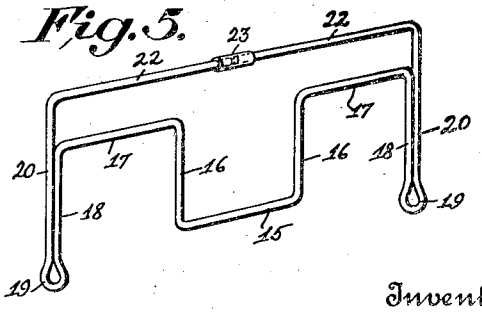


Fig. 5.



Inventor

Richard W. Flournoy, Jr.

By M. J. Thornborow

Attorney

UNITED STATES PATENT OFFICE.

RICHARD W. FLOURNOY, JR., OF BETHESDA, MARYLAND.

PAPER-HOLDING CLIP.

1,359,243. Specification of Letters Patent. Patented Nov. 16, 1920.

Application filed June 22, 1918. Serial No. 241,373.

To all whom it may concern:

Be it known that I, RICHARD W. FLOURNOY, Jr., a citzen of the United States, residing at Bethesda, in the county of Montgomery and State of Maryland, have invented certain new and useful Improvements in Paper-Holding Clips, of which the following is a specification.

My invention relates to improvements in paper holding clips and more especially to that class of clips which are used in connection with a stiff or flexible backing to which the papers are removably secured in filing the same.

The objects of my invention are:

First, to construct a simple, cheap, strong, effective and durable clip of the character described which is capable of being conveniently, rapidly and economically manufactured and is composed of a single slender elastic wire.

Second, to construct a paper clip of such form and construction which when applied to or attached to a backing may be quickly and readily adjusted to such backing and also have its paper engaging elements easily and expeditiously elevated for the insertion of the papers and firmly grip said papers when the clip is released and in its normal position.

Third, to construct a paper clip which is of such form and construction as will not only firmly grip a single sheet of paper but also adapted to hold a great number of sheets with the same ease and without in any way distorting the clip, or the proper and coöperative relations of the several elements comprising the clip with each other, so that the sheets thus fastened are suitable for desk use and may readily be filed in an ordinary file case.

Fourth, to construct a backing which is particularly made and peculiarly adapted to coöperate with the paper clip and enable said clip to be quickly and easily applied and locked to the backing and the clip at the same time enabled to effect all the advantages and functions heretofore indicated.

Fifth, other objects and advantages of construction and operation will be apparent and readily understood from the detailed description to be presently given.

The invention consists of structural characteristics and relative arrangements of elements which will be hereinafter more fully described and particularly pointed out in the appended claims.

In the drawings in which similar reference characters indicate the same parts in the several figures of the drawing:

Figure 1 is a front elevation or plan view showing the improved clip applied to the backing and engaging a sheet of paper.

Fig. 2 is a rear elevation of the clip with the backing secured thereto.

Fig. 3 is a top plan view of the clip with its coöperating backing.

Fig. 4 is an enlarged sectional view taken on line IV—IV of Fig. 1, and

Fig. 5 is a perspective view of a modified form of the clip.

In the drawings 10 is a stiff base, which is preferably made of card board, fiber paper, thin wood or metal, or any other suitable material. To the under side and near the upper edge of said base 10 is attached a thin metal plate 11, which has struck up therefrom a central spring retaining ledge 12 and a stiffening bead 13 along its lower edge, as clearly shown in Figs. 2 and 4, and for purposes to be hereinafter described. Said plate 11 is secured to the under side of the base 10 preferably by V-shaped pins 14, 14, which are struck up from the plate 11 and bent over after having been made to pierce the base 10, as indicated in Figs. 1 and 2. The plate 11 while shown as extending only in the middle half of the upper edge of base 10, said plate 11 may be enlarged or extended to cover the entire width of the base 10, if so desired without changing the operation of the invention.

The clip coöperating with the base 10 is preferably made from a single piece of wire and according to the preferred type, as shown in Figs. 1, 2, 3 or 4, is provided with a central U-shaped section formed by the bends or portions 15, 16 and 16. To the upper end of the portions 16 and 16 and at right angles thereto and oppositely disposed are provided bends or portions 17 and 17. Extending downwardly from the outer ends of the portions 17, 17 and parallel to the portions 16 and 16 are formed the portions or sides 18 and 18, which are provided at their lower ends with eyes 19 and 19 and parallel with and preferably in contact with the portions 18. 18, are provided the portions 20 and 20, which are extended above the upper bends or portions

17, and 17, and the ends of the wire are bent to form a pair of terminal eyes 21 and 21, for purposes to be presently described

The operation of the invention is as follows:

In order to apply the clip to the backing 10, the U-shaped section comprising the portions 15, 16 and 16, is disposed in the rear of the back 10 and the portion 15 will readily spring over the retaining ledge 12 of the plate 11 and assume the position as shown in Figs. 2 and 4. The portions 17 and 17 will straddle the top edge of the back 10, and the spring action of said portions 17 and 17 will force the portions 18, 20 and eyes 19 firmly against the front of the back 10 and securely hold any sheet or sheets S, S, of paper which may be interposed between the back 10 and portions 18 and 20, as shown in Figs. 1, 3 or 4. Should it be desired to file or attach one or more sheets to the back 10, all that is necessary is to press downwardly against the eyes 21 and 21, when the portions 18, and 20 will rock on the edge of the back 10 and sufficiently elevate the eyes 19, and portions 18 and 20, from the back 10, to permit the sheet or sheets to be inserted between the portions 18 and 20 and the back 10, and when the pressure is relieved from the eyes 21, and 21, the portions 18 and 20 will readily resume their normal position and firmly grip the interposed sheet or sheets S, S, due to the stiffness of the portions 17 and the spring or resilient action of said portions 17, 18 and 20 rocking on pivots corresponding to the narrow sections of the back 10 in contact with the portions 16 and 16 of the clip. It will be seen, that due to this rocking action of the portions 18 or 20, on the pivotal line corresponding to the portion 16, and the fact that the portions 16, 18 and 20 are parallel to each other, the entire under surfaces of the portions 18 and 20 throughout their length are in contact with and tightly grip the upper sheet S. of inserted paper, and this gripping condition and relation of the portions 18 and 20 with the sheets S, will be preserved whether one or many sheets of paper are interposed and held between the clip and back as will be readily seen and understood by reference to Figs. 3 and 4. If it is found that after a continuous use of the clip, the portions 17, 18 or 20 lose their resilient action and become set, the clip can be reversed, when it will be found that the necessary resiliency has been restored, and after repeated use the clip can again be reversed to its original applied position. The stiffening bead 13 not only strengthens the thin plate 11 and back 10, but also acts as means to prevent the retaining ledge 12 from coming in contact with and scratch the surface of a desk or table and at the same time acts as a protector for the portion 15 of the clip. In the modification shown in Fig. 5, the construction and operation of the invention is substantially the same as shown in Figs. 1 to 4 inclusive, except that the terminal eyes 20, 20, are omitted, and the upper ends of the portions 20, 20, are bent at right angles and toward each other, to form the upper and inclosing sections 22, and 22, whose abutting ends are fastened to a protecting sheath 23, as shown.

From the foregoing disclosure of the construction and operation of the clip and backing it will be seen that all the objects and advantages enumerated in the statement of invention have been fully carried out and that changes would readily suggest themselves to anyone without departing from the essential features and yet be within the scope of the invention as expressed in the claims.

What I claim is:

1. A paper clip adapted to be applied to a backing and composed of a single piece of spring wire bent in a single plane to form a central U-shaped section with substantially parallel side portions, an upper portion extending away from the end of each of said side portions and at right angles thereto, and of a length substantially the width of said U-shaped section, a portion extending downwardly from the end of each of said upper portions and arranged parallel and opposite to the adjacent side portion and a portion connected to the end of each of said downwardly extending portions and arranged parallel and in juxtaposition thereto and provided with an elongation extending beyond the adjacent upper portion.

2. A paper clip adapted to be applied to a backing and composed of a single piece of spring wire bent in a single plane to form a central U-shaped section with substantially parallel side portions, an upper portion extending away from the end of each of said side portions and at right angles thereto, and of a length substantially the width of said U-shaped section, a portion extending downwardly from the end of each of said upper portions and arranged parallel and opposite to the adjacent side portion and a portion connected to the end of each of said downwardly extending portions and arranged parallel and in juxtaposition thereto and provided with an elongation extending beyond the adjacent upper portion and terminating in an eye portion made integral therewith.

3. In a paper filing and gripping device the combination with a backing having near the upper edge of its under side a retaining ledge, of a paper clip composed of a spring wire bent to form a central U-shaped section with substantially parallel side portions and adapted to engage said retaining

ledge, an upper portion extending away from the end of each of said side portions and at right angles thereto and straddling said upper edge of said backing, a portion extending downwardly from the end of each of said upper portions and arranged parallel and opposite to the adjacent side portion and on the opposite or top side of the backing, and a portion connected to the end of each of said downwardly extending portions and arranged parallel and in juxtaposition thereto and provided with an elongation extending beyond the adjacent upper portion and edge of the backing, whereby papers interposed between the top side of the backing and the downwardly extending portions are firmly and removably clamped to the top side of said backing.

4. In a paper filing and gripping device the combination with a backing having near the upper edge of its under side a plate provided with a spring retaining ledge, of a paper clip composed of a spring wire bent in a single plane to form a central U-shaped section with substantially parallel side portions and adapted to engage said retaining ledge, an upper portion extending away from the end of each of said side portions and at right angles thereto and straddling said upper edge of said backing, a portion extending downwardly from the end of each of said upper portions and arranged parallel and opposite to the adjacent side portion and on the opposite or top side of the backing and a portion connected to the end of each of said downwardly extending portions and arranged parallel and in juxtaposition thereto and provided with an elongation extending beyond the adjacent upper portion and edge of the backing and terminating in an eye portion, whereby papers interposed between the top side of the backing and the downwardly extending portions are firmly and removably clamped to the top side of said backing.

5. In a paper filing and gripping device the combination with a backing having near the upper edge of its under side a plate provided with a spring retaining ledge and a stiffening bead below said ledge of a paper clip composed of a spring wire bent in a single plane to form a central U-shaped section with substantially parallel side portions and adapted to engage said retaining ledge, an upper portion extending away from the end of each of said side portions and at right angles thereto and straddling said upper edge of said backing, a portion extending downwardly from the end of each of said upper portions and arranged parallel and opposite to the adjacent side portion and on the opposite or top side of the backing and a portion connected to the end of each of said downwardly extending portions and arranged parallel and in juxtaposition thereto and provided with an elongation extending beyond the adjacent upper portion and edge of the backing and terminating in an eye portion, whereby papers interposed between the top side of the backing and the downwardly extending portions are firmly and removably clamped to the top side of said backing.

In testimony whereof I affix my signature.

RICHARD W. FLOURNOY, JR.