

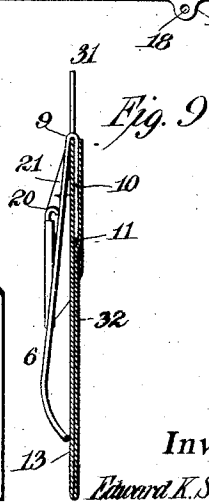
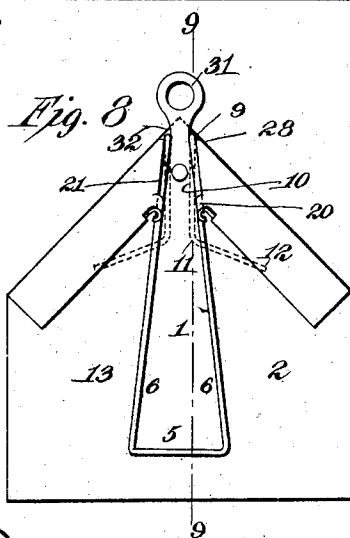
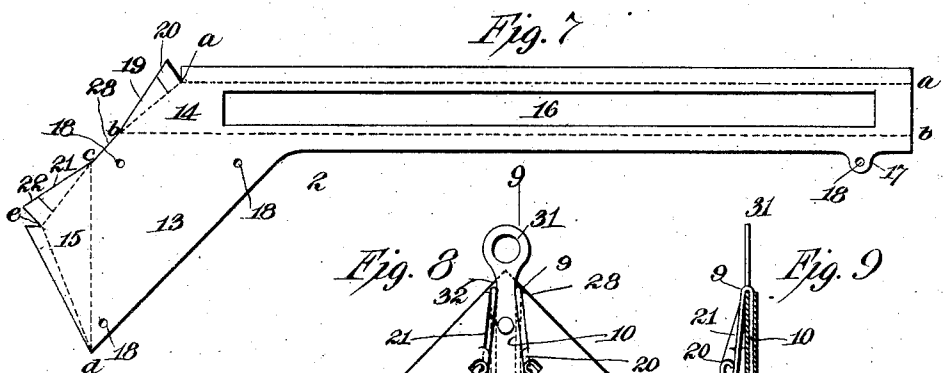
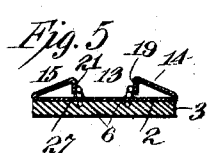
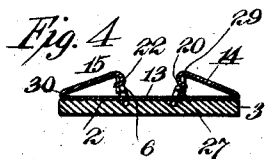
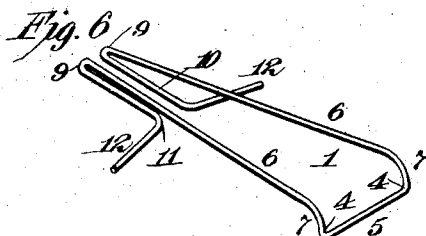
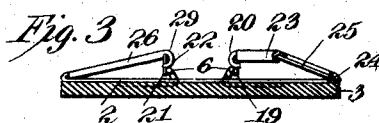
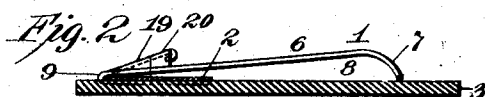
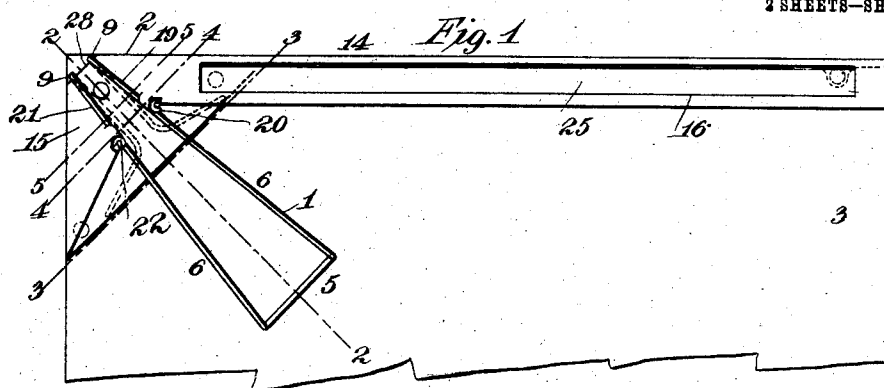
No. 854,254.

PATENTED MAY 21, 1907.

E. K. SUMERWELL.
CLASP.

APPLICATION FILED FEB. 6, 1905.

2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.

Fig. 10

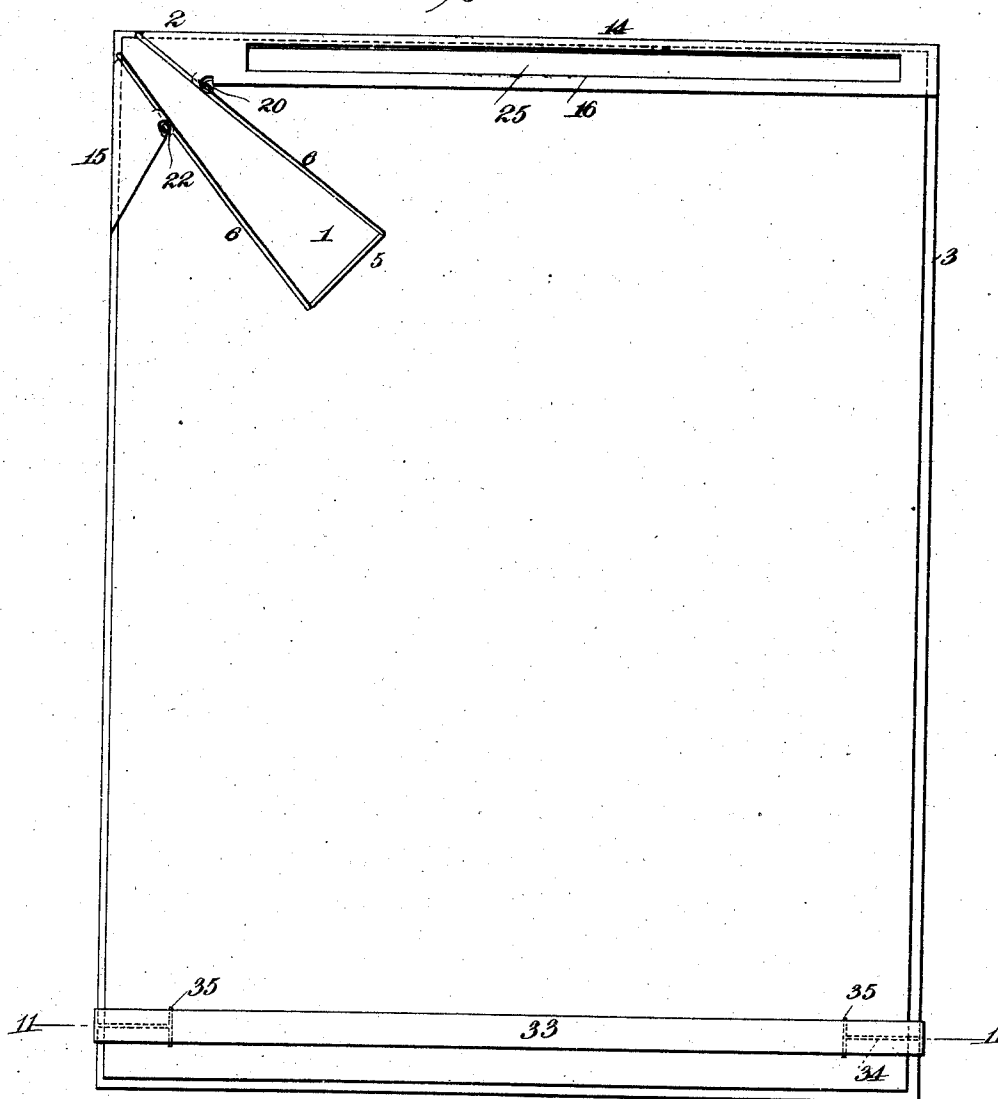
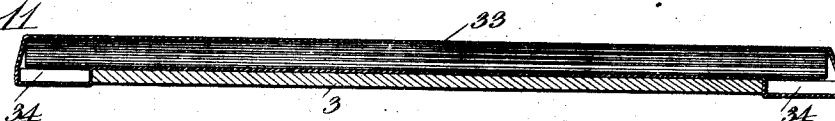


Fig. 11



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UNITED STATES PATENT OFFICE.

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CLASP.

No. 854,254.

Specification of Letters Patent.

Patented May 21, 1907.

Application filed February 6, 1905. Serial No. 244,362.

To all whom it may concern:

Be it known that I, EDWARD K. SUMERWELL, a citizen of the United States, residing in East Orange, county of Essex, and State of New Jersey, have invented certain new and useful Improvements in Clasps, of which the following is a specification.

The object I have in view is the production of a clasp for holding papers, letters, etc., which will be very simple, compact and cheap, which will not mutilate the papers and which will hold them in position to be readily examined. I attain these objects by the device illustrated in the accompanying drawings, in which

Figure 1 is a plan view of a device embodying my invention; Fig. 2 is a section taken on the line 2—2 of Fig. 1. Fig. 3 is a section taken on the line 3—3 of Fig. 1. Fig. 4 is a section taken on the line 4—4 of Fig. 1 and looking toward the corner. Fig. 5 is a section taken on the line 5—5 of Fig. 1 and looking toward the corner. Fig. 6 is a perspective view of the wire spring, Fig. 7 is a view of the metal blank before it is bent. Fig. 8 is a plan view of a modified form of the invention, Fig. 9 is a section taken on the line 9—9 of Fig. 8, Fig. 10 is a front view of the complete device, and Fig. 11 is a section taken on the line 11—11 of such figure.

In all the views, like parts are designated by the same reference characters.

In carrying out my invention, I provide a finger 1 of spring wire, supported by a fitting 2, of sheet metal, and engaged with and secured to a backing 3 of cardboard or pasteboard.

In Fig. 1 is illustrated a device to be used in connection with a vertical filing system, the upper part of the board being shown. In Fig. 8 is illustrated a clasp to be used for holding papers, letters, etc., not in connection with any system of filing. As shown in Fig. 6 the wire constituting the finger 1 is bent at two places, 4, 4, forming a horizontal portion 5 for engagement with the papers. The two sides, 6, 6, are straight when viewed from above as shown in Fig. 1, but are curved downward at 7 as shown in Fig. 2 so that when the portion 5 is resting against the backing 3, or the fitting 2, or any object placed between the two, the sides 6 will be inclined thus leaving an opening 8 between the wire finger and its support. The wire is sharply bent at 9 and extends backward below but nearly parallel to the sides 6 as indi-

cated at 10. At a certain point indicated by the numeral 11, the two points of the wire are again bent and separated, the ends 12 extending out to each side.

The wire finger is held in position to hold the papers, by being clamped between the cardboard 3 and the fitting 2 and is partly embedded within the former. The metal fitting 2 shown in Fig. 7 has a central body portion 13 and wings 14 and 15. These wings extend at an angle from the body 13, the wing 14 having an opening 16 cut therein, and an ear 17 extending from its bottom. Openings 18, 18, serve as a means for the passage of rivets for securing the fitting to the board. One edge of the wing 14 is cut so as to form separate ears 19 and 20, ears 21 and 22 being similarly formed upon the wing 15. The blank from which the fitting is made, is bent along the lines *a—b*, *b—b*, *c—d*, *c—e*, and *d—e*.

The turned over portion formed by bending along the line *a—b* produces a shoulder or lip 23. The bend *b—b* produces a shoulder or lip 24. The turned over shoulders or lips 23 and 24 together with the body of the blank, form a pocket into which a tablet or card 25 may be introduced and retained. The tablet or card 25 will lie above the clamped edges of the papers contained in the file and the contents of the file may be enumerated thereon. The opening 16 in the body of the blank will serve as a window through which the matter written on the tablet or card may be observed.

In Fig. 3 is shown a section of the device, showing the pocket with the tablet or card 25 in place therein, and in Fig. 10 is shown a number of sheets of paper clamped on the file with a tablet showing above the upper ends of the sheets. The shoulder 24 also serves as a means for retaining the upper edges of the papers in place as will be presently described. The wings 14 and 15 being bent along the line *b—b*, and *c—d*, to the position shown in Fig. 1, will not be parallel to the body portion of the blank, but will rise therefrom at an angle as shown in Figs. 4 and 5. The blank is bent along the line *d—e*, so as to form a turned over portion 26, which will be of service in protecting the fingers of the user of the device from contact with the sharp edge of the sheet metal. The ears 19, 20, 21 and 22 are bent downward along the line *a—b*, and *c—e*. The ears 20 and 22 are bent to the curved shape as shown in Fig. 4,

and thereby constitute cams, while the ears 19 and 21 are bent to the straight shape as shown in Fig. 5 and serve as guides for the wire finger. The straight ears 19 and 21 are arranged to extend closer to the body portion 13 than the curved ears 20 and 22, as is shown in Fig. 4. All four ears do not extend quite to the body portion 13, but leave a space 27 between the ends of each and the body portion 13 to permit the passage of papers, etc., under them. These ears serve as a pathway within which the wire finger works. One edge of the body portion 13 at 28 is cut off square so that it will form a bearing for the bent portions 9 of the wire finger.

In assembling the component parts of the device, the blank is first bent to shape as described; the wire finger previously bent to shape is inserted in place as shown in Figs. 1 and 2, the portions 6-6 extending over the body portion and the portions 10, 11 and 12 under it. The metal fitting 2 is then riveted or otherwise permanently secured to the backing 3, the wire finger between the metal and the backing being forced or embedded into the latter so that it will be immovably secured in position. When in place the sides 6, 6 of the wire finger will engage the straight ears 19 and 21 as shown in Fig. 5, and also with the curved ears 20, 22 as shown in Fig. 2.

The wire of the finger has sufficient elasticity and is so bent that independently of the cam action caused by the curved ears 20, 22, it will firmly engage with the backing 3 at its horizontal portion 5. The ends of the wire finger will also have a tendency to spring outward, that is to say, the two portions, 6, 6 will tend to separate and will engage directly with the straight ears 19, 21, and below the curved ears 20, 22. The wire fingers acting upon these curved ears, will have a cam effect which will assist in depressing the horizontal portion 5 to the finger and will also constitute a lock to hold its horizontal portion 5 down against the backing or elevated above it at an angle. The horizontal portion 5 of the wire finger cannot be elevated unless the portions 6, 6 of the wire be first pressed inward. The upper portions 29, 29 of the curved ears act similar to a lock for holding the horizontal portion 5 of the wire finger elevated above the backing. When the sides 6, 6 of the wire finger begin to engage with the curved portion 29 of the ears 20 and 22, the arms 6, 6 of the wire finger will begin to separate, until they assume their normal position, resting upon the upper portions 29, 29 of the curved ears. The curved ears are so proportioned in relation to the elasticity of the wire finger that when the latter is resting upon the upper portion 29 of the curved ears, it will be held in such position against the depressing effect of the wire.

In using the device, the operator may in-

troduce his thumb or one of the fingers of his left hand within the space 8 under the sides 6, 6 of the wire finger, lifting the horizontal portion 5 upward and engaging the sides with the top portions 29 of the ears 20, 22. The papers may then be inserted below the wire finger and caused to engage with the shoulder 24. The left hand edge of the paper will also engage below the wing 15, and abut against the shoulder 30 formed therein, the corner of the paper passing between the bend portions 9, 9 of the wire finger. These shoulders will thereby serve as a means for centering the paper in place within the clasp. After the papers have been inserted, the operator can depress the wire finger, thus causing the sides 6, 6 to spring around the ears 20 and 22 and engage with the lower surfaces thereof, the horizontal portion 5 of the wire finger thereby engaging with the papers owing to the elasticity of the bent portions 9, and the cam action of the sides of the wire upon the curved ears 20, 22.

In the modification shown in Figs. 8 and 9 the metal fitting 2 is extended downward some distance, and thus forms a table upon which the horizontal portion 5 of the wire engages. The metal fitting is bent double, forming the back 32 of metal, which is in two thicknesses. The wire finger is clamped between the two thicknesses of metal. The upper portion of the metal fitting is extended to form a loop or eye 31 by means of which the device may be supported.

In Figs. 10 and 11, an elastic rubber band 33 is shown as employed to retain the lower ends of the papers within the file. Narrow slots 34, 34 are made in the lower portion of the cardboard, and at the base of these slots are short transverse slots 35, 35, slightly longer than the width of the band. The band is secured in place by having a portion introduced within the transverse slots, so as to pass below the slots 34, and around the top of the board. This rubber band can be used to retain the papers in place by being passed over them.

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

1. A clasp formed of a backing of cardboard, and a metal fitting with a spring wire finger, the ends of the wire being retained in place by being clamped between the cardboard and the metal and embedded in the former.

2. A clasp formed of a backing of cardboard, and a metal fitting with a spring wire finger, the wire being clamped between the cardboard and the metal and embedded in the former, a portion of the metal being bent in curved form to serve as a locking means for the wire.

3. In a clasp, the combination with a backing, of a fitting of sheet metal attached

to a corner thereof and having a body portion and two flaps at right angles to each other the said flaps being bent over at an angle to the body portion to form a shoulder for guiding the papers within the clasp, a spring wire finger secured between the backing and the sheet metal fitting, the said flaps having ear portions which engage with and guide the wire.

4. In a clasp, the combination with a backing, of a fitting of sheet metal attached to a corner thereof and having a body portion and two flaps at right angles to each other, the said flaps being bent over at an angle to the body portion to form a shoulder for guiding the papers within the clasp, and a spring wire finger, the said flaps having ears, the said ears being straight, to engage with the wire and serve as guides.

5. In a clasp, the combination with a backing, of a fitting of sheet metal having a body portion and flaps, which are bent over at an angle to the body portion to form a shoulder for guiding the papers within the clasp, and a spring wire finger, the said flaps having ears which engage with the wire finger, the ears being curved to engage with the wire and serve as locks.

6. In a clasp, the combination with a backing, of a sheet metal fitting, having a body portion and flaps, the said flaps being bent over at an angle to the body portion to form a shoulder for guiding the papers within the clasp, and a spring wire finger, the said flaps having straight ears which engage with the wire finger and serve as guides, and other ears which are curved, and engage with the wire fingers and serve as locks.

7. In a clasp of sheet metal, the combination with a backing and a fitting of sheet metal, the said fitting having a flap bent at an angle to the body portion of the fitting, the top of the flap being turned over forming

a support for a card, a portion of the metal of the flap being cut away to expose the card, a card, and a spring metal finger secured between the fitting and backing.

8. In a clasp, the combination with a rectangular cardboard backing, of a metal fitting attached to it extending across the top of the backing forming a guide for the papers, and a spring wire finger secured at one corner of the backing and extending diagonally across it.

9. In a clasp, the combination with a rectangular cardboard backing, of a metal fitting attached to it extending across the top of the backing forming a guide for the papers, and a spring wire finger secured at one corner of the backing and extending diagonally across it, the wire finger being curved upward from its free portion so as to form an opening within which the thumb of one hand of the operator may be extended for the purpose of lifting up the wire finger.

10. In a clasp, the combination with a rectangular cardboard backing, of a metal fitting attached to it extending across the top of the backing forming a guide for the papers, and a spring wire fitting secured at one corner of the backing and extending diagonally across it, the wire finger being curved upward from its free portion so as to form an opening within which the thumb of one hand of the operator may be extended for the purpose of lifting up the wire finger, the wire finger being engaged by a lock on the fitting to hold it downward or upward free from contact with the papers.

This specification signed and witnessed this third day of February, 1905.

EDWARD K. SUMERWELL.

Witnesses:

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