(No Model.)

I. W. HEYSINGER.

UPRIGHT PAPER CLIP.

No. 327,440. Patented Sept. 29, 1885.

Fig. 1.

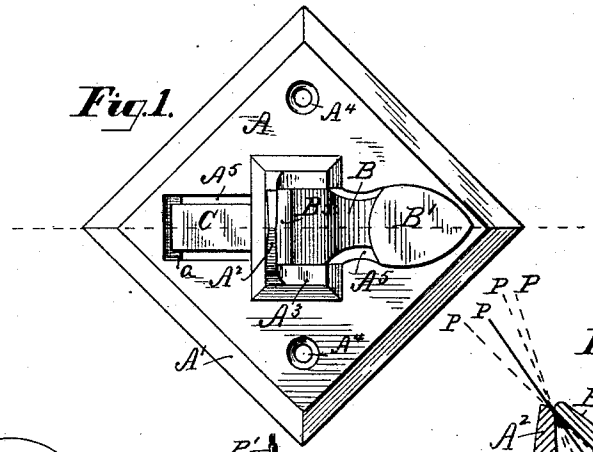


Fig. 3.

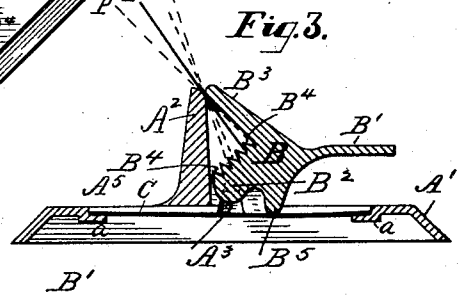
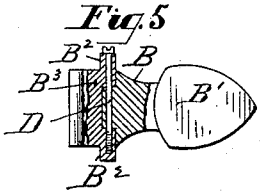


Fig. 5



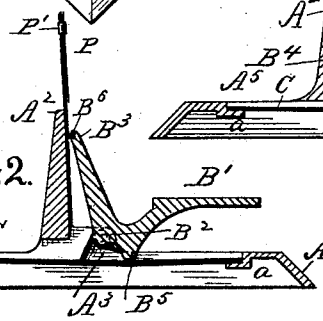
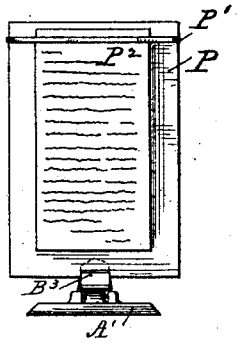


Fig. 2.

Fig. 9.



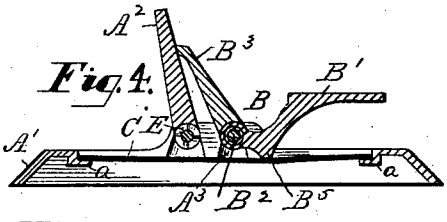


Fig. 4.

Fig. 6.

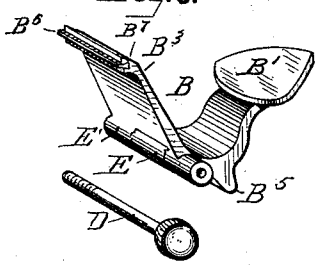


Fig. 7.

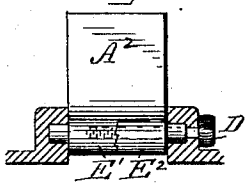
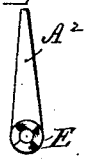


Fig. 8.



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UNITED STATES PATENT OFFICE.

ISAAC W. HEYSINGER, OF PHILADELPHIA, PENNSYLVANIA.

UPRIGHT PAPER-CLIP.

SPECIFICATION forming part of Letters Patent No. 327,440, dated September 29, 1885.

Application filed May 16, 1885. (No model.)

To all whom it may concern:

Be it known that I, ISAAC W. HEYSINGER, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a certain new and useful Improvement in Upright Paper-Clips, &c., of which the following is a full, clear, and exact description, reference being had to the drawings accompanying and forming a part of this specification, in which—

Figure 1 is a plan view, from above, of a clip embodying my invention. Fig. 2 is a longitudinal vertical section along the line of the spring C. Fig. 3 shows a construction of the clamping-lever whereby papers, &c., may be held at various angles. Fig. 4 is a modified form in which the clamping-jaws are made mutually adjustable upon transverse centers, so as to hold papers at various angles. Fig. 5 is a view of a clamping-lever, detached, with its thumb-piece and clamping-jaw formed in two parts hinged together by the screw D. Fig. 6 shows the same in perspective, the binding-screw D being shown detached. Fig. 7 is a front view in cross-section taken at the line where the clamping-jaw is pivoted to the base. Fig. 8 is a side view of the same, showing the clutch E, by which it is fixed to the thumb-piece at any desired angle by means of the screw D, and Fig. 9 shows a board held in place by the jaws of the clip, and supporting a sheet of paper, letter, or design, to be copied, the same being held from falling by the adjustable band or holder P'.

Like letters refer to like parts.

My invention relates to the construction of a spring clip for holding papers, cards, calenders, copies for writing or drawing, models, photographs, &c., in which the said papers, &c., are held in an erect or slightly-inclined position, so as to be easily read or seen upon a mantel, table, desk, &c., and in which, if desired, the angle at which they are held may be varied so as to give them a greater or less erectness of position as may be most suitable for the purposes required, the device also being adapted for use as a paper weight, the jaws of the upright clip forming a convenient handle for moving the same about from place to place.

While the device may have its thumb and clamping lever attached to its base in various ways, I prefer to use the means shown and described and patented to me in my Letters Patent of the United States No. 226,402, dated April 13, 1880, upon which, in so far, it is an improvement, the same general arrangement of spring, thumb-lever, heel impinging upon spring, and clamping-jaw being used with a base; but the device as herein described is so modified in its construction as to render it useful for purposes to which the former invention was not adapted, and at the same time take away its utility for the purposes set forth in the Letters Patent aforesaid.

Referring to the drawings, in Fig. 1 I show a flat, preferably square or oblong, base, A, raised from the table by the beveled margin A', and slotted diagonally through the middle for the reception of the flat bar-spring C, which rests at its extremities upon the shoulders *a a*. (Shown in Fig. 2.) About the middle of this spring-slot there extends across it from side to side, arched over the same and rising above the surface of A, an upright, A^2, which extends directly upward, being sloped in front and rear, as shown in Fig. 2, so as to insure easy casting if made, as I prefer to make it, of cast metal, and also to give its forward surface, where engaged upon by the clamping-jaw, a cant or rake backward, so that the papers held upon the said surface by the clamping-jaw B^3 will set backward, so as to insure easy reading, and give a graceful slope to the articles held in the the clip. As shown in Fig. 2, this upright A^2 extends above the point where it is impinged upon by the clamping-jaw B^3, to support the papers and prevent them from tipping backward upon the lip of the clamping-jaw as a pivot. In front of the upright A^2 the base is carried forward, as shown in Fig. 2, and is provided on the sides of the spring-slot with a pair of open sockets, A^3, closed above and open beneath, into which the pins B^2 B^2 of the clamping-lever B may be seated by insertion from beneath, and be held up in place by the upward pressure of the spring C against the heel B^5. This clamping-lever B consists of a thumb-piece, B', extending

backward from the pivot B^2, and overhanging the base and spring-slot A^5, so that it may be depressed by pressure upon the top surface of the said thumb-piece. At its forward end it is bent sharply upward, above the pivot B^2, to form a clamping-jaw, B^3 B^6, which impinges upon the flat surface of A^2, and is adapted to clamp and securely hold any papers, &c., interposed between the said jaws in the manner of an easel. This thumb-lever B is pivoted to the base by the pins B^2 B^2, which are seated from the under side in the sockets A^3 A^3, the thumb-lever being adapted to be slipped into place through spring-slot A^5, Fig. 3, the said spring-slot being cut away at the sides, as shown in Fig. 1, to admit the passage of the same.

The thumb-piece B, in rear of the pins B^2 B^2, is provided with a downwardly-projecting heel, B^5, which extends beneath the level of the pivots B^2 B^2, and impinges against the upper surface of the flat spring C between the shoulders *a a*, so that the upward pressure of the spring holds the thumb-piece and its pivots up to place, and at the same time secures a firm clamping of the jaw B^3 against the opposite jaw, A^2, while pressure upon the thumb-lever B′ will cause the jaws to open, the pivots B^2 B^2 forming the center upon which the clamping-lever rotates.

By slipping the spring C out of its sockets *a a* the thumb-piece may be readily disengaged, or conversely. In order to secure even pressure against the papers held in the clip along the lip of the clamping-jaw B^3 where it abuts against the opposite jaw, A^2, I provide the edge of the clamping-jaw (see Figs. 2 and 6) with a strip of rubber or other elastic substance, shown at B^6, which I prefer to set into the edge of the clamping-jaw B^3 by means of the dovetail groove B^7, Fig. 6, though it may be applied otherwise, if desired; and if such evenness of fit be not required along the edge of the clamping-jaw B^3, I dispense with the elastic cushion altogether. This cushion B^6, extending along the lip of B^3, will closely apply itself to the surface of A^2 under pressure of the spring C, and securely hold papers, &c., without lateral slipping thereof. I prefer to form the base A of cast metal in the form of a paper-weight, either square, oblong, polygonal, oval, or round, and to make it sufficiently heavy to perform the functions of such paper-weight I also provide the base A with the screw-holes A^4 A^4, by means of which I attach the device to a desk or table or to a loose board of ornamental or protective character or to a pad of such size as to prevent tipping over of the clip when used for holding large cards, pictures, &c., I also sometimes make the device exceedingly light and ornamental in character, for use as an ornamental card or photograph holder in parlors, &c. I also provide it, when made of suitable size for use by copyists, artists, &c., with a detachable-board, P, of pasteboard, wood, or other material, which I provide at its upper part with a clip or holder or adjustable spring-band, P′, so that when the board P is inserted, as shown in Figs. 2 and 9, the papers are held from dropping out sidewise or slipping by the support afforded by the clamp P′, which holds the said papers against the said board, while the base of the clip A affords a support against dropping downward by their weight, or when the clamp P′ is not used, so that the device acts as an easel of an exceedingly simple, compact, and effective character.

Instead of a spring-band at P′, I sometimes use a metallic spring or lever clamp of any of the forms in use for like purposes in letter-clips, &c.

While the backward slope or rake of A^2 (shown in Fig. 2) is sufficient in general, it is sometimes desirable to secure various adjustments of inclination for the copy in the holder. I accomplish this in a cheap construction, in the manner shown in Fig. 3, where the inside of the clamping-jaw B^3 at its lower part and above the pivots B^2 B^2 is widened in its space from point to rear, and provided along its bottom with a series of vertical or inclined transverse serrations, B^4 B^4, opening upward, and into any one of which the bottom of the board P may be inserted, and which will correspondingly incline the board P to a greater or less degree. In this case the part of A^2 which projects above the lip of the jaw B^3, (see Fig. 2,) and which in that figure supports the back of the board P above the point of impingement of the clamping-lip B^6 is removed, so that the clamping-jaw B^3 may engage against the upright A^2 at its top, so that the various slopes of the board P in the serrations B^4 B^4 may not be interfered with.

Where a more positive guidance is required for the adjustable board P, I use the construction shown in Figs. 6, 7, and 8. This may be briefly described as the hinging of the upright A^2 upon a transverse pivot at its lower part and a similar hinge or pivot at or near the joint of the clamping-lever B^2, so that each part can be set backward or forward to various angles, and then be tightened up by screws or springs acting along the line of the pintle of said hinges, so that the jaws may be adapted to each other at different angles relative to the base without interfering with the action of the pivots B^2 B^2, the heel B^5, the spring C, or the thumb-lever B′. In Fig. 6 I show a thumb-screw, D, detached. In Fig. 5 the same is shown without a thumb-screw head, however, inserted into the hinge-joint. As shown, it will draw the lugs upon the segments of the hinge together in the manner more clearly indicated in Fig. 7, the opposite faces of the hinge-lugs being roughened or serrated, as shown in Fig. 8, to hold the parts securely when tightened up. I prefer to pass this screw D through one of the pins B^2 B^2, which are enlarged for the purpose, as the centers will thus coincide, and I also seat the screw in the lug of the opposite segment of the hinge, so as to draw the lugs together by ro-

tating the said screw. I also sometimes secure this adjustment by the use of a spring acting against the serrated surfaces E E', Figs. 7 and 8, so that a very ready adjustment may be secured; but for ordinary purposes I prefer the simpler solid construction shown in Figs. 1 and 2, which can be cast to any angle required for the special class of work in view at the time the device is made.

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

1. The combination of the horizontal base A, spring C, upright jaw A^2, extending vertically above said base, pivoted upright clamping-jaw B^3, adapted to impinge thereupon and hold cards, papers, &c., in substantially a vertical position, and laterally-projecting thumb-piece B', substantially as described.

2. An upright paper-holding clip and weight, consisting of an expanded horizontal base provided with an upwardly-projecting central jaw extending vertically above the said base and adapted to be used as a handle for the paper-weight and a jaw for the paper-clip, and a laterally-projecting thumb-lever actuated by a spring and provided with an angularly raised clamping-jaw to close against said upright jaw of the base, and hold papers or other articles between the said jaws in an upright or inclined position upon a desk or table, substantially as described.

3. In combination with the base A, provided with a transverse spring-slot, A^5, having terminal spring-supporting shoulders *a a*, and an upright jaw, A^2, arched over said spring-slot and extending upward from the same, a clamping-lever, B, having pivoted supports B^2 B^2, seated from beneath in the open sockets A^3 A^3, a projecting thumb-piece, B, an upwardly-projecting clamping-jaw, B^3, and a heel, B^5, in rear of said pivots B^2 B^2, together with a flat spring, C, supported upon said shoulders *a a*, and extending beneath the arched upright A^2, the clamping-jaw B^3, and the thumb-piece B', and impinging against the under surface of the said heel B^5, substantially as and for the purposes described.

4. In combination with the upright paper-clip, consisting of the base A, having the upright jaw A^2, and a spring thumb-lever, B, having the clamping-jaw B^3, adapted to impinge against the said upright jaw A^2, the transverse serrations B^4 B^4, formed within the jaws B^3 A^2, to receive the lower edge of the card P, and secure adjustment thereof at different angles, substantially as described.

5. The adjustable upright clip A B C, having base A, upright jaw A^2, spring clamping-lever B, having thumb-piece B', and clamping-jaw B^3, and a spring, C, adapted to compress together the jaws B^3 and A^2, said jaws being made independently adjustable upon their supporting parts by means of the hinged joints E E', substantially as and for the purposes set forth.

6. As an article of manufacture, an upright paper-clip, consisting of a horizontal metallic base provided with a transverse spring-slot, A^5, shoulders *a a*, upright jaw A^2, extending vertically above the said spring-slot, the pivoted spring clamping-jaw B^3, adapted to impinge against the said upright jaw A^2, and the spring C, the said base A being provided with the holes A^4 A^4, or their equivalents, for the reception of screws, &c., for permanent attachment of the said clip to a desk or table, or to an extended wooden or other base, substantially as described.

7. As an article of manufacture, the upright paper-clip consisting of the horizontal base A, having spring-slot A^5, provided with shoulders *a a*, journal-boxes A^3 A^3, opening downward, and vertical jaw A^2, together with the clamping-lever B, having the horizontal thumb-piece B', angularly-raised clamping-jaw B^3, heel B^5, and journals or pins B^2 B^2, the said lever B, with its journals, being held up in place and the parts kept together by the upward impingement of the spring C against the heel B^5 thereof, substantially as described.

ISAAC W. HEYSINGER.

Witnesses:
J. L. HEYSINGER,
M. B. FENNINGER.