

No. 761,635.

PATENTED MAY 31, 1904.

A. F. KELLEY.  
PAPER CLIP.

APPLICATION FILED APR. 24, 1902.

NO MODEL.

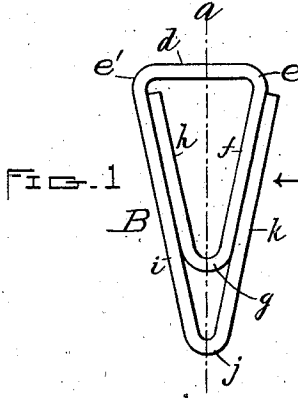


FIG. 1.

FIG. 2.

FIG. 3.

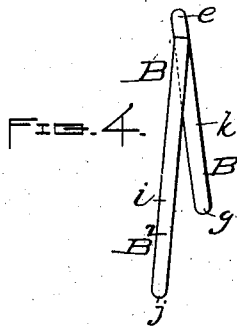
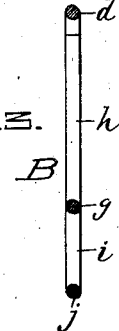
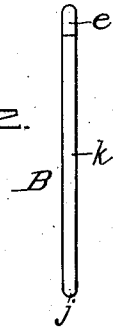


FIG. 4.

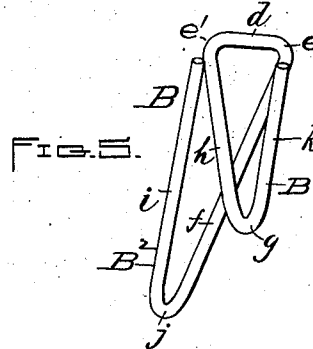


FIG. 5.

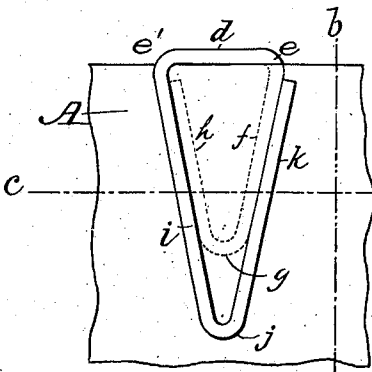


FIG. 6.

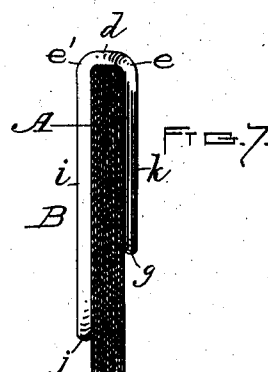


FIG. 7.

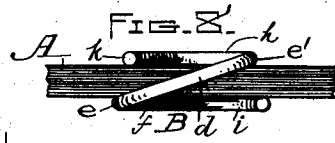


FIG. 8.

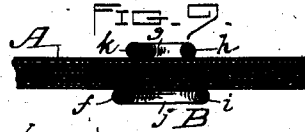


FIG. 9.

Witnesses;  
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# UNITED STATES PATENT OFFICE.

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## PAPER-CLIP.

SPECIFICATION forming part of Letters Patent No. 761,635, dated May 31, 1904.

Application filed April 24, 1902. Serial No. 104,645. (No model.)

*To all whom it may concern:*

Be it known that I, ARTHUR F. KELLEY, of the city and county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Paper-Clips; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 represents a side view of my said improved paper-clip. Fig. 2 is an edge view thereof looking in the direction of the arrow. Fig. 3 is a central longitudinal section of the clip, taken on line *a*, Fig. 1, also looking in the direction of the arrow. Fig. 4 is an edge view of the clip with the loop-clamping ends sprung apart in position preparatory to applying the same to the papers to be held. Fig. 5 is a perspective view of the clip in the expanded position shown in Fig. 4. Fig. 6 represents a side view of my improved clip applied to the edge of the papers to be held thereby. Fig. 7 is a section through said papers, taken on line *b*, Fig. 6, looking in the direction of the arrow and showing an edge view of the clip applied to said papers to hold them, as is shown in said Fig. 6. Fig. 8 is a top or plan view of the parts shown in Fig. 6, and Fig. 9 is a transverse section taken on line *c*, Fig. 6.

The object of my invention is to provide a paper clip or holder constructed so that it may be easily and quickly applied, which presents no sharp projections at the pointed end, which is applied to the paper, and therefore does not tear the paper, and which when applied lies flat upon both sides of the papers which are held thereby.

Said invention consists of a wire made of suitable spring material and bent into the special shape or form hereinafter set forth, and shown in the drawings.

To enable others to better understand the nature and purpose of my said invention, I will now proceed to describe it more in detail with reference to the accompanying drawings.

In said drawings, A represents a section of

papers, and B my improved clip or holder for fastening their edges together. Said clip is preferably made of tempered steel wire of a springy or elastic nature; but, if desired, any other material may be used suitable for the purpose. It is bent to form two triangular-shaped bodies, one a little shorter than and lying within the other. The short side *d* forms the top or base end of both triangles, said side being opposite from the ends which are applied to the edges of the paper to clamp or hold the same.

Assuming that the clip is viewed in the position shown in the drawings, that portion of the wire which extends to the right from said straight side forms the smaller triangle and the one to the left thereof the larger triangle, the smaller one coming within the larger one and their sides made to come in alinement laterally and touching. That portion of the wire which forms the small triangle starting from the rounded corner *e* extends downward and inward in a straight line *f* toward the vertical center of the clip. It is then curved to form the loop *g*, and finally extending upward and outward in a straight line *h* terminates at the end at or just under the rounded corner *e* at the opposite end of the straight side *d* from corner *e*, thus forming, as will be seen, the inner and smaller triangle above referred to. That portion of the wire which forms the outer and larger triangle extends downward and inward from the corner *e* in a straight line *i* outside of and bearing against the straight side *h* and a short distance below the loop *g*. It is then curved to form the loop *j*, centrally in line with said loop *g*, and finally it extends upward and outward in a straight line *k* outside of and bearing against the straight side *f* and terminates at its upper end at or just below the corner *e*, thus completing the larger triangle.

The above-described construction of forming a wide base *d* to the clip and so bending the wire extending from each end thereof to form the two looped ends, tongues, or clamps *B'* *B''*, with the terminating ends of the wire pointed in the direction opposite from that at which the clip is applied to the papers to be

fastened, is of the utmost importance in practice for the following reasons: First, by making the clip with a wide base unlike in construction and appearance from its opposite or clamping end the operation of applying the clips is greatly facilitated, as it is impossible to mistake the clamping end to be applied to the paper from the end to be held in the fingers in making said application; second, by making the clip with two triangular-shaped tongues or clamps, as  $B'$  and  $B''$ , supported from a wide base  $d$  the clip may be easily applied, as said tongues or clamps readily spring apart to admit the edges of the paper when the clip is pressed thereover, and when applied they both lie flat upon both sides of said paper even though quite a number of thicknesses are to be fastened, as is shown in Figs. 7, 8, and 9 of the drawings, thereby not only more securely adhering to and holding said paper, but also presenting no obstructions greater than those produced by the diameter of the wire to catch against adjoining objects or substances, and, third, by forming the clip with the terminal ends of the wire directed in the opposite direction from that at which it is applied to the paper, as previously stated, and thereby presenting only the rounded or loop ends  $g$   $j$  to said paper, the danger of tearing or mutilating said paper in applying the clips is reduced to a minimum. Other advantages might be mentioned; but these are the principal ones which I claim for my invention.

The clip as a whole is V-shaped or triangular. The two members  $BB'$  lie one within the other, with the inclined sides lying close together in the same plane. The straight top  $d$  joins one inclined side of the inner member with an inclined side of the outer member, forming acute angles where the sides of the members join the top. The inclined sides of the members afford extended friction-surfaces, and the abrupt bends at  $g$  and  $j$  serve to firmly grip the paper where the gripping action is most needed.

Having now described said invention, what I claim therein as new, and desire to secure by Letters Patent, is—

1. A V-shaped clip formed of a single piece of wire comprising two members arranged one within the other, and having inclined sides arranged close together in the same plane, and with a straight relatively long top joining one inclined side of the inner member and an inclined side of the outer member at acute angles.

2. A paper-clip formed of a single piece of wire comprising two members arranged one within the other, each of said members being substantially V-shaped, the top portion of the clip being straight, the ends of the wire being at the top of the clip and the inclined sides being arranged close together in the same plane and joining the top at acute angles, while

the inner end of the inner member is abruptly bent.

3. A paper-clip formed of a single piece of wire comprising two members arranged one within the other in the same plane, and having sides inclined to each other and arranged close together so as to grip the paper between them, and to hold the clip flat upon the paper, the top portion of the clip being straight, and the lower portion of the inner member abruptly bent, substantially as described.

4. A paper-clip formed of a single piece of wire, and comprising two members, one of which is triangular or V-shaped and has its two sides inclined downward and inward from the base of the triangle to the apex thereof, while the other member forms a continuation of that first mentioned and extends downward from the base past the apex of the first-mentioned member.

5. A paper-clip formed from a single piece of wire, comprising two triangular or V-shaped members having a common base, with the sides of each member lying close together, inclined downward and inward from the base of the triangle toward the apex thereof.

6. A paper-clip formed of a single piece of wire comprising two members, each of which is substantially V-shaped, the top portion of the clip being straight, and the inclined sides being arranged close together and joining the top at acute angles, while the inner end of one member is abruptly bent, for the purpose specified.

7. A wire paper-clip comprising two triangular-shaped bodies having a base-line in common for both, one triangle lying within the other with the wire composing the sides thereof in the same plane and touching, the smaller triangle being formed by extending the wire straight from one end of the base-line longitudinally and inward to the central, longitudinal line of the clip, thence backward and outward longitudinally in a straight line to the other end of the base-line; and the larger triangle being formed by extending the wire straight from said second-named end, longitudinally and inward to the longitudinal center of the clip outside of the smaller triangle and beyond the end thereof, thence backward and outward longitudinally in a straight line also outside of the smaller triangle to the first-named end, substantially as and for the purpose set forth.

8. A wire paper-clip comprising two triangular-shaped bodies having a base-line in common for both, one triangle lying within the other, the smaller triangle being formed by extending the wire straight from one end of the base-line longitudinally and inward to the central, longitudinal line of the clip, thence backward and outward longitudinally in a straight line to the other end of the base-line; and the larger triangle being formed by extending the wire straight from said second-

named end, longitudinally and inward to the longitudinal center of the clip outside of the smaller triangle and beyond the end thereof, thence backward and outward longitudinally  
5 in a straight line also outside of the smaller triangle to the first-named end, substantially as and for the purpose set forth.

9. A paper-clip consisting of a single piece

of wire bent to form two acute triangles, normally disposed in the same plane, one within 10 the other, and having a common base.

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Witnesses:

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