

J. H. IRVIN.
PAPER CLIP.
APPLICATION FILED DEC. 14, 1908.

1,019,256.

Patented Mar. 5, 1912.

Fig. 1.

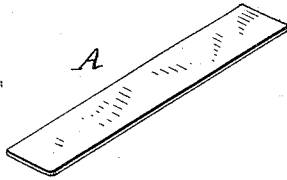


Fig. 2.

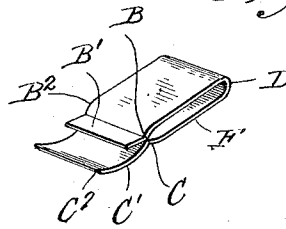


Fig. 3.

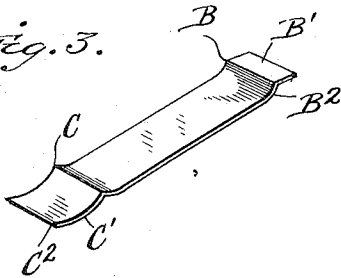


Fig. 4.

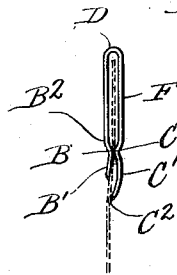


Fig. 5.



Fig. 6.

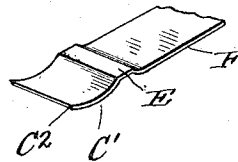


Fig. 7.



Witnesses
M. W. Church
Elizabeth Gifford

Inventor
James H. Irvin
By Church & Church
his Attorneys

UNITED STATES PATENT OFFICE.

JAMES H. IRVIN, OF BALTIMORE, MARYLAND.

PAPER-CLIP.

1,019,256.

Specification of Letters Patent.

Patented Mar. 5, 1912.

Application filed December 14, 1908. Serial No. 467,385.

To all whom it may concern:

Be it known that I, JAMES H. IRVIN, of Baltimore city, Maryland, have invented certain new and useful Improvements in Paper-Clips; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the figures and letters of reference marked thereon.

This invention relates to clips for temporarily securing sheets of paper together, one object of the invention being to provide an exceedingly simple and cheap device adapted to lie substantially flat, with no projections liable to accidentally engage other clips or the papers.

Another object is to provide a device which will have a maximum gripping power to prevent accidental separation of the sheets, and afford the greatest facility for the insertion of the edges of the paper without liability of mutilating the same.

The invention consists in certain novel details of construction and combinations and arrangements of parts all as will be now fully described and pointed out particularly in the appended claim.

In the accompanying drawings: Figure 1 is a plan view of a resilient sheet metal blank of convenient form to be bent up into the clip of the present invention. Fig. 2 is a perspective view of a clip bent up from a blank such as is shown in Fig. 1. Fig. 3 is a similar view of the partly formed blank. Fig. 4 is an edge elevation of the clip. Fig. 5 is an edge elevation of the partly formed blank shown in perspective in Fig. 3. Fig. 6 is a detail perspective view showing a modification. Fig. 7 is a view of still another modification.

The clip of the present invention is formed of resilient sheet metal, preferably rolled brass or steel, which latter may be tempered to give the desired resiliency and pressure. In the formation of the clip a sequence of steps is preferably followed, which will result in the production of the gripping edges preliminary to the bending of the blank into its final form, although it will be understood that the particular process employed forms no part of the present invention.

The blank A, Fig. 1, which may be cut from a strip of suitable width, or from a sheet of metal, is preferably first shaped between dies so as to form two gripping edges

B and C, at slightly different distances from the opposite ends, and the longer end is curved outwardly, as at C', and its extremity C² again brought in toward the plane of the edges. The shorter end B' may be left substantially straight, while the body of the blank immediately adjacent the gripping edges is curved or offset at B². A partially formed blank of this construction may be completely formed into the clip of the present invention by doubling the body portion intermediate its ends, as at D, thereby bringing the two gripping edges into contact or coöperative relation to each other, as shown clearly in Figs. 2 and 4.

In the completely formed clip, as so far described, it will be observed that the gripping edges extend transversely and are relatively sharp to concentrate the gripping effort along a single line of considerable length, whereby the paper will be held firmly with a minimum liability of the sheets being separated by twisting action. It will also be noted that the bowed or curved end of the longer arm of the clip diverges from the shorter arm in proximity to the gripping edges, thereby forming a converging entrance aperture into which the edges of the paper may be readily inserted and the clip forced down on the several sheets in the well understood manner, and at the same time the extremity of the longer arm of the clip curves inwardly or toward the plane of the shorter arm a sufficient distance to rest against the sheets of paper. The formation of projecting edges such as are liable to catch in adjacent papers when moved edgewise with respect thereto is thus entirely avoided. The result last described is of special importance inasmuch as with the present clip it will be noted that the extremes of both arms are caused to lie against or close to the surface of the paper, and hence piles of papers separated into sections by clips of the character described may be readily slipped one pile past or over the other without danger of dislodging any of the clips or of catching and mutilating the edges of adjacent papers. In so far as this last mentioned feature is concerned, however, it is obvious that the gripping edges may be formed in various ways, without changing materially the form of the ends of the arms and without affecting their operation. Thus as shown in Fig. 6 one of the arms is provided with a substantially flat

gripping surface E against any portion of which the sharp projection on the other arm may bear. In Fig. 7 the gripping edges are formed by simple substantially circular indentations in the outer faces of the arms with corresponding projections H on the inner or proximate faces so located as to cooperate and grip the paper between them.

From the foregoing it is clear that the gripping edges may be formed by indenting or grooving the plate in various ways, and the clip completed by doubling the metal so as to form one long and one short arm, the extremities of which are brought into substantially the plane of the paper.

Having thus described the invention, what I claim as new and desire to secure by Letters-Patent, is:

A clip for superposed sheets of paper formed of a resilient strip of sheet metal

doubled to form two substantially parallel arms, said arms being provided at a point intermediate their length with oppositely disposed cooperating contacting gripping projections, the ends of said arms beyond the projections being made of different length and bent to diverge and form a converging entrance aperture; the extremities of said arms being brought into substantially the same plane with the gripping projections at different distances from the gripping projections whereby they will lie in close contact with opposite surfaces of the papers and a wide entrance opening in the side of the clip will be provided.

JAMES H. IRVIN.

Witnesses:

O. F. LACKEY,
J. A. POWERS.

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