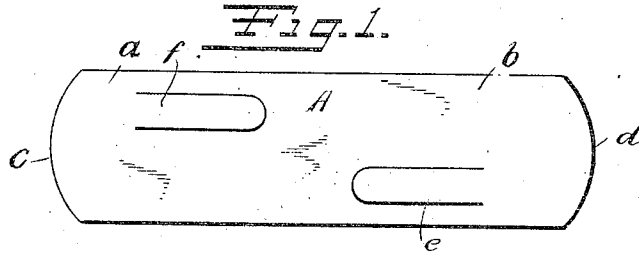
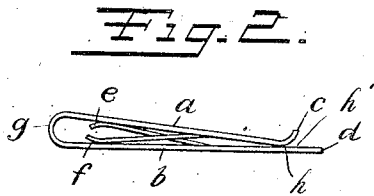
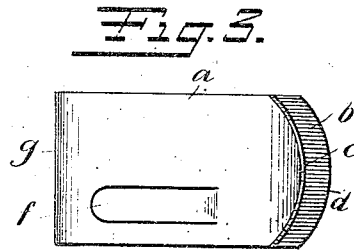
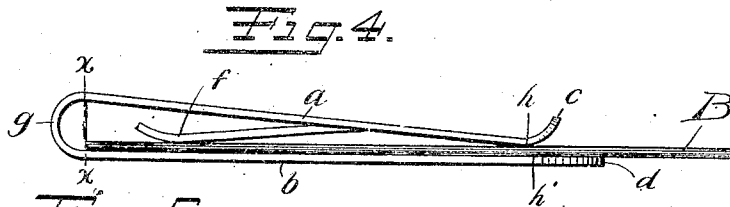
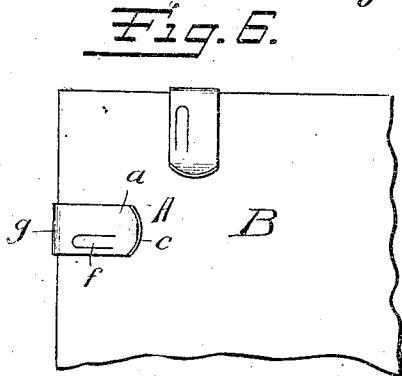
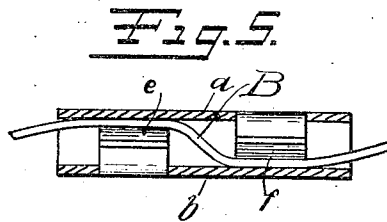


V. MUNGER.
PAPER CLIP.

APPLICATION FILED NOV. 10, 1908.

921,271.

Patented May 11, 1909.



Witnesses:
Charles P. ...
Margaret E. ...

Inventor:
Vernice Munger
By *W. A. Holden* Attorney

UNITED STATES PATENT OFFICE.

VERRENICE MUNGER, OF ANSONIA, CONNECTICUT.

PAPER-CLIP.

No. 921,271.

Specification of Letters Patent.

Patented May 11, 1909.

Application filed November 10, 1908. Serial No. 461,963.

To all whom it may concern:

Be it known that I, VERRENICE MUNGER, a citizen of the United States, residing at Ansonia, in the county of New Haven and State of Connecticut, have invented a certain new and useful Improvement in Paper-Clips, of which the following is a specification.

My invention relates to paper clips of the class which are adapted to temporarily bind together the edges of loose sheets of paper, and its object is to provide a device of this character which can be readily and economically made out of a strip of sheet metal so as to be substantially flush with the edges and outside surfaces of the sheets when in use.

With this and other objects in view my invention consists in the details of construction and manner of operation more fully set forth in following description and accompanying drawings in which like reference characters refer to corresponding parts.

In the drawings: Figure 1 is a plan view of the sheet metal blank before it is folded to form the clip; Fig. 2, a side view of the completed clip; Fig. 3, a front view of Fig. 2; Fig. 4, an enlarged side view of the clip when in use; Fig. 5, a transverse section taken on line $x-x$ in Fig. 4, and Fig. 6, a view of a fragmentary portion of the face of the sheets showing the clip in various positions.

In forming the clip a thin resilient strip of sheet metal is worked up into a blank A, as shown in Fig. 1, having a left hand portion a , a right hand portion b and ends c , d respectively. A longitudinally disposed tongue e having its free extremity adjacent to the middle of the blank is punched out of the right hand portion b near one of its side edges, and a similar tongue f , also having its free extremity adjacent to the middle of the blank, is punched out of the left hand portion a near the opposite side edge. The blank A thus formed is doubled upon itself between the adjacent extremities of the tongues e and f to form the bend g , the left hand portion a being folded down on the right hand portion b forming the front and back respectively of the clip. The blank is preferably folded so that the end d of the back b projects slightly beyond the end c of the front a . The end c is flared outwardly

to form together with the overlapping end d a mouth adapted to readily receive the edges of the sheets to be inserted. Each of the tongues e and f are bent inwardly so that the tongue e will press against the inner face of the front portion a and the tongue f against the inner face of the back portion b . The inside diameter of the bend g is substantially equal to the combined thickness of the maximum number of sheets the clip is constructed to accommodate. The front and back portions a and b , however, are held together at the mouth of the clip by virtue of the resiliency of the bend g forming a pair of transversely disposed gripping surfaces h , h' . Since the length of the bend g is much greater than the combined width of the tongues e and f , any tendency of the latter to hold the mouth of the clips open is overcome by the greater resiliency in the bend g . The clip thus constructed presents a pair of gripping surfaces entirely across the mouth portion and two pair of gripping surfaces of less strength arranged side by side in the rear of the mouth, thereby causing the sheets B to be clamped at three positions within the clip.

The arrangement of the tongues e and f side by side instead of having them oppositely disposed causes the sheets to receive a comparatively sharp bend or twist (see Figs. 4 and 5) within the clip which retards any tendency toward a lateral displacement and also resists any pivotal or oscillating movement of the sheets. The edge of the sheets may be forced into the mouth of the clip until they strike the bend g which enables the latter to lie substantially flush with the edges when the clip is in use.

While I have disclosed the preferred form of my paper clip my invention is not confined to the specific construction herein illustrated and described, and I reserve the right to utilize any of the well known equivalents thereof which fairly come within the scope of the appended claim.

Having now fully described my invention what I claim and desire to protect by Letters Patent is:

As an article of manufacture, a paper clip comprising a strip of resilient sheet metal slit adjacent to its opposite edges to form a

longitudinally disposed flat spring member
on each side of the middle portion, and lo-
cated in different planes, the said strip being
folded upon itself to form a bend between
5 the adjacent extremities of said spring mem-
bers and a pair of transversely disposed
gripping surfaces at the mouth of the clip,
and the said spring members being bent in-
wardly to coact with the opposing inner

faces of the strip to form a pair of gripping 10
surfaces spaced laterally within the clip.

In testimony whereof I have hereunto set
my hand this 7th day of November, 1908.

VERRENICE MUNGER.

Witnesses:

MARGARET E. BAXTER,
WALTER A. HOLDEN.