(No Model.)

J. C. JENSEN.

PAPER FASTENER.

No. 377,029. Patented Jan. 31, 1888.

Fig. 1.

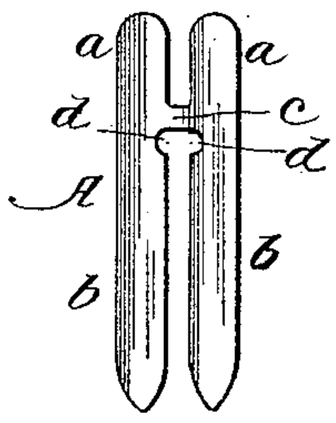


Fig. 2.

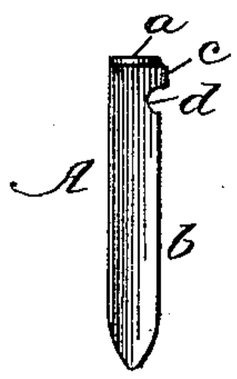


Fig. 3.

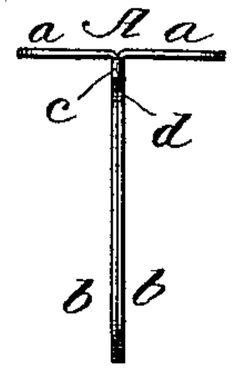


Fig. 7.

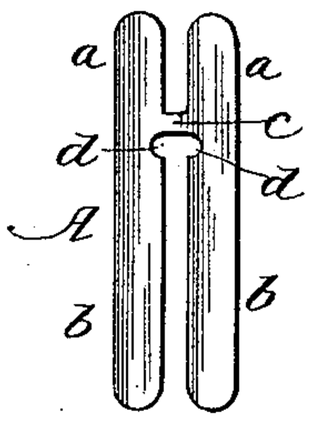


Fig. 4.

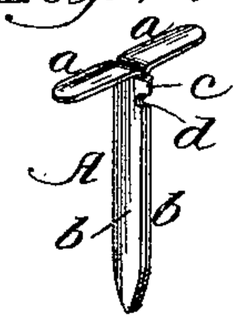


Fig. 5.

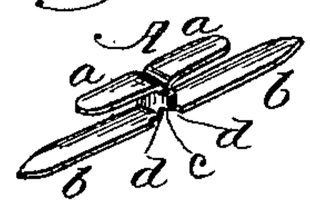


Fig. 6.

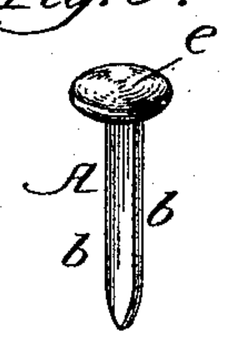


Fig. 8.

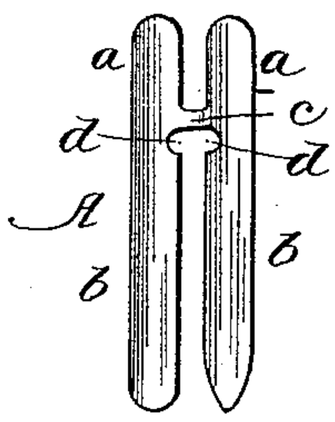
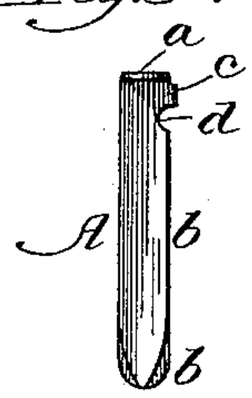


Fig. 9.



Witnesses:
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Harry T. Jones.

Inventor:
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UNITED STATES PATENT OFFICE.

JOHN C. JENSEN, OF CHICAGO, ILLINOIS.

PAPER-FASTENER.

SPECIFICATION forming part of Letters Patent No. 377,029, dated January 31, 1888.

Application filed June 21, 1887. Serial No. 242,058. (No model.)

To all whom it may concern.

Be it known that I, JOHN C. JENSEN, residing at Chicago, in the county of Cook and State of Illinois, and a citizen of the United States, have invented a new and useful Improvement in Paper-Fasteners, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 represents a metal blank for one form of fastener. Fig. 2 is a side elevation of the fastener made from the blank shown in Fig. 1. Fig. 3 is an edge view of the same. Fig. 4 is a perspective view of the same. Fig. 5 is a perspective view showing the fastener in the position occupied when in use. Fig. 6 is a perspective view showing a cap applied to the head of the fastener. Figs. 7 and 8 represent different forms of blanks from which fasteners are formed. Fig. 9 is a side elevation of a fastener formed from the blank of Fig. 8.

As heretofore constructed, metallic paper-fasteners are open to the objection that when securing together only a few sheets of paper the prongs of the fastener cannot be bent back and up against the sheet so as to lie in close contact therewith, as when the blow is made on the fastener as usual to secure the same tightly in place, one or both of the fastening-prongs will be given a sudden and sharp bend that will cause the prong or prongs to break at that point when bent back to their original position for the purpose of removing the fastener.

My invention is designed to construct a metallic fastener that will overcome and obviate the difficulty above referred to; and its nature consists in providing a notch in each prong of the fastener below the strip or piece connecting the prongs together to allow of a square bending of the prongs.

In the drawings, A represents the complete fastener formed of sheet metal by cutting a blank, as shown, to form a piece having duplicate halves, each consisting of a portion, *a*, the two of which form the head, a piece, *b*, the two of which form the prongs, and the connecting-piece *c*, joining the halves of the fastener together. The blank is made from sheet-brass or other material, and can be stamped or otherwise formed, as shown in Figs. 1, 7, and 8.

d is a notch cut in the inner end of each prong near the upper end thereof and just beneath the connecting-piece *c*.

e is a head or cap which may be applied to the head *a a*, if desired.

After the blank is formed the fastener is made by slightly bending both of the half-heads *a* over in the same direction, and then bending the prongs *b* against each other, after which the half-heads *a* are fully bent into position. The connecting-strip *c* is by this operation bent, as shown in Fig. 4, with the edges of the notches *d* coinciding. The half-heads *a* are then turned away from each other so as to be at right angles to the prongs *b*. The fastener is then ready for use, and when used to secure together a small number of sheets of paper the prongs can be turned back so as to lie nearly parallel their full length to the head *a a*, instead of bending back in an arc of a circle, as in the fasteners heretofore constructed. This advantage is gained by the notches *d* at the bending-point, which slightly weaken the metal and allow of this nearly-square bending of the prongs, and by reason of this square bending the connecting-piece *c* is not so liable to become broken off as when the prongs are bent back in a more rounding manner.

Fig. 9 illustrates my improved manner of constructing the prongs by which they may be made of the same length, and yet be readily separated, which consists in forming the end of one prong pointed and the other rounded. The blank from which this form is made is represented in Fig. 8. This feature of forming the ends of the prongs, as just described, is made the subject-matter of another application for patent, and is only here shown for the purpose of illustrating one form of fastener with which my present invention is adapted to be used.

Fasteners with prongs having ends of various shapes are shown for illustrating that any sheet-metal prong-fastener, no matter how its ends are formed, is adapted to be made

with the cross-piece *c*, and notched at the connecting-point of the strip to allow the prongs to be bent without liability of breaking off in removing the fastener.

What I claim as new, and desire to secure by Letters Patent, is—

A paper-fastener having prongs *b*, each provided with a notch, *d*, adjacent to a connecting-strip, *c*, between the prongs, substantially as and for the purpose specified.

JOHN C. JENSEN.

Witnesses:

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