

(No Model.)

H. A. FREE.
PAPER FASTENER.

No. 417,165.

Patented Dec. 10, 1889.

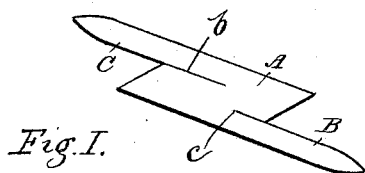


Fig. I.

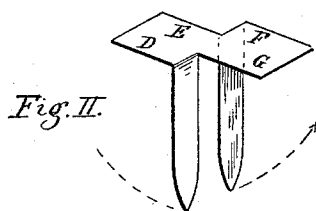


Fig. II.

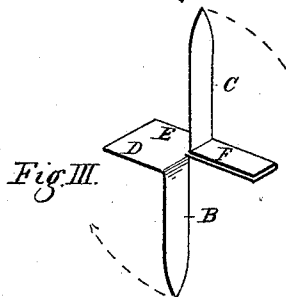


Fig. III.

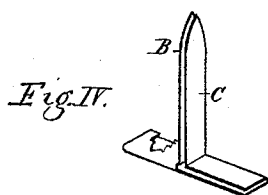


Fig. IV.

WITNESSES:

H. S. Millar
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By

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UNITED STATES PATENT OFFICE.

HARRY A. FREE, OF VACAVILLE, CALIFORNIA.

PAPER-FASTENER.

SPECIFICATION forming part of Letters Patent No. 417,165, dated December 10, 1889.

Application filed May 16, 1889. Serial No. 310,940. (No model.)

To all whom it may concern:

Be it known that I, HARRY A. FREE, of Vacaville, in the county of Solano and State of California, have invented a new and useful Improvement in Paper-Fasteners, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure I is a perspective view of the sheet-metal blank as formed for my improved fastener; Fig. II, a view of the tines bent at right angles to the body of the blank. Fig. III illustrates the manner of folding the body of the blank to form the head of the fastener; Fig. IV, a view of the fastener in complete form, with a portion of the fold on the left side of the figure broken away to show the double head on this side.

The object of my invention is to construct a simple, inexpensive, and useful device whereby the leaves or sheets of paper in books, pamphlets, or documents of any description may be temporarily bound or securely fastened together and readily released when desired.

The invention consists of a strip or blank of sheet-brass or other flexible metal, which may be easily cut in the desired form by a suitable die, and then bent and folded as shown in the accompanying drawings, in which—

A designates the main body or central portion of the blank cut longitudinally from each end on parallel lines *b* and *c*, respectively, near each edge and extending to the center, having on its opposite edges longitudinal extensions or tines *B C* on the lines *b* and *c*, and extending beyond the central part or body portion, and having pointed ends by which the paper is easily penetrated. The tines are first bent downwardly at right angles, as shown in Fig. II. They are then rotated or bent transversely upward in the direction indicated by the darts, so that when they reach a perpen-

dicular position the central parts of the blank *D E* and *F G*, respectively, will be folded each upon the other and form the double head, and the device will be in complete form, as shown by Fig. IV.

The advantages of this device will be apparent. It will be observed that no more material is required than is used in fasteners which are made in the usual manner with a straight blank or strip of metal; but the head in this device, being formed by a lateral fold of the central body of the blank, is practically solid, and the tines cannot be drawn apart at their junction with the head.

These fasteners may be used repeatedly, their durability being limited only by the capacity of the metal to endure successive bending and straightening.

I am aware that it is not broadly new to slit a thin piece of metal having pointed ends and then bend the metal upon itself so as to provide a paper-fastener with pointed ends for the purpose of passing the said ends through pieces of papers and bending the same down on the said pieces of paper to hold them together.

What I claim as new is—

A paper-fastener made of a blank, the main body having longitudinal cuts from each end on parallel lines, respectively, near the edge and extending to the center, and having ends or extensions projecting beyond the body portion and bent at right angles thereto, and the body portion folded laterally in reverse direction to form a doubled head, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand, this 29th day of April, 1889, in the presence of witnesses.

HARRY A. FREE.

Witnesses:

P. McLOUGHLIN,
R. LONG.