(No Model.)

E. W. MILDRUM.

PENCIL CLASP.

No. 482,409. Patented Sept. 13, 1892.

Fig. 1

Fig. 2

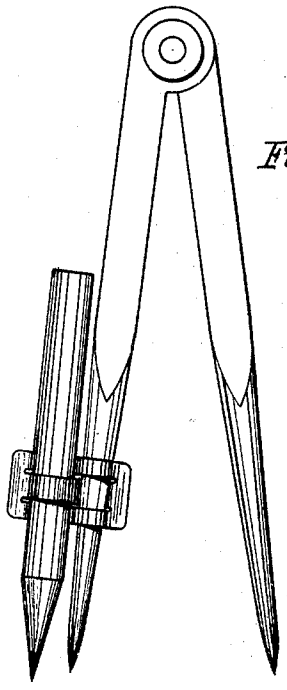

Fig. 3

Fig. 4

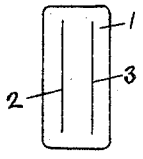

Fig. 5

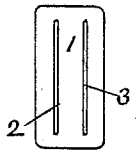

Fig. 6

Fig 7

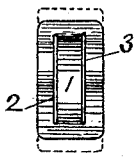

Fig. 8

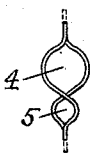

Fig. 9

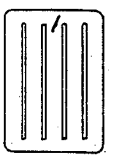

Fig. 10

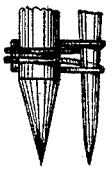

Fig. 11

Witnesses

H. J. Hill

W. B. Howes

Inventor

E. W. Mildrum

UNITED STATES PATENT OFFICE.

ERNEST W. MILDRUM, OF BERLIN, ASSIGNOR OF ONE-HALF TO WILLIAM H. HONISS, OF HARTFORD, CONNECTICUT.

PENCIL-CLASP.

SPECIFICATION forming part of Letters Patent No. 482,409, dated September 13, 1892.

Application filed February 13, 1892. Serial No. 421,456. (No model.)

To all whom it may concern:

Be it known that I, ERNEST W. MILDRUM, a citizen of the United States, residing at Berlin, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Pencil-Clasps, of which the following description and claims constitute the specification, and which is illustrated by the accompanying sheet of drawings.

The object of this invention is to provide a simple, efficient, and inexpensive means of attaching a pencil, pen, or a marking or cutting tool to a pair of compasses or trammels or to any other instrument for which such an attachment is desirable and applicable; and it consists, preferably, of a piece of sheet metal having two or more slits which allow the alternate strips of metal at their sides to be bent in opposite directions. The slits do not extend to the edges, and thereby allow the strips to remain connected at their ends in an integral piece. The alternate strips or members are bent in opposite directions in substantially the form of a figure **8** in such a way that each lobe of the **8** is adapted to clasp one of the objects to be attached together, and is tightened upon them both by having one of those objects slightly tapering or wedge-shaped and by forcing that tapering or wedge-shaped object firmly into its seat in the clasp.

Figures 1, 2, and 3 of the drawings are an end, a side, and an edge view, respectively, of my invention as used in attaching a lead-pencil to an ordinary pair of compasses. Figs. 4, 5, 6, 7, and 8 are side and edge views representing one of these clasps in the different stages of its manufacture. Fig. 9 is a side view of a modification of this invention and shows a blank having a larger number of slits therein, which may be desirable under some circumstances. Figs. 10 and 11 are a side and an edge view, respectively, of another modification of this invention, formed of wire and interlaced in such a way as to accomplish substantially the same result as is accomplished by the sheet-metal forms.

The numeral 1 in the several views indicates the piece of metal of which the clasp is made and which has the slits 2 and 3. Those slits may be made by simply shearing the metal along the lines 2 and 3, as in Fig. 4, or portions of the metal may be punched out, forming slots, as shown in Figs. 2, 5, and 7, the latter method being preferred. The alternate members separated by the slots are next bent in opposite directions, approximating the form of a figure **8** when viewed from the edge, as in Fig. 8.

The dotted lines in Figs. 7 and 8 represent the original length of the blank and exhibit the amount of shortening caused by bending the members of the clasp into the form shown in those figures.

Referring to Figs. 2 and 3, it will be observed that the member of the clasp which passes over the pencil also passes under the compass-leg, and vice versa, thus interlacing them in such a way that when the compass-leg is forced into its place 5 in the clasp it operates to tighten firmly the grip of the clasp upon both the leg and the pencil. The same tightening effect will be secured by making the pencil tapering and forcing it into its place 4 in the clasp.

It is obvious that the clasp may be adapted to the holding of other than cylindrical objects, such as those which are angular or irregular in cross-section; also, that it may be made in any desired size or length or may have any desired number of clasping strips or members without departing from the spirit and substance of this invention.

In order that I may manufacture this clasp from thin metal for lightness and economy and in order that it may yet be stiff and strong, I propose to form corrugations transversely across the clasp at the ends of the slots thereof. It will then more easily resist the bending stress due to the wedging action of the compass-leg, which action would otherwise tend to bend the clasp on lines produced from the ends of the slots to the ends of the clasp.

I claim—

1. A clasp consisting of three or more members bent into substantially the form of a figure **8**, the alternate members crossing each other at the point corresponding to the crossing in that figure, whereby one of the openings is contracted by the expansion of the other opening, substantially as described.

2. A pencil-clasp having substantially the form of a figure 8, adapted to encircle and interlace a pencil and a compass-leg in its respective openings corresponding to those in that figure, whereby the clasp is tightened upon both the pencil and the compass-leg when one of them is tapering and is forced into its seat in the clasp, all substantially as described.

E. W. MILDRUM.

Witnesses:
H. J. HILL,
W. H. HONISS.