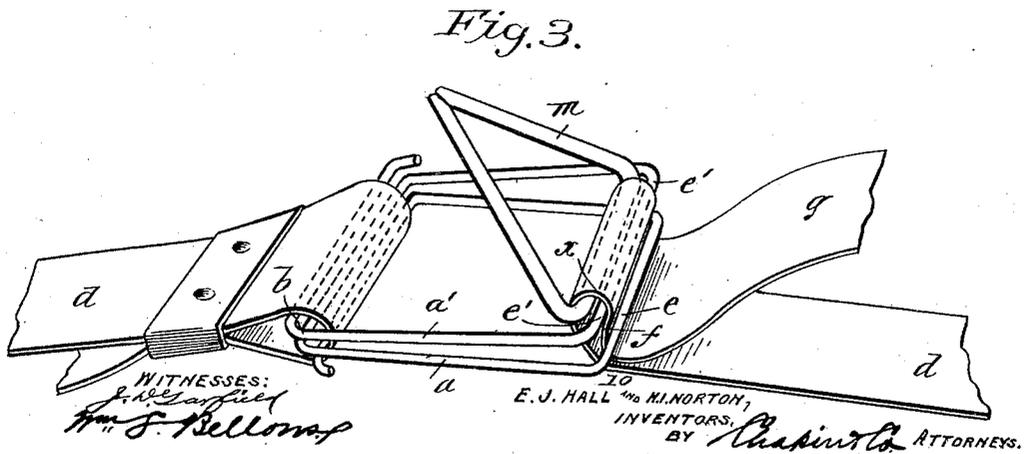
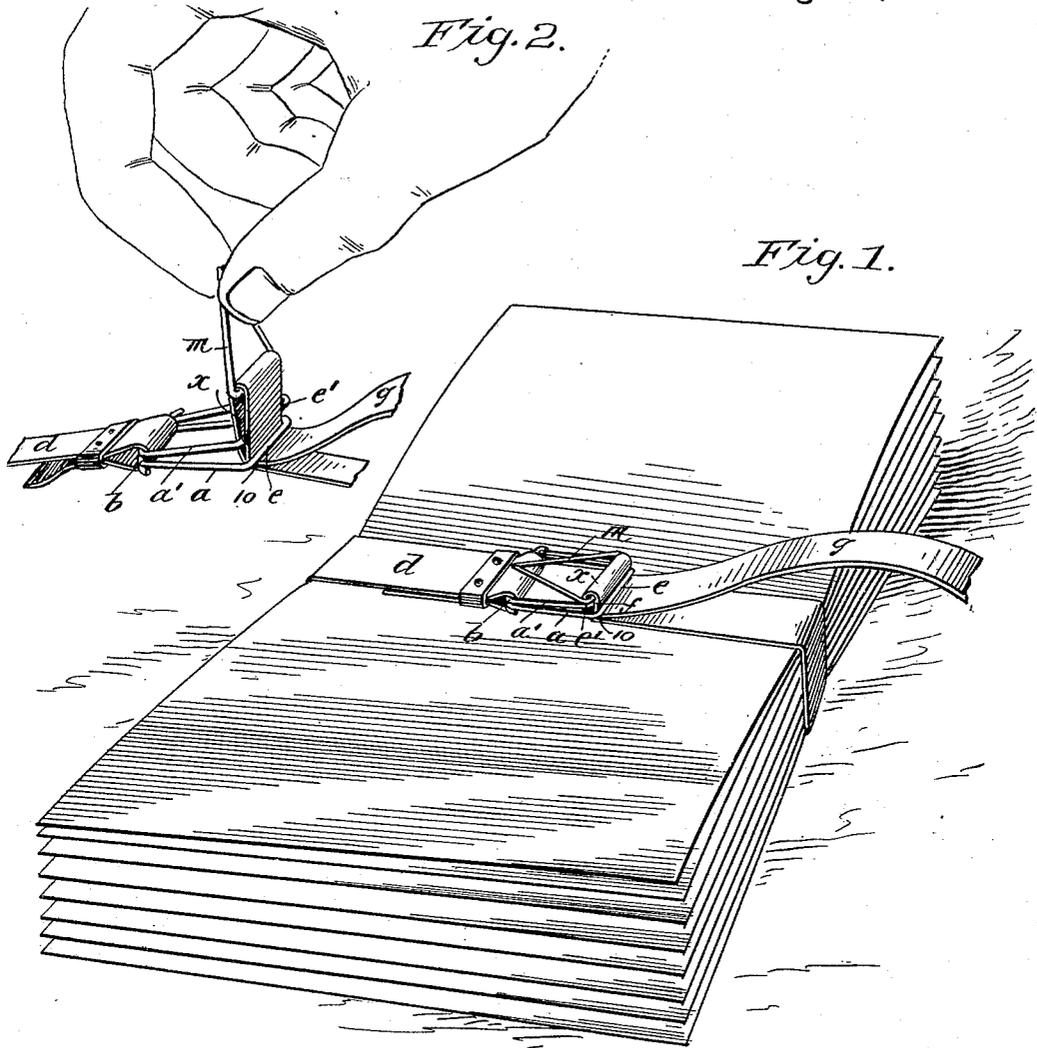


(No Model.)

E. J. HALL & H. I. NORTON.
FILE BAND AND CONFINING CLASP THEREFOR.

No. 434,926.

Patented Aug. 26, 1890.



UNITED STATES PATENT OFFICE.

EDWARD J. HALL AND HARRISON I. NORTON, OF BENNINGTON, VERMONT.

FILE-BAND AND CONFINING-CLASP THEREFOR.

SPECIFICATION forming part of Letters Patent No. 434,926, dated August 26, 1890.

Application filed January 21, 1890. Serial No. 337,585. (No model.).

To all whom it may concern:

Be it known that we, EDWARD J. HALL and HARRISON I. NORTON, citizens of the United States, residing at Bennington, in the county of Bennington and State of Vermont, have invented new and useful Improvements in File-Bands and Confining-Clasps Therefor, of which the following is a specification.

This invention relates to improvements in file-bands and clasps or confining devices therefor, the object of the invention being to improve the construction of contrivances of this class and to render to the same advantageous characteristics or capabilities which have not heretofore existed in other devices for similar use; and the invention consists in the combination and arrangement of parts, all substantially as will hereinafter more fully appear, and as specified in the claims.

In the accompanying drawings the present improved device is illustrated.

Figure 1 is a perspective view of a file-band embracing a bundle of papers and showing the clasps in its confining engagement. Fig. 2 is a perspective view of the clasp and the terminal portions of the file-band and illustrative of a manipulation of the parts to secure a loosening of the band. Fig. 3 is a perspective view of parts of the file-band and clasp similar to those shown in Fig. 2, but on a considerably enlarged scale, said view also showing a slight modification in construction, which will hereinafter be pointed out in connection with the advantage derived therefrom.

The clasp device consists, in part, of two frames or rings *a a'*, preferably of rectangular form, as shown, and the one above and upon the other, and to the one side or end *b* of each thereof one end of the file-band *d* is connected, and said band thence from said attachment with the ends *b* of said frames passes around the bundle of papers under the front bar *e* of the lower frame and then upwardly to the rear of and over the front bar *e'* of the upper frame and then under said bar *e* of the lower frame, but lying on and above the portion 10 of the band first mentioned as passed under said front bar. By drawing on the free end of the band *g* to shorten the loop surrounding the bundle of papers the forward bar *e'* of the upper frame is drawn against the adjacent bar *e* of the

lower frame pressing upon and binding that portion *f* of the file-band which is between them and confining it against endwise movement, and the closer the band is drawn increasing its tension about the bundle the firmer the said portion *f* of the band will be confined.

The device further consists in a handle or lifter *m*, which has an engagement with the looped portion *x* of the band which has been described as passing rearwardly from under the lower bar *e*, over and around the upper bar *e'* of the frame, and thence under the said lower bar, as at 10, and upon drawing on said lifter a strain may be imparted to said loop portion *x* of the band to elongate it, as seen in Fig. 2. In the elongation of the loop *x* by draft thereon through the lifter the said loop receives slack band length from the free and surplus portion *g* of the band, and then by releasing the draft on the lifter the slack comprised in the elongated loop may be drawn so as to be comprised in the large bundle-surrounding loop formed by the major part of the band length.

The lifter *m*, as shown, consists of a frame formed, preferably, of wire bent into triangular or rectangular form, one bar of which being the part embraced by the loop portion *x*, the other sides of the frame constituting that portion which is to be grasped in manipulating the clasp device.

In Fig. 3 the lifter-frame is shown as formed of wire, which is of considerably larger diameter than that of the wire from which the frames *a a'* are formed. Were the lifter-frame made of quite thin wire, there would be so sharp a contact and so great a tension by the loop-engaging bar with the band-loop that in drawing on the lifter the said band would, due to its narrow contact with the bar, be prevented from freely running over the bar in the attempt to slacken the loop.

It is deemed in the present clasp a matter of considerable advantage to have the lifter applied directly at the loop which encircles or engages the frame-bars *e e'*, for the reason that in operation to loosen the clasp the lifter is rendered more direct of action and free, while at the same time the clasp is thereby in no way affected as to its capabilities for effective confinement.

What we claim as our invention is—

1. A file-band and clasp or confining device therefor, in combination and arrangement, as follows: the two frames, to one side
5 of each of which one end of the file-band is connected, said file-band by a loop in its other terminal portion being passed under the forward bar of the lower frame, thence upwardly
10 around the adjacent bar of the upper frame, and then under the said lower bar, as described, and a lifter directly engaged with said loop in the file-band, all substantially as described, and for the purpose set forth.

2. The double-frame clasp formed of comparatively fine wire, substantially as described, combined with the file-band by its

one end being secured to said frames at one side thereof and by a loop in its other terminal portion having a relation and engagement with the front bars of the said frames, substantially as shown, and a lifter consisting of a frame formed of wire of larger diameter than that from which the clasp-frames are formed and by one bar thereof having an engagement with said loop in the file-band, substantially as described.

EDWARD J. HALL.
HARRISON I. NORTON.

Witnesses:

CLEMENT H. CONE,
O. H. DEWEY.