June 1, 1926.

1,587,335

F. J. KLINE

CLAMPING DEVICE

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Fig. 2

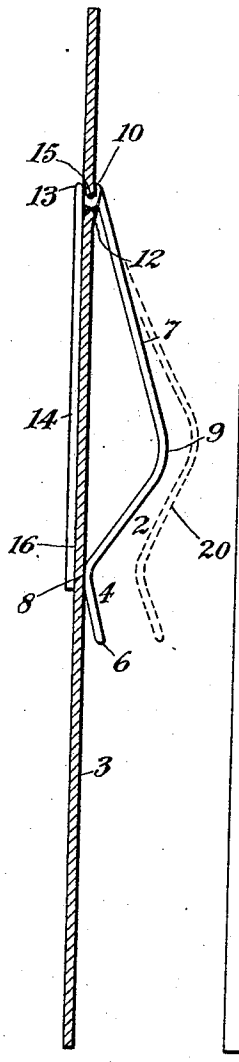
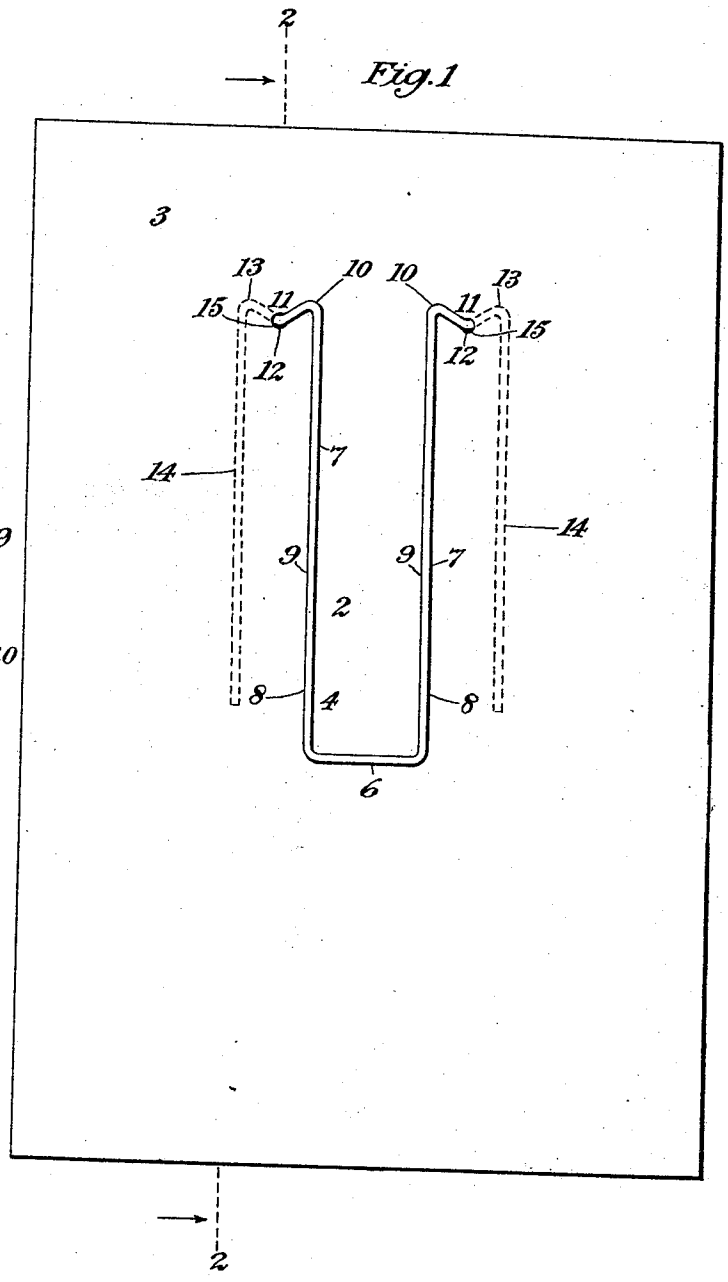


Fig. 1



Inventor

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By his Attorney

Charles D. King

Patented June 1, 1926. 1,587,335

UNITED STATES PATENT OFFICE.

FRED J. KLINE, OF NEW YORK, N. Y.

CLAMPING DEVICE.

Application filed November 2, 1922. Serial No. 598,488.

This invention relates to devices adapted for clamping various things including papers, documents, letters, flowers, bouquets, and other articles.

The main object of the invention is to provide an inexpensive device of this class which is adapted for holding considerable quantities of papers, flowers, and the like. Another object is to provide a device of this class which is especially adapted for manufacture in automatic wire-bending machines.

The means I prefer to employ to accomplish the above-mentioned objects, together with other advantageous features of my improved clamping device for papers, flowers, and other articles, are illustrated in the drawing accompanying and forming part of this specification, and in which—

Figure 1 is a plan of my improved device for clamping papers, flowers, and other articles, and

Fig. 2 is a section of the same on the line 2—2 of Fig. 1.

Like characters of reference denote like parts in both the figures of the drawing.

The device preferably embodies a wire clip of special form and which is designated generally by the numeral 2. The said clip may be used in any suitable manner and is ordinarily combined with and mounted on a cardboard backing member such as indicated by 3. Preferably the clip 2 has a loop 4 consisting of a horizontal portion 6 and two longitudinal portions or plies 7, the longitudinal portions being bent backward slightly at 8 to form suitable clamping portions to hold papers, and are bow-shaped or bent forward considerably at 9 to form portions adapted for clamping flowers, bouquets, and the like, and from the parts 9 the longitudinal portions continue on to the two points 10, side by side. The wire is then bent transversely at each side, preferably outwardly in opposite directions, and ordinarily so as to form V-shaped portions such as those designated in the drawing by 11, and the lower points of which are indicated by 12. At the outer parts 13 of each of said V-shaped portions, the wire is preferably bent over to form long tongues such as 14, one on each side of the clip.

The cardboard backing member 3 is preferably formed with two, small, spaced apart holes 15, and the tongues 14 are adapted to be pushed through them as illustrated in Fig. 1, allowing them to rest on the rear surface 16 of said backing member 3. The lower points 12 of the V-shaped transverse portions 11 rest in the holes 15 of the member 3, holding the clip in place. The points 10 fulcrum the downwardly extending or longitudinal portions of the loop 4. The clamping portions 8 on each side are ordinarily used for clamping papers, letters, documents, and the like, and the portions 9 on each side, are used for clamping flowers, bouquets, and articles round in form. The clip 2 can be sprung outwardly a considerable distance to hold large numbers of papers, flowers, and the like, as indicated at 20 in broken lines. There is a torsional or twisting stress in the V-shaped transverse portions 11 which gives the clip its clamping effect and this increases as the clip is opened to receive more papers, flowers, etc. so that more pressure is exerted by the clip as more articles are added, up to the limit of its holding capacity.

Up and down displacement of the clip 2 is prevented by the position of the portions 12 in the holes 15 of the backing member 3, and diagonal displacement is also largely prevented thereby. It is also to be noted that the portions 11 are centered by the holes 15 at the points 12 by reason of the V-shape of said portions, as well as said holes being apertures through which the tongues 14 can be passed to the rear side of the backing member 3.

The clip 2 is also adapted to clamp papers without a backing member 3, and in such a case the papers are passed between the loop 4 and the tongues 14 in the same plane as that of the backing member until the top edges of the papers are in the vicinity of the transverse portions 11. It will be seen from the foregoing that the device is very efficient and of low cost, and the clips for the same are well adapted to be made in automatic wire-forming machines.

What I claim is:—

A device of the class described comprising a backing member having openings therein to receive portions of a clamping element formed from a single length of wire, said element including a U-shaped jaw portion

adapted to bear upon the face of the backing member and legs formed integral with the jaw adapted to bear upon the rear face of the backing member, V-shaped portions integrally connecting the legs with the jaw and having their apexes passing through the openings in said backing member, and each of said V-shaped portions having corresponding portions lying in a plane parallel to its remaining portion to receive therebetween the backing member.

Signed at New York, in the county of New York, and State of New York, this 16th day of October, 1922.

FRED J. KLINE.