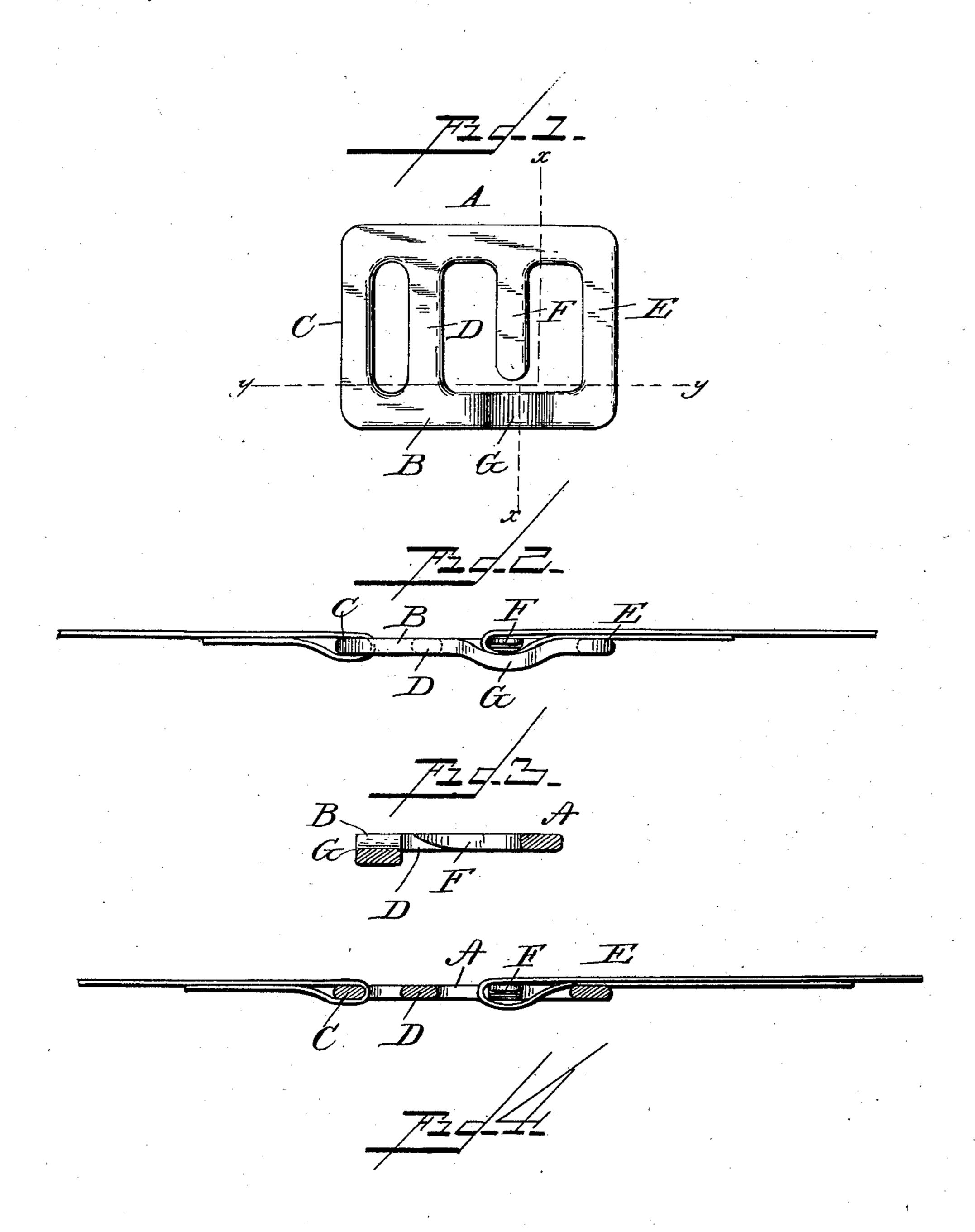
F. A. FRAWLEY. BALE TIE.

(Application filed Mar. 7, 1901.)

(No Model.)



Witnesses F.L. Ourand. R.M. Bishop Frederick a Frawley by MAKALLON Attorney

United States Patent Office.

FREDERICK A. FRAWLEY, OF CHATTANOOGA, TENNESSEE.

BALE-TIE.

SPECIFICATION forming part of Letters Patent No. 685,831, dated November 5, 1901.

Application filed March 7, 1901. Serial No. 50,209. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK A. FRAW-LEY, a citizen of the United States of America, residing at Chattanooga, in the county of Hamilton and State of Tennessee, have invented certain new and useful Improvements in Bale-Ties, of which the following is a specification.

My invention is a cheap and simple buckle or tie for bale-bands; and it consists in certain novel features hereinafter described and claimed.

In the drawings, Figure 1 is a plan view of a tie constructed in accordance with my invention. Fig. 2 is an edge view of the same with the position of the band indicated. Fig. 3 is a transverse section on line x x of Fig. 1, and Fig. 4 is a section on line y y of Fig. 1.

The buckle or tie is constructed with the side bars A B and the cross-bars C D E. Be-20 tween the cross-bars D and E a tongue F projects from the side bar A toward the side | B, terminating close to the inner edge of the said bar B. The under side of the tongue is beveled or tapered to the end of the same, 25 and in the bar B, directly opposite the end of the tongue, is a depression G, concentric with the under side of the tongue and having its upper face in the same horizontal plane with the under face or side of the tongue. With 30 the exception of this depression in the side bar B the entire buckle lies within the planes of the upper and lower faces of the side bars. In practice one end of the band is looped around the end cross-bar C, after which the

band is passed around the bale and the opposite looped end thereof brought over the cross-bar E and up to the end of the tongue F, over which it is forced, as will be readily understood. It will be seen at once that I have produced a very simple and effective tie which can be manufactured at a slight cost. The device being entirely within the planes of its upper and lower faces with the exception of one very slight depression and the sides or edges of the several cross-bars being all parallel, a very simple die may be

used to stamp out the tie and the manufacture conducted very rapidly. The depression in the cross-bar is so slight that it permits the loop on the end of the band to be 50 readily passed over the tapered end of the tongue, but prevents the band accidentally moving off the tongue. The bar D acts as a brace to prevent the side bars spreading under the baling and tying operations. Should 55 it be desired to loosen the bale, slight pressure may be applied to the tongue F, so as to slightly lift the same to permit the band to be removed without destroying the tie or buckle. By having the buckle provided with 60 flat upper and lower faces a large number may be packed in a small space and an economy of packing-space effected. The loops at both ends of the band are held by bars, which are in their original positions in the plate 65 and are not weakened by having been bent from the positions they originally occupied in the plate.

Having thus described my invention, what I claim, and desire to secure by Letters Pat- 70

ent, is—

The improved bale-tie herein described and shown consisting of a single integral structure having side bars A B, the cross-bars C, D, E connecting the side bars, and the tongue 75 F projecting from the side bar A, the cross-bars and tongue having their upper and lower surfaces entirely within the planes of the upper and lower faces of the said side bar, the tongue terminating short of the side bar B 80 and having its end tapered on its under side, and the side bar B having a concave depression opposite the end of the tongue, the upper surface of the said depression being in the same plane as the lower face of the tongue. 85

In testimony whereof I have hereunto set my hand in the presence of two attesting wit-

nesses.

FREDERICK A. FRAWLEY.

Witnesses:

JNO. C. CAMPBELL, D. F. BECKHAM.