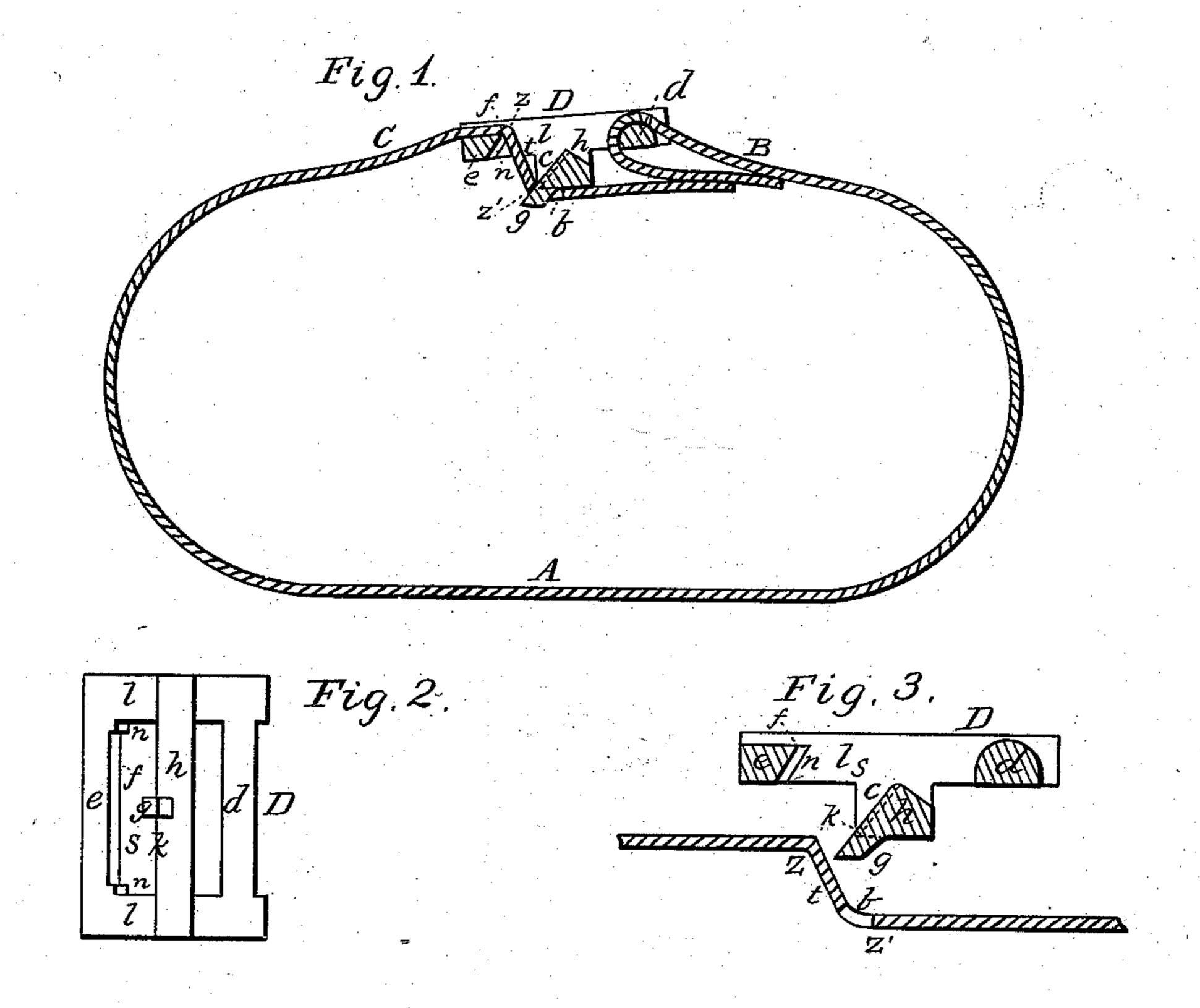
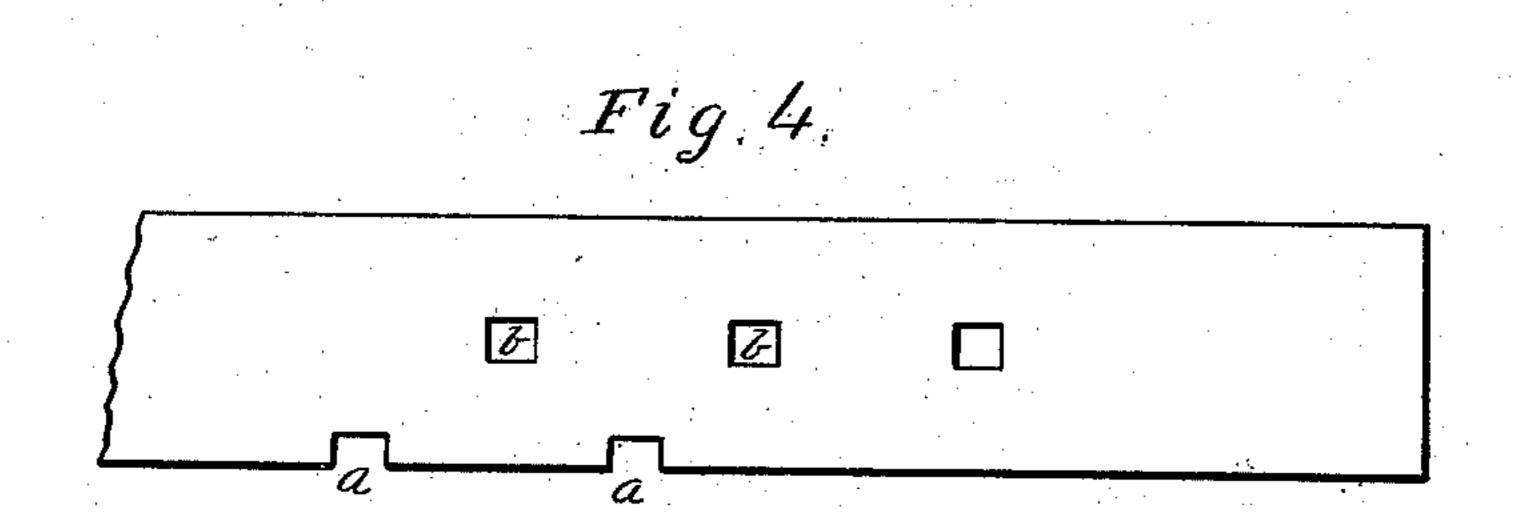
## B. HEMPSTEAD.

BALE-TIES.

No. 187,758.

Patented Feb. 27, 1877.





WITNESSES Villette Anderson Walter C. Masi

Beall Hempstead, by E. W. anderson, ATTORNEY

## UNITED STATES PATENT OFFICE.

## BEALL HEMPSTEAD, OF LITTLE ROCK, ARKANSAS.

## IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. 187,758, dated February 27, 1877; application filed September 2, 1876.

To all whom it may concern:

Be it known that I, BEALL HEMPSTEAD, of Little Rock, in the county of Pulaski and State of Arkansas, have invented certain new and valuable Improvements in Bale-Ties; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, forming a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 is a sectional view of the buckle and band connected. Fig. 2 is a bottom view of the buckle. Fig. 3 is a sectional view of the buckle and the slotted end of the band shown apart. Fig. 4 is a plan view of the

slotted end of the band.

This invention has relation to means for securing the ends of baling-bands; and it consists in the construction and novel arrangement of a bale-tie buckle, having level front and rear bars, and an intermediate depressed acute-edged bar, having an oblique stud adapted to engage with spaced perforations in a band or binder, all as hereinafter shown and described.

In the accompanying drawings, the letter A designates the band, whereof one end, B, is designed to be looped around the rounded bar of the tie or buckle, and the other end, C, is provided with series of edge notches a, central perforations b, or both, as may be required. D indicates the tie or buckle, which is usually cast rectangular in form, with side bars l, connecting the front bar with the rear bar, and having arms or extensions c downward to the ends of the depressed middle bar. d represents the rear bar, which is rounded, and, when the end B of the band is bent around it, forms a sort of journal, around which it may be turned to a certain extent. To this bar the end B of the band is connected before passing the band around the bale. The front bar e has an acute inner and upper edge, f, its inside face being beveled, and at each end thereof a re-entering shoulder or offset, n, in the angles formed by this bar and the side bars. h represents the depressed middle or bearing bar. Its front face is beveled in the reverse direction to that of the bevel of the inner face of the front bar, so that these beveled faces are parallel, or nearly so, and although their acute edges lie one nearly over !

the other, the space or throat between the oblique faces is quite large enough for the ready insertion of the band end, when the buckle is turned up in the proper position. Its front edge k is acute, and a stud or projection, g, extends somewhat obliquely in the general direction of the acute front edge. This bar is connected with the side bars of the buckle by the arms or extensions below the latter. The buckle may be provided with offsets n and a central tongue or stud, g, or either, according to requirement. If both are used the edge notches of the band should alternate in position with the central perforations, as shown in the drawings.

The operation of this buckle is as follows: The band, having been looped around the journal-bar, is carried around the bale, and the buckle being somewhat turned upward, its free end is passed through the front slot s, between the bending-bar and the depressed bearing-bar, until the band is drawn close, the free end of the band passing under the rear bar and its loop. Thus, the perforations or edge notches of the band having been engaged with the stud or offsets of the buckle, the bale is loosed from its compression, and the buckle is drawn into the flat position thereon, forcing the acute angles of the bending-bar and bearing-bar against the band in such a manuer as to form two sharp bends, z and z', and a shoulder, t, and at the same time to fix the engagement between the stud and its perforation, or the offset shoulders and their edge notches in the band.

What I claim as my invention, and desire

to secure by Letters Patent, is-

1. The combination of the buckle D, having depressed front and rear bars de, and a depressed acute-edged intermediate bar, h, having an oblique stud, g, the band A adapted to be passed around the bars d e, between the raised side bars of the buckle, and provided with spaced perforations b, adapted to receive the stud g, substantially as specified.

2. The rectangular bale-tie buckle having the level front and rear bars, and the depressed acute-edged central bar provided with the oblique stud g, substantially as specified.

BEALL HEMPSTEAD.

Witnesses:

C. WALKER,

A. BELDING.