To all whom it may concern:

Be it known that I, JOHN L. SHEPPARD, of Charleston, in the county of Charleston and State of South Carolina, have invented certain new and useful Improvements in Upset or Turn-Over Buckles for Bale-Ties, and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in upset or turn-over buckles for bale-ties, the object being to provide a buckle which will possess the required strength, and yet be of minimum weight, and give the free end of the band at two points, and prevent its displacement when on the bale.

To this end my invention consists in an upset or turn-over buckle for bale-ties, provided with a cross-bar at one end for the attachment of one end of the band, and at its opposite end with a band-holding bar, and with two prongs located over the holding-bar, the outer edges of said prongs being inclined, to subject the free end of the band to a wedging grip, and thus prevent the slipping of the band when the tie is formed.

In the accompanying drawings, Figure 1 is a plan view of a buckle embodying my invention. Fig. 2 is an end view of the same. Fig. 3 is a central longitudinal section taken through the buckle. Fig. 4 is a side view of the buckle turned back on the band for the reception of the band. Figs. 5 and 6 are, respectively, side and plan views of the buckle and band after being locked. Figs. 7, 8, 9, 10, 11, 12, 13, and 14 represent modifications, all of which embody the principle of my invention.

A represents the cross-bar, to which the end B of the band is secured. C is a band-holding bar formed on the opposite end of the buckle. D D' are prongs located over the holding-bar C, the outer edges, a a', of the prongs being inclined inwardly and converging toward each other. When the buckle is turned back upon the end of the band to which it is secured, as represented in Fig. 4, the prongs D D' will rest upon the band, and in such position the free end E of the band may be readily inserted between the holding-bar and prongs. When the buckle is upset or turned over, as illustrated in Figs. 5 and 6, an outward bend is formed in the free end of the band, the holding-bar serving to hold the band, while the prongs serve to depress the outer and free end of the loop of the band, and thus constitute a complete edge. The prongs, being constructed with convergingly-inclined edges a a', operate to grip the free end of the band on its opposite sides, and thereby subject it to a wedging action, and thus effectually prevent its slipping and consequent displacement. The prongs need only be of sufficient length to overlap the opposite edges of the band and hold the latter in place. The buckle, with its prongs, may be readily cast, and when constructed of the form and in the manner described the minimum weight of metal is disposed in a manner to insure the best results in an upset buckle.

Figs. 7 and 8 of the drawings respectively represent a plan view and a view in longitudinal section of a modified form of construction. The prongs D D' are made to extend rearwardly toward the cross-bar beyond the inner edge or surface of the holding-bar, so that when the buckle is turned back upon the band, as illustrated in Fig. 8, the rear ends of the prongs will serve to guide the free end of the band as the latter is inserted in the band opening formed between the prongs and holding-bar. The outer edges, a a', of the prongs D D' are made inwardly converging, that they may firmly bite or grip the opposite edges of the free end of the band, and effectually prevent the tie from slipping when once formed on a bale.

Fig. 9 is a plan view of another modification, showing the outer edges, a a', of the prongs D D', of curved form, and made to converge inwardly, and thus constitute a wedging bearing-edge for the free end of the band.

While I prefer that the edges of the prongs shall converge inwardly, as such construction not only operates to hold the end of the band but also serves to retain the band centrally within the buckle, yet the prongs may be formed with outwardly-inclined edges, either straight
or curved, as illustrated in Fig. 10, as such construction insures two sharp points for engagement with the free end of the band.

Fig. 11 is an end view of the buckle, wherein the prongs are caused to project upwardly at their ends, and they may be made to project downwardly, if desired. To prevent the cutting of the free end of the band, the holding-bar may be made of the shape illustrated in Figs. 12, 13, or 14. Other shapes may be resorted to; but I do not limit myself to any particular shape of holding-bar, as it may be varied in form without departing from the spirit of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. An upset buckle having a cross-bar at one end for the attachment of one end of the band, and provided on its opposite end with a holding-bar and with two prongs located over said holding-bar, said prongs being constructed to grip the free end of the band at opposite sides at two points, substantially as set forth.

2. An upset buckle having a cross-bar at one end for the attachment of one end of the band, and provided on its opposite end with a holding-bar and with two prongs provided with inclined converging outer edges for gripping the band, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 13th day of October, 1879.

JOHN L. SHEPPARD.

Witnesses:

W. B. MINOTT,
J. C. DILLINGHAM.