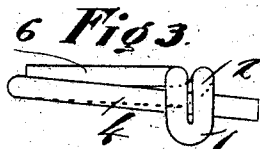
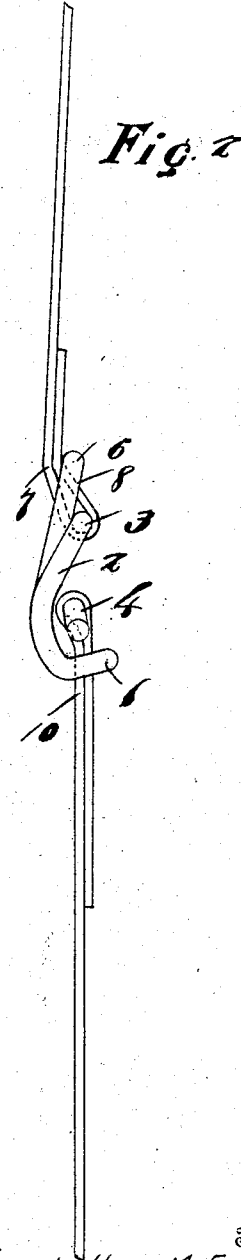
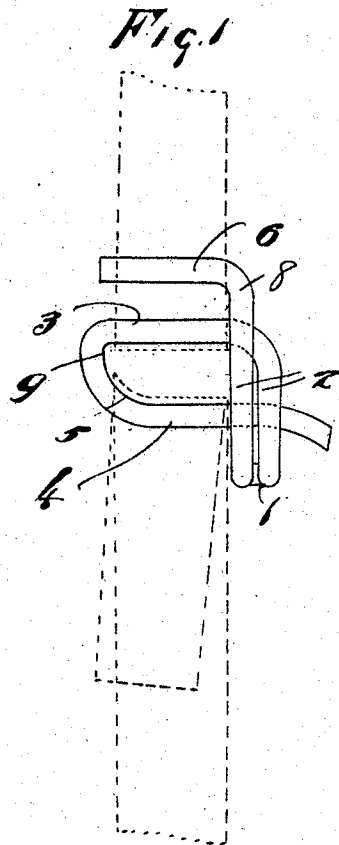


F. H. McFARLAND.
 BALE TIE BUCKLE.
 APPLICATION FILED MAY 10, 1911.

1,061,860.

Patented May 13, 1913.



Witnesses
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 W. E. H. Hoon

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UNITED STATES PATENT OFFICE.

FRANK HAYS McFARLAND, OF FORT WORTH, TEXAS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO FRANTZ STANDARD BUCKLE CO., OF WEATHERFORD, TEXAS, A CORPORATION OF TEXAS.

BALE-TIE BUCKLE.

1,061,860.

Specification of Letters Patent.

Patented May 13, 1913.

Application filed May 10, 1911. Serial No. 626,200.

To all whom it may concern:

Be it known that I, FRANK HAYS McFARLAND, a citizen of the United States, residing at Fort Worth, in the county of Tarrant and State of Texas, have invented certain new and useful Improvements in Bale-Tie Buckles, of which the following is a specification.

My invention relates to an improved bale tie buckle for securely binding the ends of the ball tie, and the object is to provide buckles which can be put on with great rapidity and which will secure the ties without leaving the ends of the ties exposed. Such exposed ends are dangerous because they mutilate the hands of the operators.

A further object is to provide a device which is simple in construction to which the ties are easily and quickly attached, and in which the parts are so arranged as to brace each other mutually and to prevent the ties from slipping from the buckles.

With these and other objects in view the invention consists in the novel construction and arrangement of parts hereinafter described, illustrated in the drawings, and more particularly pointed out in the claims, it being understood that various changes in the form, proportions, size, and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention as claimed.

Reference is had to the accompanying drawings which form a part of this application.

Figure 1 is an elevation of the buckle, showing the position as used on a bale and showing in dotted outline the ends of a tie applied to the buckle. Fig. 2 is an edge view, showing the ends of the tie secured thereto, the side to be next to the bale being shown on the right side of the figure. Fig. 3 is a view of the lower end of the buckle.

Similar characters of reference are used to indicate the same parts throughout the several views.

The improved buckle is constructed of heavy wire, preferably circular in cross-section, and of a single piece of wire or of a rod or bar. The wire is first lapped upon itself with one arm considerably longer than the other. The end of the lapped portion is bent inwardly to form a guard 1. The two parts are then extended upwardly to form a

side bar 2 and then the longer part is bent under the other to form a tie engaging bar 3. The longer part is extended still farther and then bent to form another tie engaging bar 4. The bar 4 has a portion 5 thereof curved to effect a binding action. When the press or compress releases a bale, the tie will be forced to conform to the contour of the portion 5 and the portion 4, and the pull on the tie will be of different leverages and any slipping of the tie is thus effectually prevented. The shorter end of the wire is continued and bent at right angles to form a clamping bar 6.

The end 7 of the tie is first placed on the bar 3 with the free end thereof brought back over the bar 6 by which the two parts of the tie are clamped together and it is not essential that the tie be pressed against the bale to be held in place. The side bar 8 serves as a guard and will prevent lateral displacement of the tie. On the other side of the buckle a guard 9 is formed at the bending of the wire which will prevent lateral displacement of the tie on that side of the buckle. The end 10 of the tie is then placed on the bar 4. The tie can be bent before inserting it in the buckle, since the bar 4 has a free end. After the end 10 is located or placed on the bar 4, it will be held in place by the guard 1 and by the guard 9 so that it cannot be displaced laterally on either side. The free end of the tie at end 10 will be forced toward one side as shown in the drawings. The end of bar 4 is bent so that the tie can be easily forced on the bar and also so that if the bar 4 is forced down against the guard 1 the bent portion will serve as a hook to prevent the guard 1 from being forced outwardly. The wire is purposely doubled to form the guard so that the guard will be strengthened.

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

1. A bale-tie buckle formed of a single piece of wire and having a portion thereof doubled upon itself to form a side guard bar and the doubled portion bent to form an end guard, one arm of said wire being bent under the other arm and at right angles to said side guard to form a tie engaging bar and then curved and extended back under said side bar to form another tie engaging bar in

alinement with said end guard and the other end of said wire being extended and bent parallel to said first mentioned tie engaging bar to form a clamp to cooperate with said bar.

2. A bale-tie buckle formed of a single piece of wire and having a portion thereof doubled upon itself to form a side guard bar and the doubled portion bent to form an end guard, one arm of said wire being formed into a loop at right angles to said side bar and the opposite sides thereof forming tie engaging bars and the free end of said arm being adapted to cooperate with said end guard to prevent spreading of said buckle and the other arm of said wire being extended and bent parallel to said tie engaging bars to form a clamp.

3. A bale-tie buckle formed of a single piece of wire and having a portion thereof doubled upon itself to form an end guard and a side guard and one arm of said wire being formed into a loop at right angles to said side guard, one side of said loop forming a fixed tie engaging bar and the other side thereof forming a free tie engaging bar within the plane of said end guard, a portion of said free tie engaging bar being curved opposite the side guard bar for binding the tie thereon and the other arm of said

wire being extended and bent parallel to said bars to form a clamp to cooperate with said fixed tie engaging bar.

4. A bale-tie buckle formed of a single piece of wire and having a portion thereof doubled upon itself to form a side guard bar and bent to form an end guard, one arm of said wire being bent under the other and at right angles to said side bar to form a tie engaging bar and then bent parallel to said side bar to form the second side bar and then bent substantially at right angles to said side bars and extended under said doubled portion and standing free to be engaged by a bale tie and in position to be drawn automatically against said end guard by the bale tie and the other arm of said wire being extended in line with said first named side bar beyond the first named tie engaging bar and then bent at right angles and parallel to said tie engaging bar to form a clamping bar.

In testimony whereof I set my hand in the presence of two witnesses, this 26th day of October 1911.

FRANK HAYS McFARLAND.

Witnesses:

HUGH ORGAIN,

G. U. FLORENCE, Sr.