

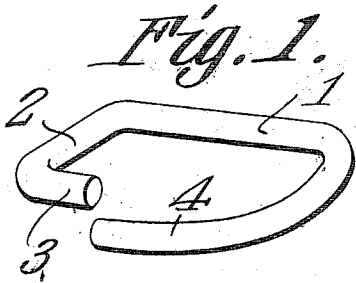
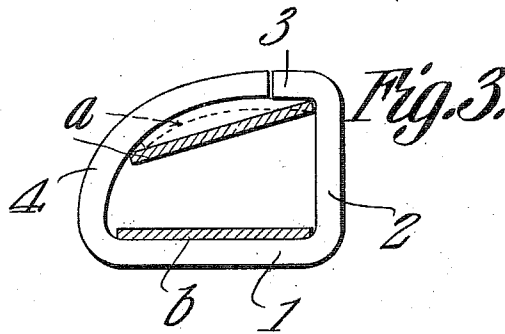
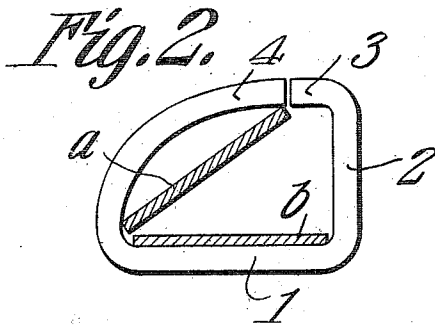
D. E. EDDLEMAN & J. E. ARMSTRONG.

BUCKLE FOR BALE TIES.

APPLICATION FILED JUNE 22, 1909.

972,834.

Patented Oct. 18, 1910.



Witnesses

Robert D. Lawson

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UNITED STATES PATENT OFFICE.

DUDLEY E. EDDLEMAN AND JAMES E. ARMSTRONG, OF WEATHERFORD, TEXAS, ASSIGNORS, BY DIRECT AND MESNE ASSIGNMENTS, OF ONE-HALF TO SAID EDDLEMAN AND ONE-HALF TO EZRA A. FRANTZ, OF WEATHERFORD, TEXAS.

BUCKLE FOR BALE-TIES.

972,834.

Specification of Letters Patent.

Patented Oct. 18, 1910.

Application filed June 22, 1909. Serial No. 503,702.

To all whom it may concern:

Be it known that we, DUDLEY E. EDDLEMAN and JAMES E. ARMSTRONG, citizens of the United States, residing at Weatherford, in the county of Parker, State of Texas, have invented a new and useful Buckle for Bale-Ties, of which the following is a specification.

This invention relates to buckles for use in connection with bale ties.

The object of the invention is to provide a buckle which permits both ends of the tie to be turned under, the buckle being capable of quick application to the tie and being of such a construction as to positively hold the tie ends against separation after the parts have been assembled.

Another object is to provide a buckle which permits the two ends of the tie to be turned under and thus eliminate all danger from one or both of the ends of the tie cutting persons handling the bale.

With these and other objects in view the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claim.

In the accompanying drawings the preferred forms of the invention have been shown.

In said drawings:—Figure 1 is a perspective view of the buckle. Fig. 2 is a plan view of the buckle, those portions of the tie therein being shown in section and the insertible tie end being indicated in its initial position within the buckle. Fig. 3 is a view similar to Fig. 2, but showing the inserted tie end in the position assumed by it when subjected to the expanding action of the bale, said view also showing, in dotted lines, the position ultimately assumed by the inserted tie end.

Referring to the figures by characters of reference *a* and *b* designate loops formed at the end of a bale tie adapted to be used in connection with the buckle.

The buckle constituting the present invention is made of a single length of heavy wire bent to form a straight tie-engaging portion 1 having a straight arm 2 extending perpendicularly from one end thereof and terminating in a retaining stud 3 which projects at right angles from the arm 2 and is parallel with the tie-engaging portion 1.

The other end of said tie-engaging portion 1 has an arcuate arm 4 extending therefrom and in the direction of the stud 3, the free ends of the stud and of the arcuate arm being out of alinement but close together, there being a sufficient space between them to permit the insertion of one of the loops of the tie. As shown in Fig. 1 the ends of the stud and of the arcuate arm are preferably cut off at right angles and parallel, the arm 4 terminating short of the stud 3. The arcuate arm is arranged at a slight angle to the plane occupied by the members 1, 2 and 3, so that the adjoining ends of the stud 3 and arm 4 will not aline.

When any one of the buckles herein described is to be used the tie is placed around the bale and one end thereof is bent to form the loop *b*, said end being extended around the tie-engaging portion 1 of the buckle. The other end of the tie is then similarly looped, as indicated at *a*, and the edge of the loop is inserted between the spaced ends of the stud 3 and arm 4, and along oblique lines, as indicated in Fig. 2. This is of course done while the bale is under pressure. As soon as the bale is relieved of this pressure, it will expand to a slight extent and thus pull on the tie and cause the loop *a* to slip along the arcuate arm 4 until one edge of the loop is brought against the arm 2, as shown in full lines at *a* in Fig. 3. Said loop *a* will thus bear against both the arm 4 and the stud 3 and will ultimately yield to such an extent as to assume practically the position within the buckle indicated by dotted lines in Fig. 3. After the parts have been thus assembled it will be apparent that the tie cannot become detached from the bale except by cutting either the tie or the buckle, the curved or concave inner face of the arm 4 operating to firmly press the tie against the arm 2 and thus positively avoid any danger of the tie slipping laterally so as to present one of the edges of the loop *a* to the opening between the ends of the stud 3 and the arm 4. By having the ends of said stud and arm out of alinement the loop can be very readily inserted into the buckle, as will be apparent by referring to Fig. 1, and when the buckle is subjected to the pulling action of the tie these ends will move into alinement and the opening between them will be practically closed.

It will be seen that the buckle is very compact and simple in construction and is advantageous, because the looped end of the tie with its terminal extended under, can be easily inserted into the buckle, thus eliminating all projecting tie ends, which are dangerous to persons handling bales.

It is of course to be understood that various changes may be made in the construction and arrangement of the parts within the scope of the appended claim without departing from the spirit or sacrificing the advantages of the invention.

What is claimed is:—

15 A bale tie buckle comprising a wire loop having a straight tie engaging portion, an arm extending perpendicularly from one end thereof, an arcuate arm extending from the other end of said portion toward the

perpendicular arm, and a stud extending at right angles from the perpendicular arm and toward the arcuate arm, the said arcuate arm being offset, and the end thereof out of alinement with the stud, and the terminal faces of the arm and stud being disposed in parallel planes, said terminal portions of the buckle being shiftable into alinement and substantially into contact with said stud by a pull upon a tie engaging said terminal portions.

In testimony that we claim the foregoing as our own, we have hereto affixed our signatures in the presence of two witnesses.

DUDLEY E. EDDLEMAN.
JAMES E. ARMSTRONG.

Witnesses:

M. V. WHORTON,
T. R. BRASELTON.