J. M. POLLARD
Wire Bale-Tie.

No. 210,629. Patented Dec. 10, 1878.

Fig. 1

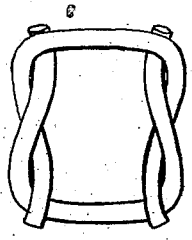

Fig. 2

WITNESSES

Geo Selwyn
A W Harte

INVENTOR

James M. Pollard

UNITED STATES PATENT OFFICE.

JAMES M. POLLARD, OF NEW ORLEANS, LOUISIANA, ASSIGNOR TO MOSES SCHWARTZ.

IMPROVEMENT IN WIRE BALE-TIES.

Specification forming part of Letters Patent No. **210,629**, dated December 10, 1878; application filed July 1, 1878.

To all whom it may concern:

Be it known that I, JAMES M. POLLARD, of the city of New Orleans, parish of Orleans, and State of Louisiana, have invented certain new and useful Improvements in Bale-Tie Loops or Buckles; and I hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 is a view of my improved buckle, and Fig. 2 an end view of same, showing the manner of applying the bands.

The object of the invention is to provide a buckle of greater strength, free from objections heretofore existing, and at a reduced cost of manufacture.

The invention consists in forming a buckle of two pieces of wire, each formed into a staple, curved to the arc of a circle, the ends of the wire bent inward, so that the two pieces may be easily and rapidly interlocked and then subjected to the action of a forcing press or swage, by which the two pieces are bent outward at their ends and backward, securing them firmly together.

From this arrangement of the parts several important and essential advantages are secured. There is no weak corner in the buckle, and the part inclosed by the loop of the band, being composed of two diameters of wire, presents a circle of one-fourth of an inch diameter to the band, which is thus prevented bending at so acute an angle as to impair its tensile strength. Again, the rigidity of the doubled wires prevents their bending within the loop, and from all this results a fastening double in strength those heretofore used, as the bands are much stronger than when bent around a single diameter of wire or the edge of a thin punched plate.

The smooth round surfaces of this buckle do not catch the jagged edges of imperfect bands or the lap-joints or rivets of pieced bands, and allow the bands to be drawn tightly with little effort, &c.

Band-iron as now made for baling cotton is of excellent quality, and can be bent around a rod of one-fourth of an inch in diameter with but little loss of strength, while if bent at a more acute angle the fibers of the metal are broken and the band destroyed.

The introduction of more powerful presses and band-pullers has greatly increased the expansive powers of bales and necessitates a stronger fastening than heretofore required, so that many ties that have been successfully used in the past would not now have sufficient strength.

My improved tie-buckle is designed to afford a better hold for the band, in that it is twice the diameter of a single wire at the part inclosed by the band, and the band may be bent around the twisted double wire with no impairment of its strength, and the doubled wires do not bend or yield to the loop, thus preventing undue strain upon the edges of the band.

The construction of the buckle is such as to avoid acute angles in the wire, the corners being more gradually rounded and bent at right angles instead of a continuous curve, and by this construction the whole work is done by suitable machinery, except the putting the pieces together before swaging.

I claim—

As a new article of manufacture, the buckle, Figs. 1 and 2, formed of two pieces, the pieces being exactly alike, and curved to fit each other, and when interlocked swaged in such manner as to form a solid buckle with its side pieces twisted around each other, as shown and described.

In testimony whereof I have subscribed my name this 28th day of June, 1878.

JAMES M. POLLARD.

Witnesses:
ANDREW HERO, Jr.,
D. I. DOWERS.