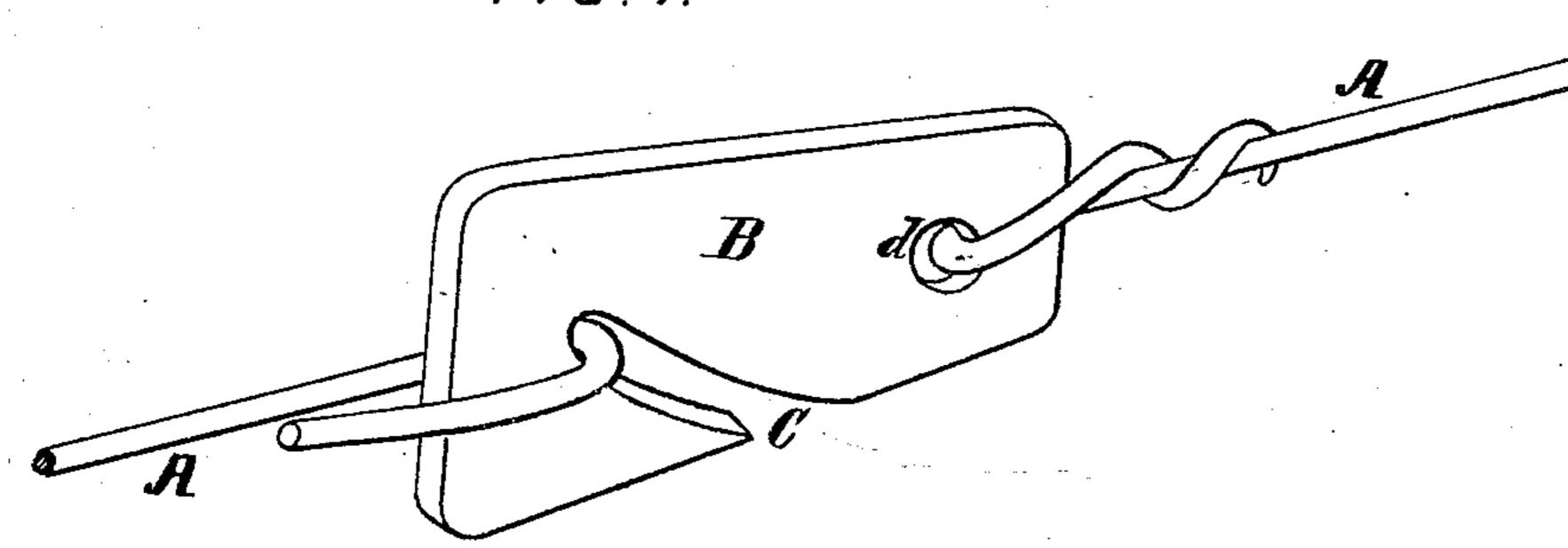
F. QUARLES. Cotton Bale-Ties.

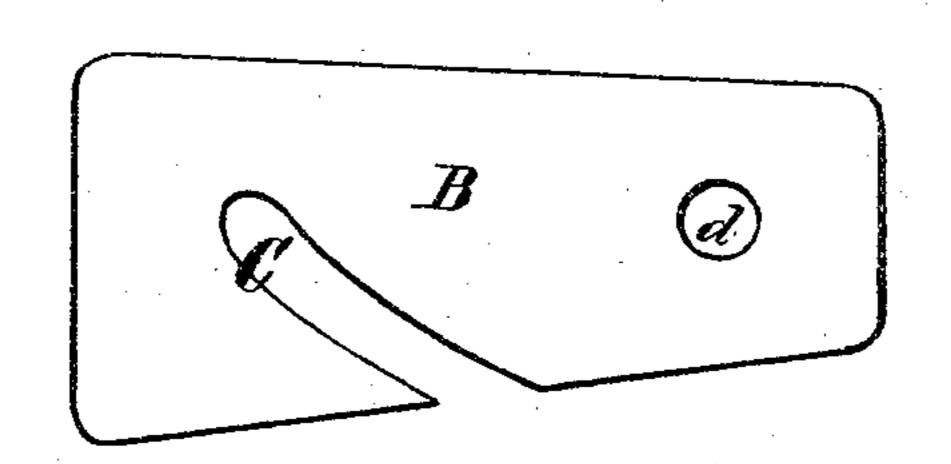
No. 144,793.

Patented Nov. 18, 1873.

F/G. 1.



F/G. 2.



WITNESSES

Jonge G. Uhhaue. Jos. B. Loomis.

Bu

inventor Frederick Quarles, Chipman former a Attorneys.

UNITED STATES PATENT OFFICE

FRED QUARLES, OF WACO, TEXAS.

IMPROVEMENT IN COTTON-BALE TIES.

Specification forming part of Letters Patent No. 144,793, dated November 18, 1873; application filed August 23, 1873.

To all whom it may concern:

Be it known that I, FRED QUARLES, of Waco, in the county of McLennan and State of Texas, have invented a new and valuable Improvement in Cotton-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 making a part of this specification and to the letters and figures of reference marked thereon.

The figure of the drawing is a representation of a perspective view of the buckle-tie

plate.

This invention has relation to cotton-bale ties; and the novelty consists in a truncated tie-plate having an elongated oblique notch in the broad end, and round hole in the narrow end, as will be hereinafter described and claimed.

In the drawings, A represents an iron wire galvanized with zinc. B is the buckle or tie-plate, formed of the same material, being a flat iron plate cut into the form of a truncated wedge. The lesser end is perforated, before coating, with a round hole, d, through which one end of the tie A is passed, and fastened by forming a loop and twist, as shown. C is an elongated notch cut in the tie-plate, also before coating, from the center of one side obliquely toward the larger end, terminating near the middle line, forming a hook of great strength. The slot must be of sufficient size to admit of the tie being inserted with facility.

The method of operation is as follows: The tie is formed by cutting the wire of sufficient length to encompass the bale when in the

press, lapping a little. One end of it is fastened to the buckle or plate by being passed through the hole in the narrow end of the same, doubled back into a loop, and secured by twisting the end around the tie. The other end of the tie is passed over the bale and around it in the usual manner, and being brought up from the bottom of the bale in press is passed under the plate or buckle that is between it and the bale, and, being drawn to the proper place, is slipped into the elongated notch in the large end of the buckle and bent down flat, forming a closed loop.

When the exact length of the tie has been ascertained by drawing around the bale, the loop may be first formed and then hooked into the notch of the buckle. The expansion of the bale when released tightens the tie, and the oblique direction of the slot prevents it

from becoming disengaged.

What I claim as new, and desire to secure

by Letters Patent, is—

The cotton-bale tie consisting of the wedge-shaped plate, having oblique slot on one side and a perforation at one end, in combination with a wire band, one end of which is secured within the perforation and the other adapted for looping in the slot, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

FRED QUARLES.

Witnesses:

G. B. GERALD, I. D. STROTHER.