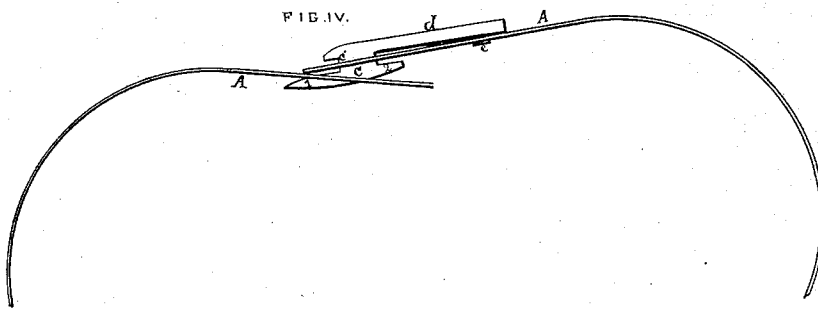
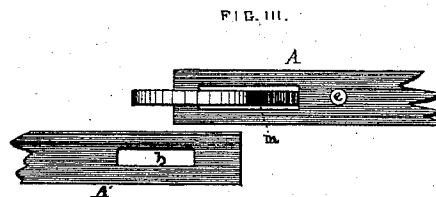
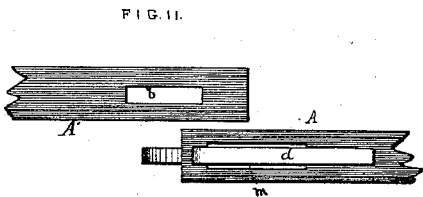
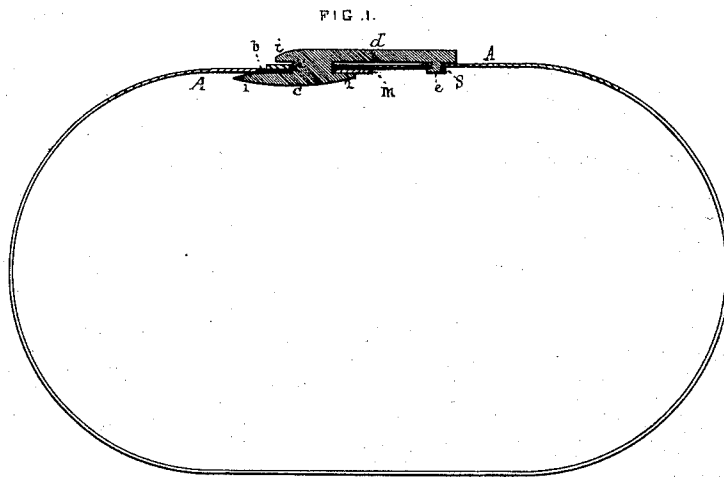


M. T. BROWN.
Bale-Ties.

No. 156,013.

Patented Oct. 20, 1874



WITNESSES.

R. J. Evans
Jno. D. Patten

INVENTOR.

Maurice T. Brown
by *A. H. Evans & Co*

UNITED STATES PATENT OFFICE.

MAURICE T. BROWN, OF TYLER, TEXAS.

IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. **156,013**, dated October 20, 1874; application filed September 3, 1874.

To all whom it may concern:

Be it known that I, MAURICE T. BROWN, of Tyler, in the county of Smith and State of Texas, have invented a new and Improved Bale-Tie; and I hereby declare the following to be a full, and clear, and exact description thereof, reference being had to the accompanying drawings making part of this specification, in which—

Figure 1 is a vertical section through the tie. Fig. 2 is a top view of the ends of the tie when unfastened. Fig. 3 is a plan of the bottom of the end of the tie on which the button is. Fig. 4 is a side view of the tie in the act of locking.

The object of my invention is to produce a cheap and convenient tie, which is durable, and which will not unlock should the rivet holding the button break from any strain on it, the button still holding by means of slots, and the strain being transferred to a slot in the end of the tie in which the button was riveted.

In order that those skilled in the art may make and use my invention I will proceed to describe the manner in which I have carried it out.

In the said drawings, A A' are the ends of the ordinary iron hoop used for bale-ties. In the end A' is a slot, *b*, to receive the hooking portion *c* of a peculiarly-shaped button, D, which is riveted to the end A. This button consists of a shank, *d*, with a projection, *e*, at one end, and at the other a hooked portion, *c*, shaped as shown, and attached to the shank by a neck, *c'*, and having its under surface rounded from the center toward each end. The distance from the neck *c'* to the point 1 of the hook is about three times the distance from the neck to the point 2. A recess, 3, is made between the end *i* of the shank and the long

end of the hook portion. A hole is punched in the end of the hoop A, corresponding in size to the projection *e*. The hooked portion of the button is passed through a slot, *m*, in the end A, and the shank brought down on the hoop, so the projection *e* passes through the hole *s*, and the end is riveted. The distance is so regulated that when this is done the outer edge of the slot *m* is just free from contact with the outer side of the neck *c'*. This leaves the end A from the hole *s* to its end to act as a spring to aid in interlocking the hook. The upper edge of the long end 1 of the hook is slightly beveled toward the point to aid in passing it down through the slot *b* while locking. The upper edge of the end 2 is straight, and in a plane parallel to the strain on the hoop.

The tie being locked, the strain is on the inner side of the neck *c'* and the riveted projection *e*. Suppose the projection breaks, starts, or pulls out; then the strain is transferred to the sides of the neck and the outer end edges of the slots *b* and *m*, and the tie still holds, as the formation of the button, shank, and neck prevents tilting so as to throw the key from the slots.

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

A bale-tie fastening consisting of the shank *d*, riveted projection *e* at one end and projection *i* at the other, and hook portion *c*, attached by the neck *c'*, in combination with the tie ends A A', slotted as described, substantially as set forth.

MAURICE T. BROWN.

Witnesses:

ROBT. DONOUGH,
JNO. A. BROWN.