

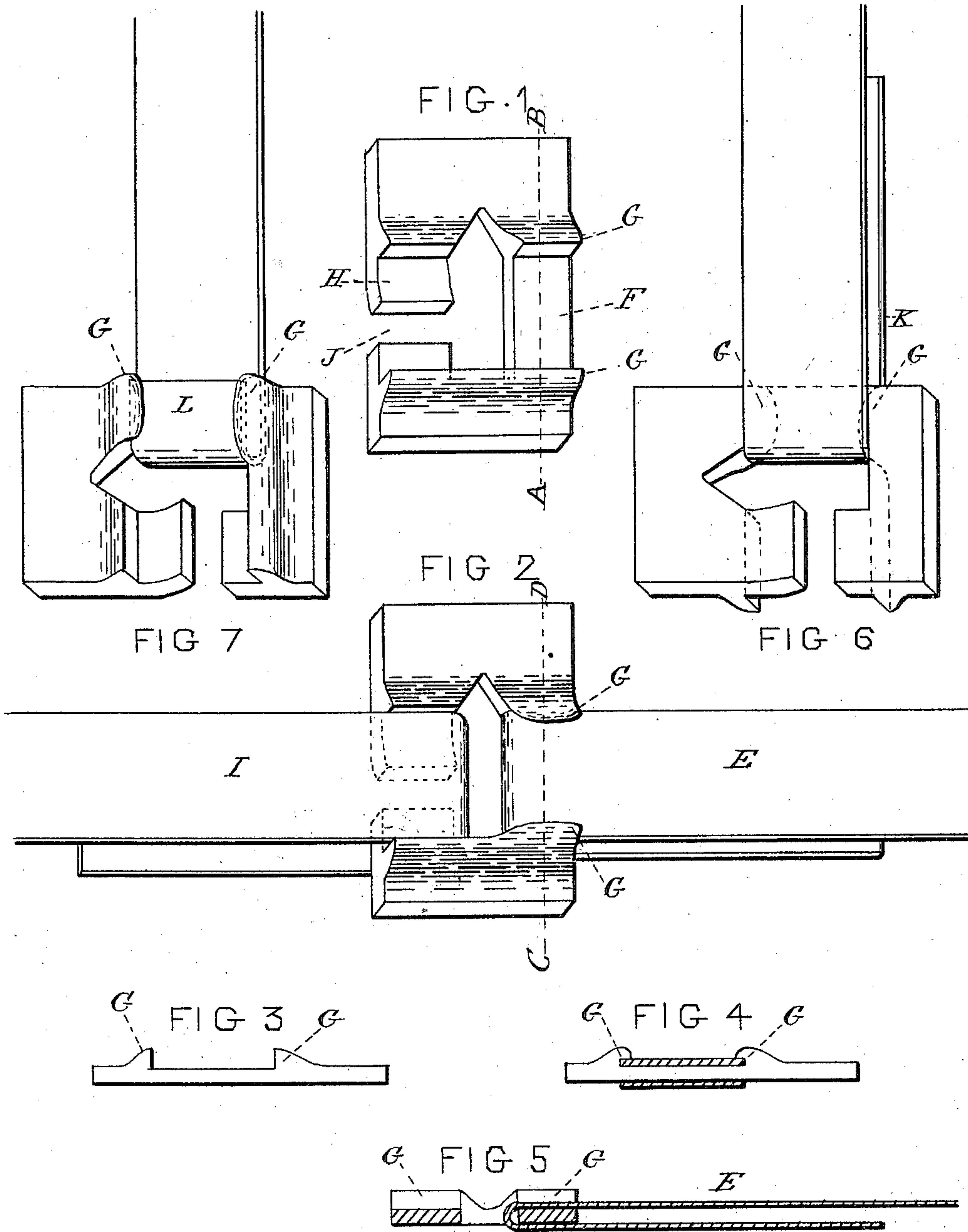
(No Model.)

F. COOK.

BALE TIE.

No. 306,584.

Patented Oct. 14, 1884.



WITNESSES

Lloyd Rosey
S. S. Carlisle

INVENTOR

Frederic Cook

UNITED STATES PATENT OFFICE.

FREDERIC COOK, OF NEW ORLEANS, LOUISIANA.

BALE-TIE.

SPECIFICATION forming part of Letters Patent No. 306,584, dated October 14, 1884.

Application filed July 22, 1884. (No model.)

To all whom it may concern:

Be it known that I, FREDERIC COOK, a citizen of the United States, residing at the city of New Orleans, in the parish of Orleans and State of Louisiana, have invented a new and useful Improvement in Bale-Ties, of which the following is a specification.

In the present improvement I combine the looped end of the band, commonly known as the "oblate hook," with side riveting-strips on the buckle, and use both hook and strips in combination with the open-slot arrow-tie buckle. The riveting-strips on buckle hold it to the band without any loss of strength to the band, and, each band having its buckle fixed on its end, no buckles can be lost in shipping or manipulation of bundles. This is an advantage to handlers of ties and to the planters. When the tie is applied to the bale, the expansive force of the bale, on being released from pressure, assists in holding the inwardly-turned bent end of the fixed end of band from slipping, so that the strain of the bale does not altogether come on the side riveting-strips of buckle, but the looped end will partly strain on the bar of buckle. Thus the strain is partly taken on the inwardly-turned end of band against the bale, the bar of buckle, and the side riveting-strips, which, if not strong enough to resist the entire strain, will do so in part. When the tie is once on the bale, the office of the riveting-strips has been performed—that of simply fastening the buckle to band, for shipping purposes, without perforating or cutting the band, so its full strength may be preserved. Bands fastened in this way may be made of lighter iron, and consequently lighter bundles may be furnished the trade having equal strength of wider or heavier bands fastened to buckles by a rivet.

In the accompanying drawings like letters refer to like parts, in which Figure 1 is a perspective view of the well-known arrow-buckle with my improvement of my side riveting-strips. Fig. 2 is a perspective view of same buckle, showing the fixed end E and the free end I of band both in the buckle and as the tie will appear on the bale. Fig. 3 is a section through line A B of Fig. 1. Fig. 4 is a section through line C D of Fig. 2. Fig.

5 is a longitudinal section through both bars of buckle of Fig. 2 and through the fixed end E of band. Fig. 6 shows the riveting-strips G on side of buckle next the bale. The fixed looped end of band is fastened by the riveting-strips being clinched over the bent end K. Fig. 7 shows the fixed end of band on the under side of the buckle next the bale, with a short bent end, L, turned outward and hooked onto bar of buckle, secured by the riveting-strips being clinched over short bent end. This fastening has no dependence on the expansive force of the bale to assist in taking the strain.

The iron for buckles is rolled in bars of a shape or section like Fig. 3. The buckles are punched like Fig. 1. The end of band E to be fixed in buckle at the factory is first formed into an oblate hook, as shown at Figs. 2, 5, and 6, and is bent so that the space between is about the same as the thickness of bar F. The bent end is then hooked onto bar F, and the side riveting-strips, G G, are pressed or clinched over by a die or hammered over the edges of the band, as shown at Figs. 2 and 4. The balance of the strips G, at the slotted bar H, form a recessed seat for the looped end of band I, which is inserted sidewise through slot J, in usual manner. In the ordinary arrow-buckles sometimes the oblate hook I catches on the long side of bar H at an angle, and the buckle breaks. The described side strips G will prevent this to a great extent, and cause the looped free end I to stay in its seat after the tie is adjusted on bale.

The riveting-strips G may be made on either side of buckle and clinched over edges of band, as shown at Figs. 2, 4, and 5, or over edges of short bent end, as at G, Fig. 7, or over edges of long bent end, as at Fig. 6; but I prefer the mode of fastening shown at Figs. 2, 4, and 5, as being more convenient to manufacture. At same time the action of the expansive force of the bale against the long bent end is availed of in combination with the fixed end of band secured by the riveting-strips G, which is not the case at Fig. 7.

A tie-buckle having an arrow-shaped slot is not herein broadly claimed, as such is shown in Letters Patent No. 31,252, and, likewise, I

do not broadly claim riveting-strips on a buckle, as such are shown in my Letters Patent No. 188,725. A bale-tie has also been composed of cords or ropes and a plate having 5 prongs to bend around the cords for securing them, as in Patent No. 133,858.

My invention differs from the above, in that I combine an arrow-tie buckle with a band having end loops which extend around the tie, 10 the band being fixed to the tie by riveting-strips, as shown and set forth.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the arrow-tie buckle with side riveting-strips and the band having 15 a looped end extending around and riveted to the buckle, substantially as described.

FREDERIC COOK.

Witnesses:

LLOYD POSEY,
S. S. CARLISLE.