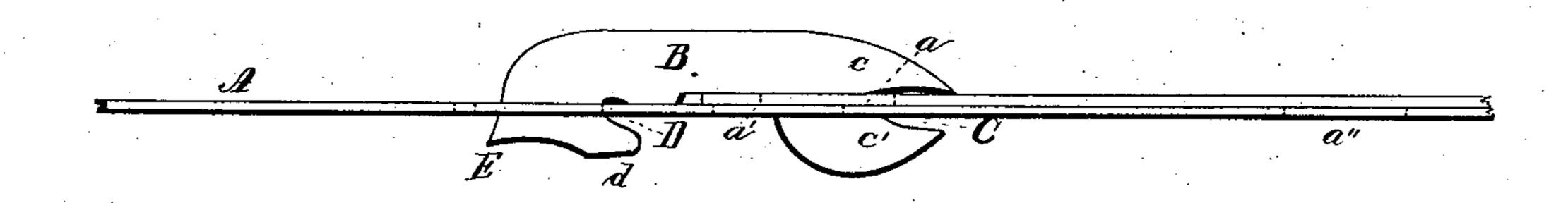
## H. G. HUTCHISON. Bale-Ties.

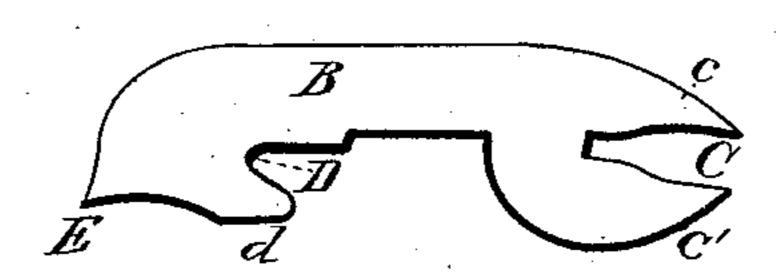
No.157,005.

Patented Nov. 17, 1874.

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THE GRAPHIC CO. PHOTO-LITH, 39% 41 PARK PLACE, N.Y.

## United States Patent Office.

HUGH G. HUTCHISON, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR OF FIVE-EIGHTHS HIS RIGHT TO WILLIAM W. SPEER, OF SAME PLACE.

## IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. 157,005, dated November 17, 1874; application filed November 7, 1874.

To all whom it may concern:

Be it known that I, Hugh G. Hutchison, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Bale-Ties; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to a bale-tie for securing the ends of the bands that are used in baling cotton and like material; and consists in a key of a peculiar shape that locks into slots made in the ends of the said bands, holding them together firmly, as hereinafter

more fully set forth and claimed.

In the drawings, Figure 1 represents a hoop, the ends of which are secured or tied together by a key, and Fig. 2 represents the key itself.

A is a hoop or strip of metal or other suitable material of which hoops are usually made. It is provided with slots  $a a^1 a^2$  in its ends. B is the metallic key. It is formed substantially as shown in the drawings. In one end is formed the throat or slot G, having upper and lower lips,  $c c^1$ . The other end forms substantially a hook having a throat or slot, D, with a lip, d. This end of the key B terminates in the lip or lug E. One end of the hoop A may have but a single hole or slot, a, but the other end of the hoop should have several of the holes  $a^1$   $a^2$ , &c., in order that the band may be suited to the slight differences in the size of different bales, and that they may admit of being tightened, if necessary.

The operation of my device is as follows: The hoop or strip A having been bent around the bale, and the ends in the proper position for lapping, so that the hole a in one end is brought directly over one of the holes,  $a^1 a^2$ , in the other end of the hoop, the key B is then inserted in the following manner: It is held |

with the lip or shoulder d downward, or adjacent to the hoop. The forked end  $c c^1 c^2$  is then slipped into two holes,  $a^1 a^2$ , that are opposite to each other, in such a manner that both hoops are grasped between the prongs or lips  $c c^1$ , thereby being retained in the jaw C. The other end of the hook B is then pressed down into the hole  $a^1$ , which completes the fastening by the action of the jaw D. The lip or lug E, impinging against the lower side of the hoop or strip, prevents upward displacement of the key B.

It will be seen that in this position one of the ends of the band A is pulling in the jaw D, while the other end is pulling in an opposite direction in the jaw C. Any sudden compression of the bale which would tend to make the ends of the hoop lap over each other to any great extent would cause the lower end to move forward against the jaw D, and the upper end would move forward until it struck against the bottom of the jaw C, in which position the key would prevent the ends of the

band from separating.

The key B being entirely separate from the bands, can be manufactured separately and is always ready for use.

What I claim as new, and desire to secure

by Letters Patent, is—

1. The independent bale-tie or key B, provided with the jaw or hook D d and lip or lug E at one end, and the jaw C, with its lips  $c c^1$ at the other, substantially as and for the purposes set forth.

2. The combination, with the hoop or band A, provided with the slots  $a a^1 a^2$ , &c., of the removable and independent key B; the whole constructed and adapted to operate substantially as and in the manner shown.

In testimony that I claim the foregoing I have hereunto set my hand this 4th day of November, 1874.

HUGH G. HUTCHISON.

Witnesses:

LEVERETT L. LEGGETT, ALEXANDER WALKER.