T. H. MURPHY.

Bale-Tie.

No. 168,518. Patented Oct. 5, 1875.

Fig 1.

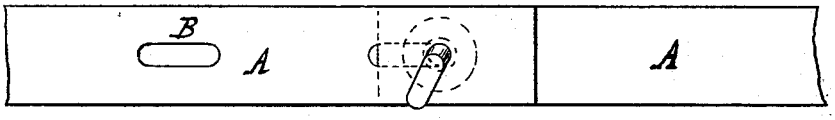

Fig 2.

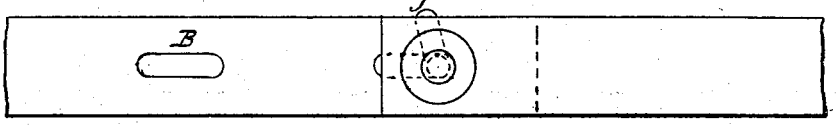

Fig 3.

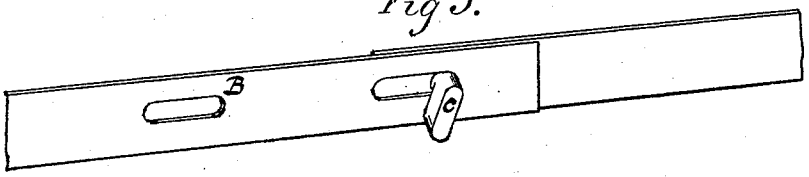

Fig 4

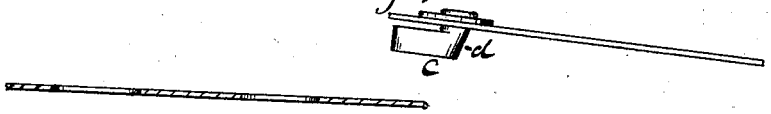

Fig 5.

WITNESSES:
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Albion K Parris

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UNITED STATES PATENT OFFICE.

THOMAS H. MURPHY, OF NEW ORLEANS, LOUISIANA.

IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. **168,518**, dated October 5, 1875; application filed July 17, 1875.

To all whom it may concern:

Be it known that I, THOMAS H. MURPHY, of New Orleans, county of Orleans and State of Louisiana, have invented an Improved Bale-Tie.

The following description, taken in connection with the accompanying plate of drawings, hereinafter referred to, forms a full and exact specification, wherein are set forth the nature and principles of the invention, by which the same may be distinguished from others of a similar class, together with such parts thereof as are claimed as new and are desired to be secured by Letters Patent of the United States.

My invention relates to that class of metal bands or hoops designed for binding bales of cotton and other substances; and the nature thereof consists in the means employed for disengaging the ends of these bands or hoops, as hereinafter described.

In the accompanying plate of drawings, in which corresponding parts are designated by similar letters, Figure 1 is a plan of the ends of the band or hoop next to the bale, having my invention applied thereto. Fig. 2 illustrates the exterior of the said ends. Fig. 3 illustrates the ends as they appear when locked by the button. Fig. 4 shows the band when the ends thereof are unlocked. Fig. 5 shows the button.

The bands A are cut of any required length, and at one end oblong or oval holes or slots are perforated at convenient intervals, to adapt the said bands to bales of different sizes. The opposite end of the band is provided with a revolving key or button, *c*, the shank D of which is secured by riveting or otherwise, in a manner to admit of its turning in its socket without becoming clutched from the band. The head of the catch is of a form corresponding with that of said holes or slots B in the opposite end of the band, though somewhat smaller to admit the ready passage of the catch or button *c* through the said holes or slots. The said head of the catch or button only projects on one side of the shank D, and the latter is of sufficient length to allow the head *e* to be easily turned when passed through the said holes or slots.

The bale of cotton, wool, or other substances is first compressed, and then the band is passed around the bale, the end to which the catch or button is secured overlapping the end containing the slots B till the said catch or button comes directly over the slots or holes. The end of the band is forced down, the catch or button passing through the hole or slot. The projecting portion of the head or button is then turned at an angle of about eighty degrees with the direction of the band, thereby locking the ends of the hoop together, and confining the same securely around the bale.

To remove the band from the bale, the projecting portion of the said head is again turned to its first position directly opposite the slots or holes.

Having thus generally described a bale-tie to which my invention is applied, I deem it proper to state that, so far as thus described, it contains no novel features. The novel feature of my invention consists in providing the button or key *c*, constructed and operated as described, with a beveled or obtuse-angled heel, *d*—that is to say, the part of the button and shank which I designate as the heel *d* is so constructed as to form an obtuse angle with the planes of the ends of the bands or inclined side, extending from the point of intersection between said shank and the inner surface of the band to the side of the said button next to the bale. The said button is turned with facility by a wrench inserted between the bale and the band in such a manner as to grasp the said button. When the button *c* is turned in such a manner as to occupy a position opposite the hole B, the pressure upon the band causes the ends of the same to disengage themselves from each other—that is to say, the edge of the aperture B which is in contact with the heel *d* is caused, by the obtuse angle which the said heel forms with the planes of the ends of the hoop, to slip with facility from the said heel, and thus disengage the ends of the band.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

The button *c*, provided with an obtuse-an-

gled heel, the inclined side of which extends from the point of intersection between the said button and the hoop to which it is attached to the inner side of the button, in combination with the hoop ends, as and for the purposes described.

In testimony that I claim the foregoing, I have hereunto set my hand this 17th day of July, 1875.

THOMAS HAMILLER MURPHY.

Witnesses:
A. H. PARRIS,
MARTIN CONNOLLY.