

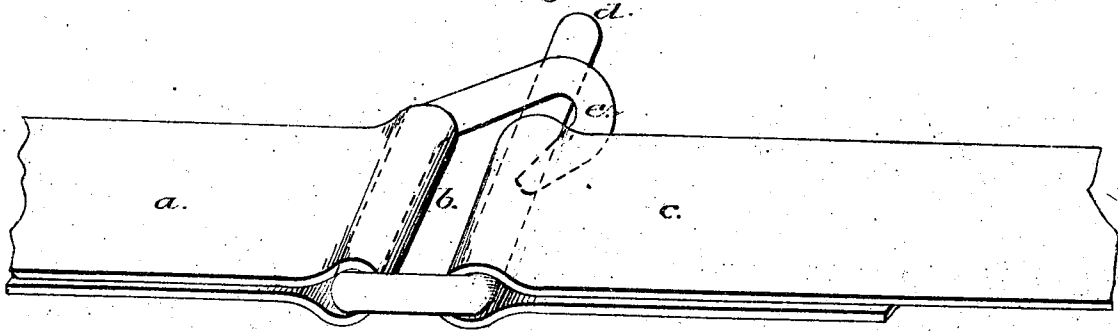
*G. A. Seaver,*

*Cotton Bale Tie.*

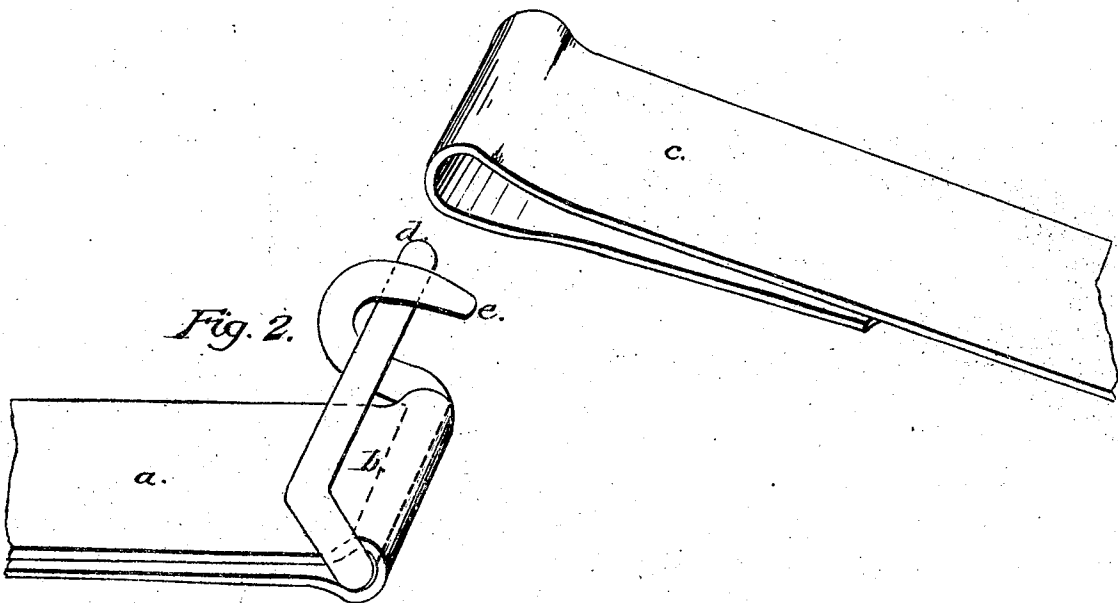
*No. 77,770.*

*Patented May 12, 1869.*

*Fig. 1.*



*Fig. 2.*



*Witnesses:*

*Thomas Bay*  
*H. Remick Hall*

*Inventor.*

*G. A. Seaver*

## United States Patent Office.

GEORGE A. SEAVER, OF NEW YORK, N. Y.

Letters Patent No. 77,770, dated May 12, 1868.

### IMPROVED COTTON-BALE TIE.

The Schedule referred to in these Letters Patent and making part of the same.

#### TO ALL WHOM IT MAY CONCERN:

Be it known that I, GEORGE A. SEAVER, of New York, in the city and county of New York, have invented a certain new and useful Improvement in Cotton-Bale Ties, and other fastenings for similar purposes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, making a part of this specification, and to the letters of reference marked thereon.

My invention relates to the means of fastening the metallic ties which are usually employed in baling cotton and other similar articles and manufactures. The very great superiority of metallic ties over the ropes formerly used in baling cotton has been largely lessened by the want of a fastening that is simple and cheap in construction, and easily applied and unfastened without being liable to become undone by accident, and which may be quickly adjusted without the use of skilled labor when the bale is being again pressed or "compressed," as it is styled in the business. When a simple "buckle" is used, in which the tie is secured by bending the strap back upon itself, too much space is required in which to bend the loose end under, so that it may be jammed between the subsequently-expanded bale and the lower face of the strap. A fastening in which the strap is inserted first over one projecting tongue, and then over another, so that it lies partially over both, in which position it is jammed by being forced sharply over the angles, requires less space for its action in "compressing," but it is liable to the objection that it may become displaced in stowage, by any force which temporarily relieves the strain upon the tie, causing it to slip and probably to become unfastened when the accidental pressure is removed. Any tie that requires the strap to be cut, either with a hole in the middle or notches at its edges, manifestly requires the use of a strap that must be of undue size to permit a reduction of its transverse area at any point, which is the measure of the strength of the entire tie; and for a similar reason the employment of a tie, with angular corners or edges over which the tie is required to be sharply bent, is equally objectionable; and, further, any tie that involves the use of loose pins, or detached parts, is liable to become useless by the displacement of the fastening.

The object of my invention is to make a tie or fastening that shall have no sharp corners to injure the strap, and into which the strap may be inserted after being bent to the required length, and from which it may be easily removed, shortened, and replaced, and that, finally, is not likely to become accidentally unfastened. To accomplish this object the said invention consists of an open buckle, into which the looped strap may be inserted from the side when the buckle is raised in the proper position, the strap being subsequently held safely to the buckle by a guard, formed with one end of the round iron of which the buckle is made; the guard also serving as a hook that may be caught in the bale to enable the strap to be tightly drawn and bent to the required length. The tie can only become unfastened by turning it up at one side until the angle of the guard coincides with the loop of the strap; and unless the buckle or tie is thus turned up to the exact angle required, any mere release of the strain upon the strap, by further compression of the bale in stowage, has no effect upon the tie.

To enable others skilled in the arts to which it appertains to make and use my invention, I will proceed to describe its construction and operation with reference to the drawing.

Figure 1 is a view of the tie and the ends of the strap together in position, and

Figure 2 represents the same when detached, and with the tie and the loose end of the strap raised to make the fastening.

The permanent end *a* of the strap, extending around the bale, is secured to the tie or buckle *b*, by simply passing it through the tie, and bending it over the round wire of which the tie is composed. The loose end *c* of the strap passes sideways of the tie over the projecting end *d* of the tie, and under the guard *e*, until it is wholly within the latter, when the tie is released and drawn out flat by the expansion of the bale. The projecting end of the guard *e* forms a hook, that may be hooked into the bale while the strap is being adjusted to the proper length.

I claim the construction of the tie or fastening, substantially as described.

GEO. A. SEAVER.

Witnesses:

THOMAS DAY,

WM. KEMBLE HALL.