

*A. Ralston.*

*Bale Tie.*

*N<sup>o</sup> 23,496.*

*Patented Apr. 5, 1859.*

*Fig. 1.*

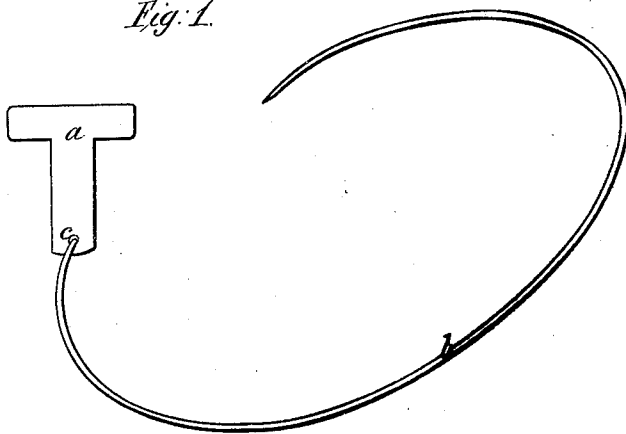


*Fig. 2.*

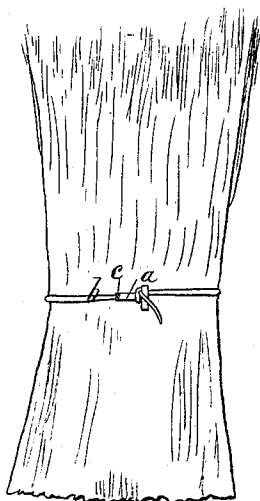


*Fig. 3.*

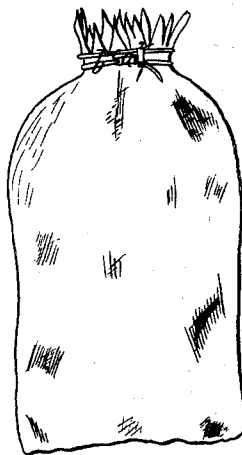


*Fig. 4.*

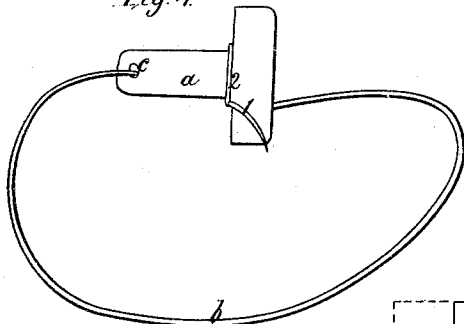


*Fig. 5.*

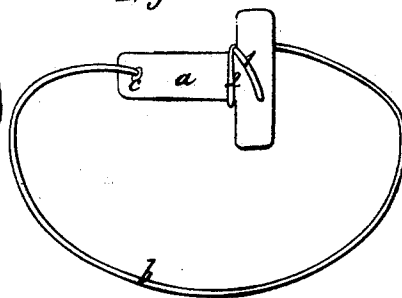
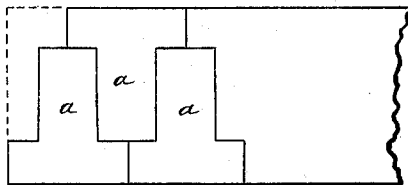


*Fig. 6.*



*Witnesses;*

*James J. Johnston*  
*John B. Johnston*

*Inventor;*

*Andrew Ralston*

# UNITED STATES PATENT OFFICE.

ANDREW RALSTON, OF WEST MIDDLETOWN, PENNSYLVANIA.

## IMPROVEMENT IN BANDS FOR BINDING GRAIN, HEMP, &c.

Specification forming part of Letters Patent No. 23,496, dated April 5, 1859.

### *To all whom it may concern:*

Be it known that I, ANDREW RALSTON, of West Middletown, in Washington county and State of Pennsylvania, have invented a new and useful Improvement in Bands or Cords for Binding Grain, &c.; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, similar letters referring to similar parts.

The nature of my invention consists in attaching to one end of a suitable cord or strap a T-shaped clasp so arranged that by passing the other end around the clasp it will be locked between it and the cord.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawings, Figure 1 represents the band and clasp. Fig. 2 is a sheaf of grain around which the band is locked. Fig. 3 is a bag or sack closed and tied with the band. Figs. 4 and 5 represent the method of locking the band around the head of the clasp. Fig. 6 is a sheet of metal, showing how the clasps may be cut out without wasting the material.

*a* is the T-shaped clasp.

*b* is the cord or strap to which the clasp *a* is attached.

*c* is a small hole in the end of the clasp *a*. Through this the cord is passed and secured by a knot or other suitable device.

1 is the loose end of the cord.

2 is the part of the cord which passes around the clasp.

The operation of my improvement is as follows: The cord *b* is placed around the article to be bound, and after being drawn tight it is passed once around the clasp and the end drawn into the corner, where it is securely locked or clasped between the cord and the clasp. To open the band it is only necessary to draw the end one under the head of the clasp and give it a quick pull, when it will be instantly released.

Having thus described the nature, construction, and operation of my improvement, what I claim as of my invention, and desire to secure by Letters Patent of the United States, is—

Furnishing cords or straps used for binding grain, hemp, &c., with a T-shaped clasp, as herein described, and for the purpose set forth.

ANDREW RALSTON.

Witnesses:

ALEXANDER HAYS,  
JAS. B. JOHNSTON.