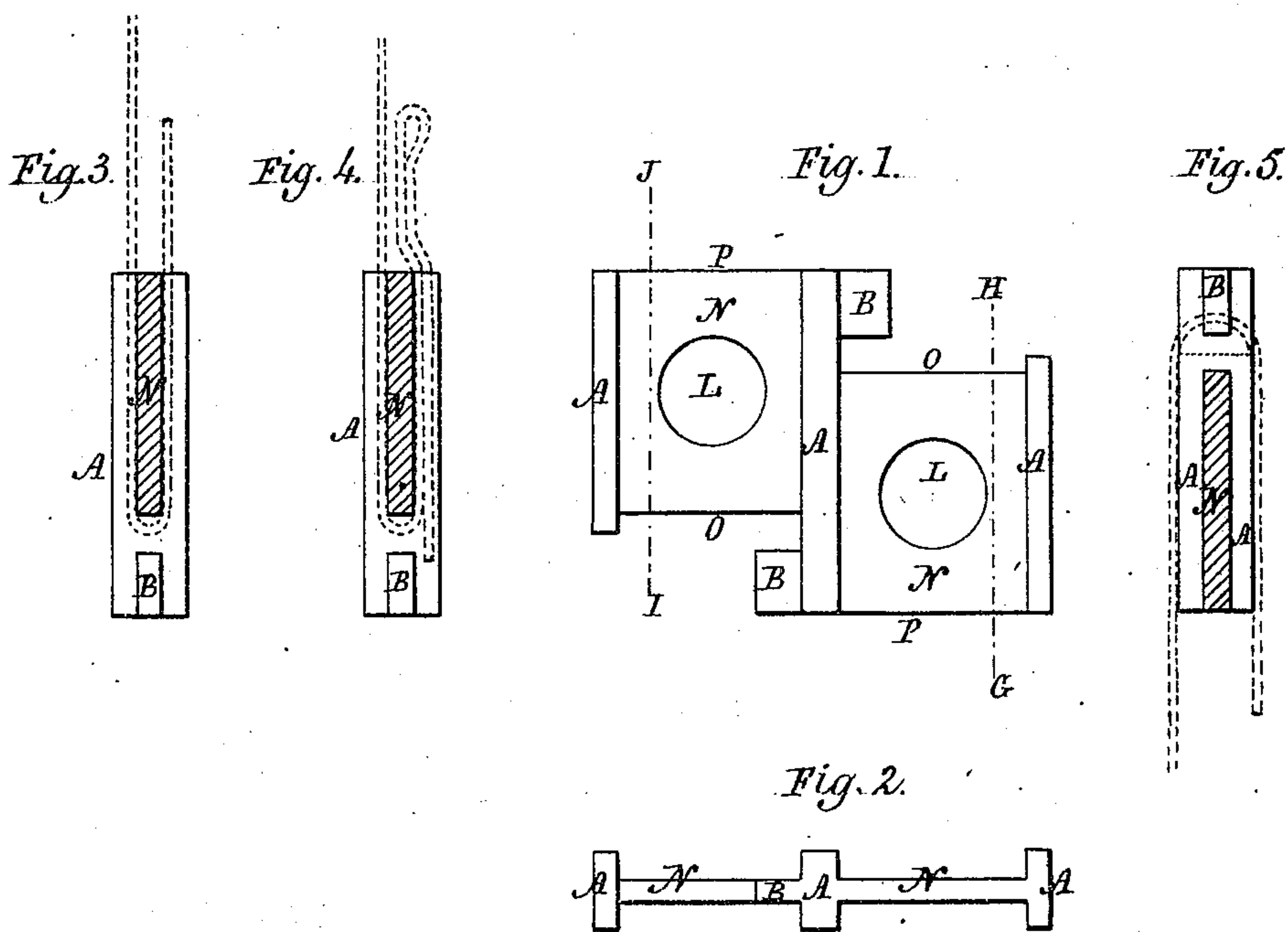


F. COOK.  
Bale-Ties.

No. 133,412.

Patented Nov. 26, 1872.



Witnesses.  
*Thos. Jewell*  
*Edmund Masson*

Inventor:  
*Frederic Cook.*  
 By atty. *A. B. Stoughton.*



# UNITED STATES PATENT OFFICE.

FREDERIC COOK, OF NEW ORLEANS, LOUISIANA.

## IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. 133,412, dated November 26, 1872.

*To all whom it may concern:*

Be it known that I, FREDERIC COOK, of New Orleans, in the parish of Orleans and State of Louisiana, have invented certain Improvements in Metallic Ties for Cotton-Bales, of which the following is a specification:

The nature of my invention consists in a metallic cotton-bale tie composed of webs, flanges, and lips, as and for a purpose hereafter described.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawing, in which—

Figure 1 represents a plan of the link. Fig. 2 represents an end view of the same. Fig. 3 represents a section taken through the line I J of Fig. 1, and showing one end of the looped band in dotted lines. Fig. 4 represents a modification of the manner of looping or securing the end of the band to the link. Fig. 5 represents a section taken through the line G H of Fig. 1, and showing the manner of looping the end of the band to pass it over the flange of the link.

Similar letters of reference where they occur in the several separate figures denote like parts of the tie in the drawing.

The links may be punched out of strip wrought-iron that has the projections that form the flanges, rolled upon it.

The web portion N of the link is much thinner than the flange portion A, so that the bent ends of the bands may have a seat in or on said thinner portions, and be held there by the flanges. The flanges, however, in addition to their holding the bands to their seats, give material strength to the lighter or thinner material of which the web is composed. The bands after being properly placed, and the expansive force of the bale allowed to come upon them, would not be apt to be moved or unfastened, but as an additional security against their becoming loosened lips B are provided to prevent any such casualty.

The object of the middle rib or flange, beside that of receiving and retaining the edges of the band, is to compensate also for the metal removed from the webs each side of it to form the seats for the ends of the bands.

It will be perceived that the lines O which form the seats for the bent ends of the bands are quite distant from the edges or ends P of the link, and in such case the central rib would be necessary to compensate for this cut-away metal. But if these lines O P are nearer to each other, then the central rib or flange would not be necessary, as the link would have sufficient strength without it, and the side flanges would be sufficient to hold the ends of the bands in their places.

In Fig. 3 the end of the band (in dotted lines) shows a simple loop as passing over the link.

In Fig. 4 the end of the band is represented as returned back past itself, so as to afford more thickness of band to withstand the strain.

The holes L are not necessary in the operation of the link, but are convenient for stringing the links on wires for handling and for transportation; besides, they lighten the link without detracting from its ability to resist the strain that comes upon it. The looped ends of the band lie side by side of each other, and lap past each other onto their seats on the same link. That end of the band which is seen in Fig. 5 is so bent or looped that in passing it to its seat it may pass over the flanges, and when drawn up and the strain comes on it is brought down close upon its seat and against the web of the link. The flanges A rise above or project beyond the plane or web of the link for two purposes: first, to catch and hold the looped ends of the band, but for this purpose they need not rise higher than about the thickness of the hoop; and second, to prevent the link from tipping by the use of such flat bands, and for this latter purpose the flanges are raised much higher, as seen in the drawing.

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

A metallic cotton-bale tie composed of the webs N, flanges A, and lips or stops B, as and for the purpose described and represented.

FREDERIC COOK.

Witnesses:

F. B. PARKINSON,  
S. A. TONGLET.