

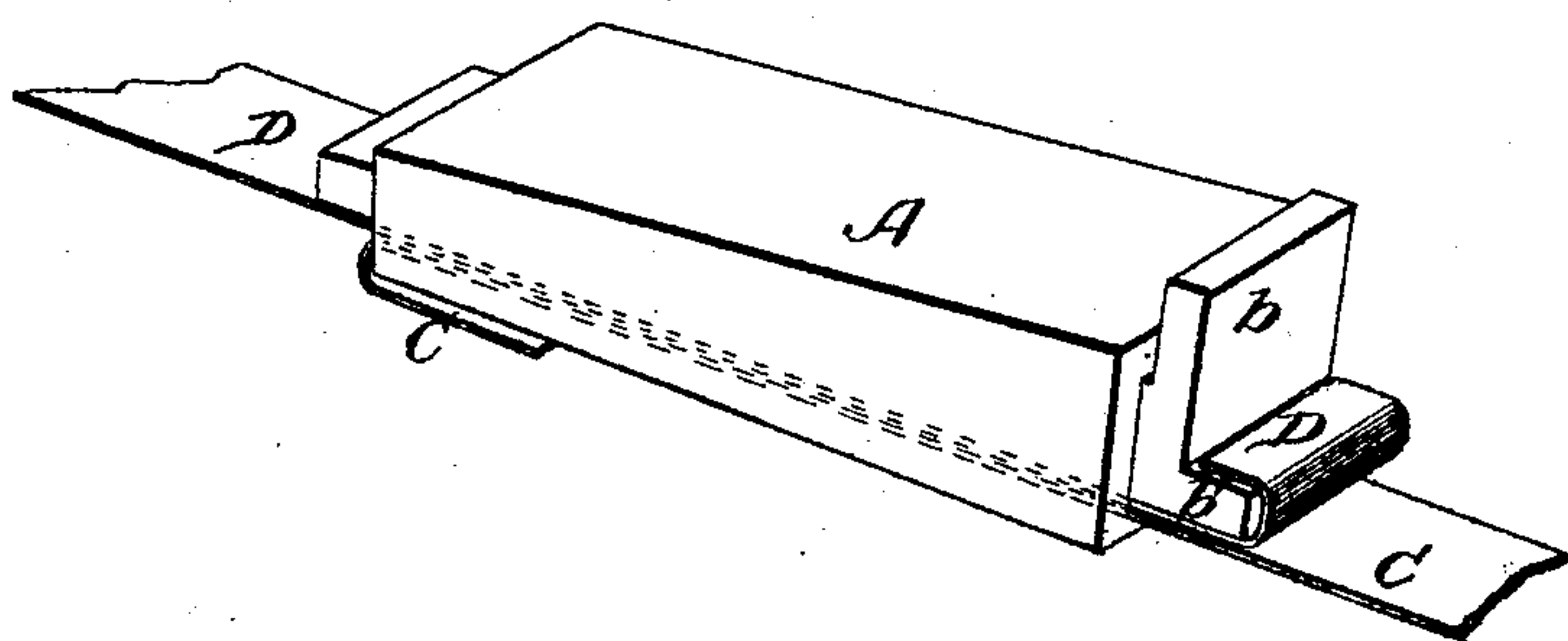
J. W. GURLEY.

Bale-Ties.

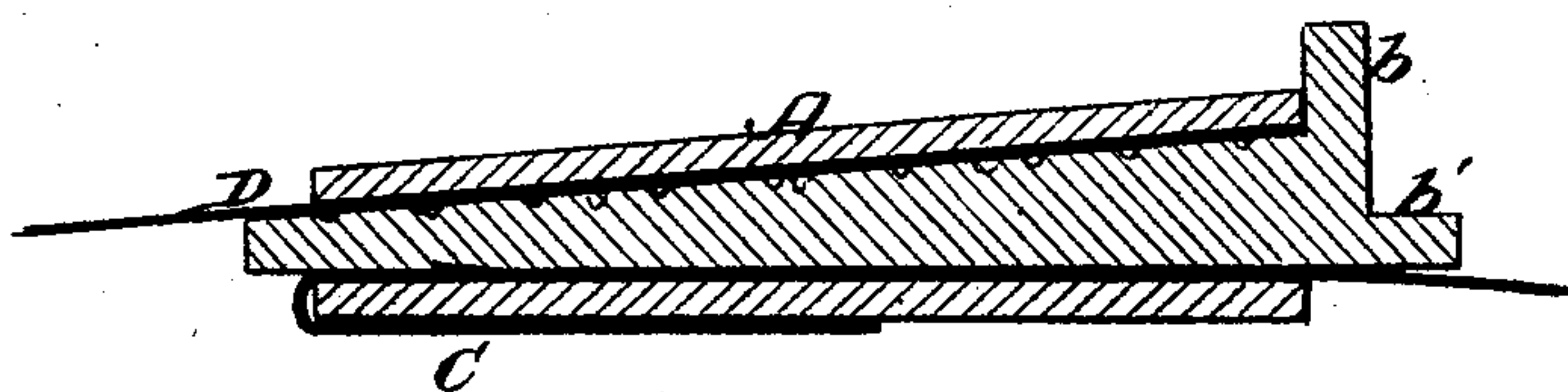
No. 134,052.

Patented Dec. 17, 1872.

*Fig. 1.*



*Fig. 2.*



*Witnesses.*

*C. F. Brown -  
Melville Church -*

*Inventor,  
J. W. Gurley.  
by his Attys.  
Hill & Ellsworth.*

# UNITED STATES PATENT OFFICE.

JOHN W. GURLEY, OF PETERSBURG, VIRGINIA.

## IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. 134,052, dated December 17, 1872.

*To all whom it may concern:*

Be it known that I, JOHN WILLIS GURLEY, of Petersburg, in the county of Dinwiddie and State of Virginia, have invented a new and Improved Cotton-Bale Tie; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a perspective view, and Fig. 2 is a longitudinal vertical section.

Similar letters of reference in the accompanying drawing denote the same parts.

This invention has for its object to improve cotton-bale ties in such manner as to secure extreme cheapness and simplicity of construction, ease of manipulation, and durability, and to prevent expansion of the bale during the process of tying. To this end the invention consists in a box with a tapering recess, in combination with a wedge fitting said recess and fastening the ends of the band inside the box in such a manner that the greater the strain on the band the tighter it is tied in the box, said wedge having a head by which it can be easily knocked out, and a heel over which the projecting end of the band can be turned, all of which I will now proceed to describe.

In the drawing, A is the box, made of wrought or cast iron, and having its inside tapering lengthwise of the box. The surfaces of the wedge and box, or either of them, may be roughened, if preferred, though they will operate perfectly well if smooth. The wedge has a head, *b*, by which it can be knocked out of the box, and a heel, *b'*, projecting back from the head.

The manner of operation is to first pass one end, C, of the band through the box from the

large to the small end, and turn it back under the box as far as necessary, then carry the band around the bale, insert the other extremity, D, of the band through the box from the small to the large end, and finally put in the wedge either above both parts of the band or between them, one way answering as well as the other. In this way the band can be drawn tightly against the bale, and after fastening with the wedge, as above described, there can be no expansion of the bale, as the greater the strain of the latter on the band the tighter is the latter held by the wedge and box. If the end D be placed under the wedge in the box its projecting end, if any, can be turned back over the heel *b'*.

This apparatus can be applied not only to baling cotton, but also to hooping barrels, to linking jewelry, and, in fact, anywhere that metal is required to be connected. It is very simple, cheaper than rivets or other ties, keeps the bale of the same size as when packed, saves length of band, thus producing a neater and cheaper tie than any other, and inducing both purchasers and shippers to buy on account of the smallness of the bale, which is, nevertheless, of the same weight as a larger bale.

For cooping it does not cost as much as bradding of hoops, and can be applied to any size of barrel.

Having thus described my invention, what I claim as new is—

The combination of the box A having a tapering recess with the wedge B having the head *b* and heel *b'*, substantially as described.

JOHN W. GURLEY, M. D.

Witnesses:

MELVILLE CHURCH,  
C. F. BROWN.