

J. F. Milligan.

Sheet 1,  
2 Sheets.

Cotton Bale Tie.

N<sup>o</sup> 59,512.

Patented Nov. 6, 1866.

Fig. 1.

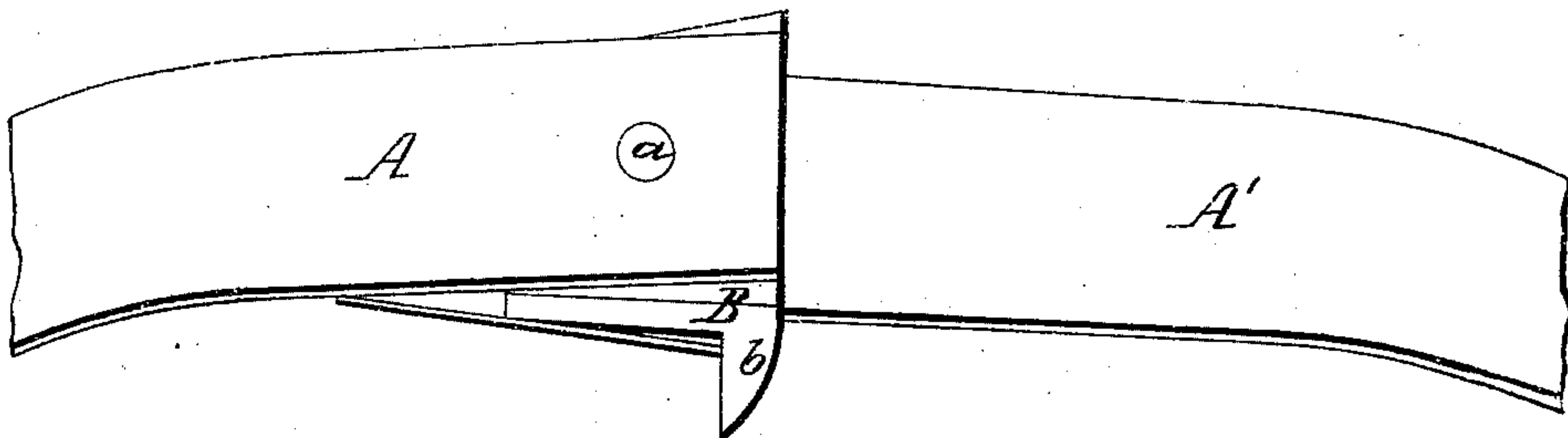


Fig. 2.

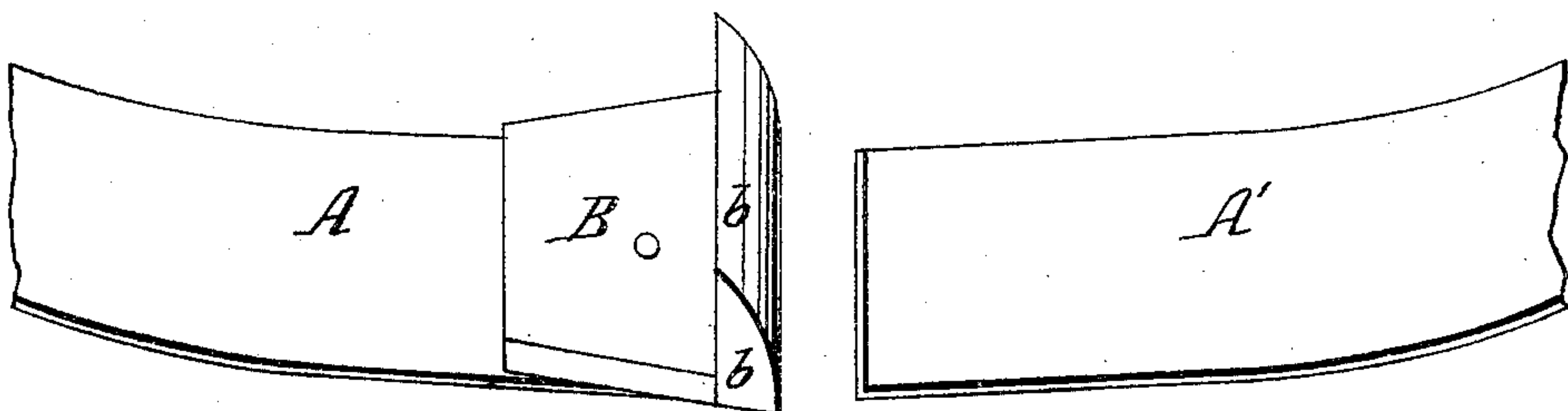
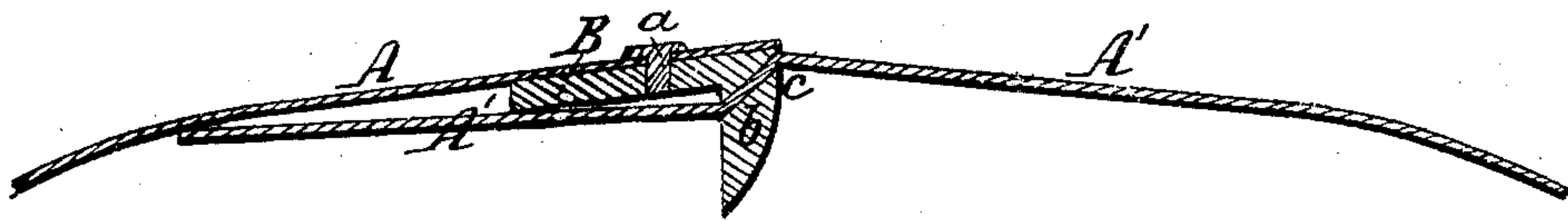


Fig. 3.



Witnesses.

Henry W. Fraatz.

M. Randolph.

Inventor.

John F. Milligan.

Sheet 2,  
2 Sheets.

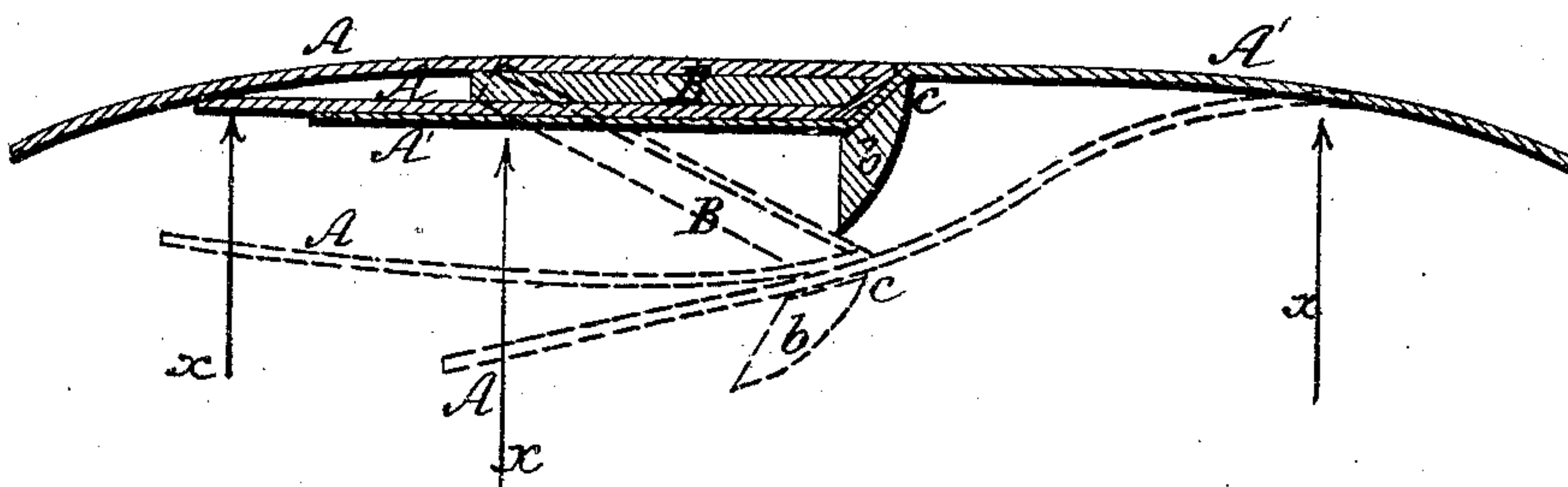
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Fig. 4.



Witnesses.

Joseph W. Branch

Joseph Crook.

Inventor.

John F. Milligan

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attys.



# UNITED STATES PATENT OFFICE.

JOHN F. MILLIGAN, OF ST. LOUIS, MISSOURI, ASSIGNOR TO JOSEPH W. BRANCH AND JOSEPH CROOKS, OF SAME PLACE.

## IMPROVEMENT IN COTTON-TIES.

Specification forming part of Letters Patent No. 59,512, dated November 6, 1866.

*To all whom it may concern:*

Be it known that I, JOHN F. MILLIGAN, of the city and county of St. Louis, and State of Missouri, have invented a new Cotton-Bale Tie or Fastener for Bale-Hoops; and I do hereby declare that the following is a full and clear description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 is a perspective view of the outside of a hoop to which one of the improved fastenings is applied. Fig. 2 is a similar view, showing the bottom or inner side of the hoop and its fastening. Fig. 3 is a sectional view of the hoop and its fastening, showing the connection between the two.

The nature of my invention consists in the use of a tie-plate, one end of which is riveted to the hoop, and the other end thereof provided on its lower face with a pointed projection, having an oblique slot, to receive the free end of said hoop and admit of its adjustment to any point the pressure on the package will admit of.

The object of the present invention is to produce a fastening for hoops of bales that may be removed and replaced upon the bale without injuring the hoop in the least; also, one that will admit the hoop to be drawn up to any degree of tightness required, and there held in perfect security without weakening or impairing the strength or durability of the hoop in the least, as it must be where the hoop is perforated for the attachment of the fastenings, which is the case with those fastenings now in use.

Although this fastening is especially intended for fastening cotton-bale hoops, it is, of course, equally applicable to bales of any other description of merchandise where iron hoops are employed.

To enable those skilled in the art to make and use my improved tie or fastener, I will proceed to describe its construction and operation.

A and A' are the two ends of the hoop that are to be fastened together. B is the tie or fastener that is to hold them together. It

is fastened to the end A by means of the rivet *a*.

The piece B is simply a piece of metal, (gray or malleable iron, for instance,) on the forward end of which there is a lug, *b*, extending across the hoop, and a little longer than the width of it. There is a mortise cut through this lug, of just sufficient size to allow the end of the hoop A' to be easily inserted in and passed through it, as shown in Fig. 3. This mortise should be cut through the piece B in a diagonal direction, as also shown in Fig. 3, making between it and the plane of the hoop A, to which it is fastened, an angle of about forty-five degrees, more or less, and leaving an acute angle at *c*, over which the hoop A' will receive a short bend when the pressure of the bale is thrown upon it on being removed from the press. This pressure of the bale against the inner side of the end A' will also bend it up hard against the hoop A, as shown clearly in Fig. 3.

As long as the pressure of the bale remains upon the hoop it will be found impossible to withdraw the hoop from its fastening or hold upon the piece B.

Should the bale, however, be again placed in the press, as in the case of the compress, the hoop A' may be easily drawn out of its mortise in the piece B, or drawn up shorter, without injuring the bale or hoop.

It is believed that this device has the advantage over all similar devices, in that the hoop may be locked at any point to which it may be drawn, as no perforation of the hoop A' is necessary for its fastening.

Having fully described my invention, what I claim therein as new, and desire to secure by Letters Patent, is—

A tie-plate, B, provided with the pointed retaining projection or stop *b*, when combined with an oblique slot, *c*, to receive and secure the free end of the hoop, all substantially as and for the purposes herein described.

JOHN F. MILLIGAN.

Witnesses:

M. RANDOLPH,  
M. RANDOLPH.