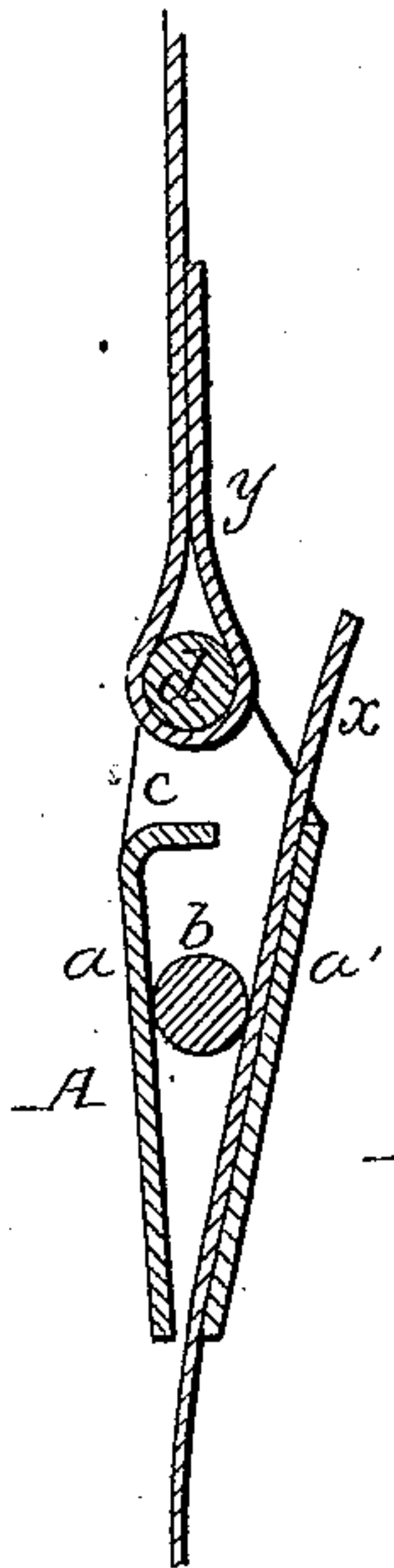


J. R. BLOSSOM.  
Bale-Tie.

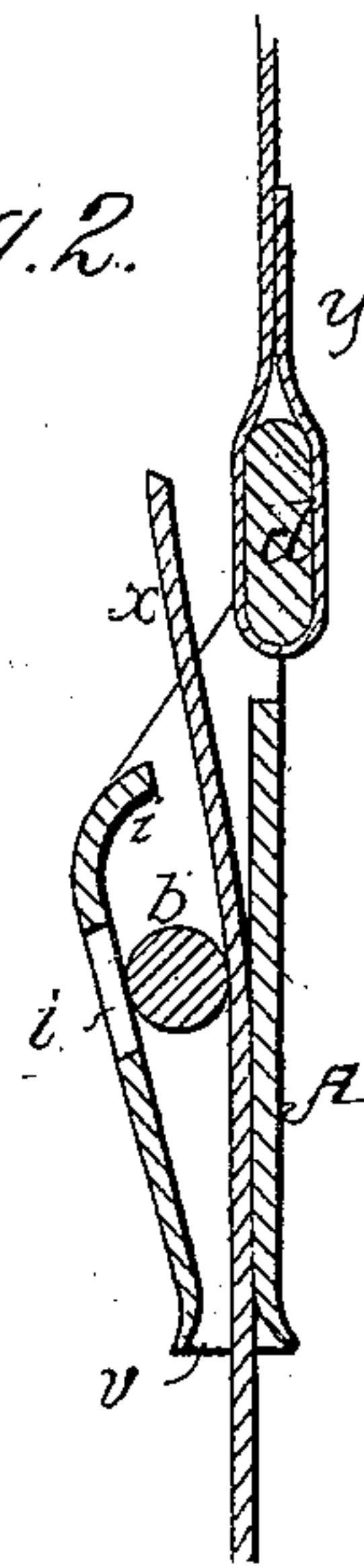
No. 205,720.

Patented July 9, 1878.

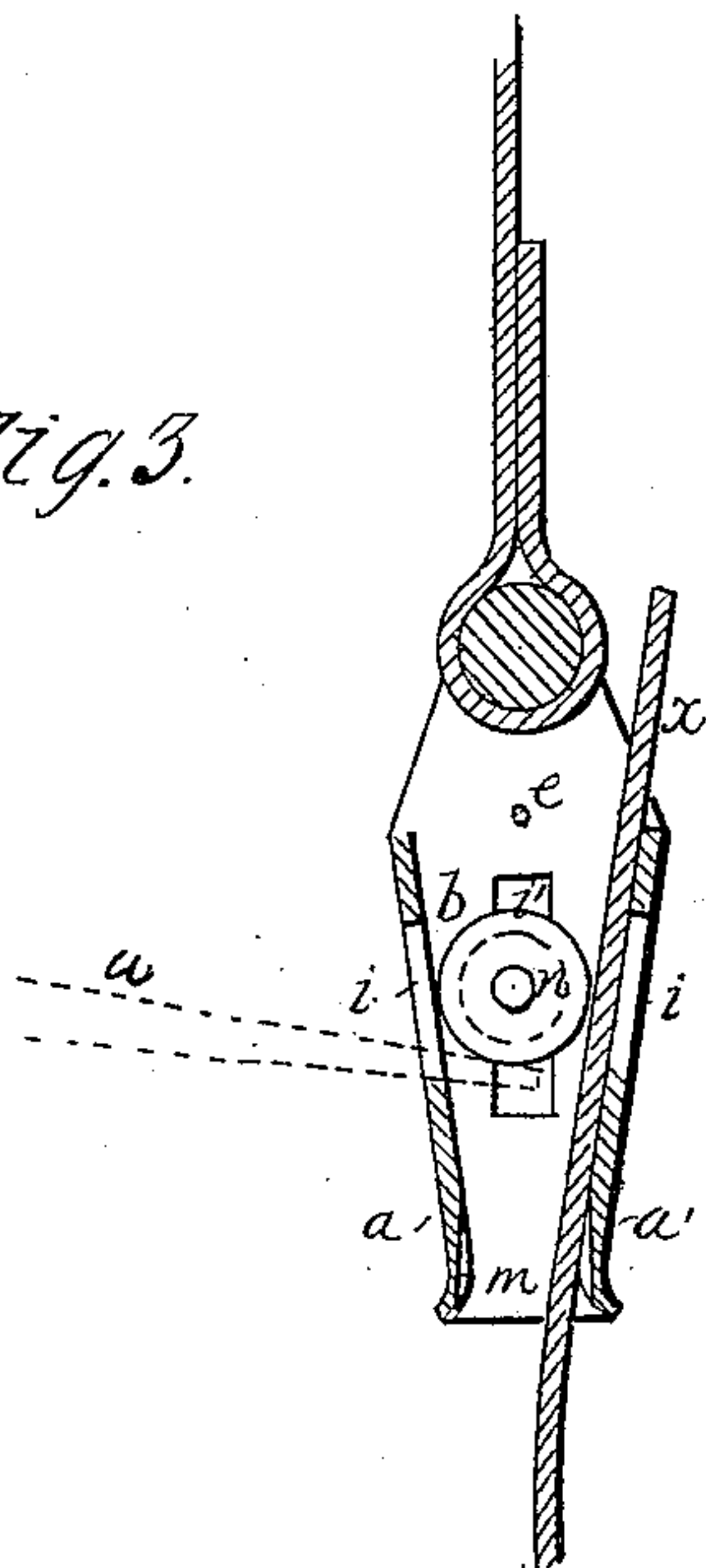
*Fig. 1.*



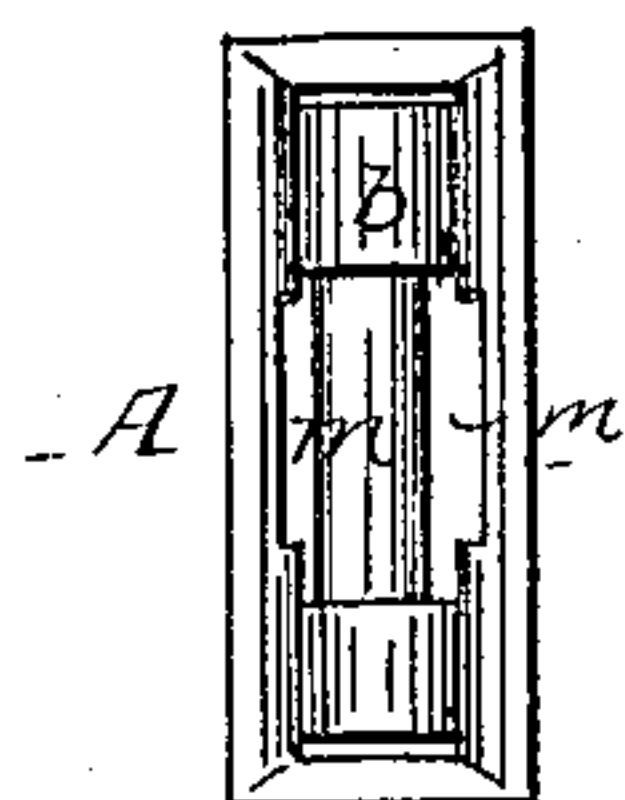
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



*Attest:*

*Frank M. Green.*

*J. Benjamin*

*Inventor*

*J. R. Blossom*

*By his attorney*

*Charles E. Foster*

# UNITED STATES PATENT OFFICE.

JOSEPH R. BLOSSOM, OF BROOKLYN, NEW YORK.

## IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. **205,720**, dated July 9, 1878; application filed June 10, 1878.

*To all whom it may concern:*

Be it known that I, JOSEPH R. BLOSSOM, of Brooklyn, Kings county, New York, have invented certain Improvements in Baling-Ties, of which the following is a specification:

My invention relates to the manufacture of that class of bale-ties in which one end of the band is secured in any suitable manner to the tie and the other end is jammed between one side of a case having converging sides and a roller, wedge, or cylinder contained therein, as described hereinafter.

Referring to the accompanying drawing, which forms part of this specification, Figure 1 is a section of a tie of ordinary form; Fig. 2, a section of my improved tie; Fig. 3, a section showing a modification, and Fig. 4 an inverted end view of Fig. 3.

In this class of ties heretofore made and illustrated in one form in Fig. 1, various methods have been employed to secure the roller or wedge so that it would not drop out from the case, and one or more flanges have been used upon the case, which, as heretofore employed, interfere with passing the end *x* of the band readily between the roller and the flanged plate. As a result of such defective construction it is often necessary to cut the bands in order to loosen the wedged ends.

There are other objections which need not be here enumerated, but which I obviate by constructing the tie, as I will now describe.

I make the tie with a case, *A*, as usual, having plates *a a'* and plates *c*, the sides converging toward the mouth *v*, which, however, is flaring, as shown in Fig. 2, so as to facilitate the speedy introduction of the end of the band without the nice manipulation hitherto required, thus saving time, which is of the utmost importance at this stage of the operation and in processes where the pressing and tying of a bale must not take more than three-fourths of a minute's time.

The cross-bar *d*, Fig. 3, is directly in the center of the casing, permitting the free end of the band to be passed to either side, so that the tie is reversible and may be used with either side out.

In order to avoid the use of flanges for securing the cylinder *b* in its place when not attached to the band or during transportation,

I extend a wire or rod, *e*, nearly centrally across the case, and to secure the roller after baling the bar *d* may be arranged at such a distance from the edges of the plates *a a'* as to barely permit the passage of the roller *b*, which is then retained by lapping the attached end *y* of the band around the bar *d*, thus reducing the width of the opening.

In order to facilitate the releasing of the band, I make in the ends or sides of the case one or more slots, *i i'*, arranged in any suitable manner, through which a prong or lever, *w*, Fig. 3, or the point of a cotton-hook, may be introduced to pry up the roller; and, in order to facilitate the employment of bands consisting of pieces riveted together, I may form recesses *m* in either the case or the cylinder, or both, as shown in section, Fig. 3, and plan, Fig. 4, which recesses permit the passage of the heads of the rivets as the band is drawn through.

It is most desirable that the loose end *x* of the band should be carried to the front, that it may be seized by the tightening appliances; but it is also desirable that the roller be in front, where it may be loosened, as before described. To effect these objects I arrange the bar *d* above the back plate, and the rod *e* or flange *i*, if the latter be employed, at or near the front, as shown in Fig. 2, so that the end *x* may be passed at the rear of the roller, but in front of the fastened band end *y*, thus permitting the roller to be raised, when required, and the end *x* of the band to be seized, even when very short.

The cylinder may be provided with trunnions *n*, which extend into the end slots *i'*, guide it, and also serve to facilitate its release when required.

The widening of the lower mouth of the case is of much importance, as the speedy introduction of the end *x* of the band is essential to the rapidity of operation of baling.

The bar *d* may be flat in cross-section, as shown in Fig. 2, so as to prevent the case from tilting or turning in the eye of the band.

I am aware that a notched recessed block has been provided with a bar secured at one end and adapted to be bent down into the notch to secure the roller; but this is not my invention, which consists in providing the case with



holes in the opposite ends for the passage of a wire, as described, to hold the roller or wedge in place during transportation.

I claim—

1. The casing consisting of the plates *a a'* *c c* and the bar *d*, arranged to permit the introduction of the roller *b* within the casing and to hold it therein by passing the end *y* of the band around the bar, as set forth.

2. The combination, with the sides *a a'* and bar *d*, of the wire *e* arranged below the said bar *d*, as and for the purpose set forth.

3. The casing provided with openings at either or all four of the sides, as set forth.

4. The casing with its bar *d* arranged centrally, for the purpose set forth.

5. The bale-tie having recesses *m* for the passage of rivet-heads between the casing and roller, substantially as specified.

6. The casing with its flaring mouth *v*, for the purpose set forth.

7. A bale-tie consisting of a case, *A*, with an internal tapering recess containing a loose roller or wedge, and with holes in the opposite ends for the passage through the same and across the recess of a tying or securing wire, *e*, all as set forth.

8. The combination of the casing and a cross-bar, *d*, opposite the mouth of the casing, flattened, as described, and shown in Fig. 2, for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH R. BLOSSOM.

Witnesses:

J. R. BLOSSOM, Jr.,  
H. S. BLOSSOM.