J. L. SHEPPARD.

Bale-Band Tightener.

No. 165,374. Patented July 6, 1875.

Fig. 2.

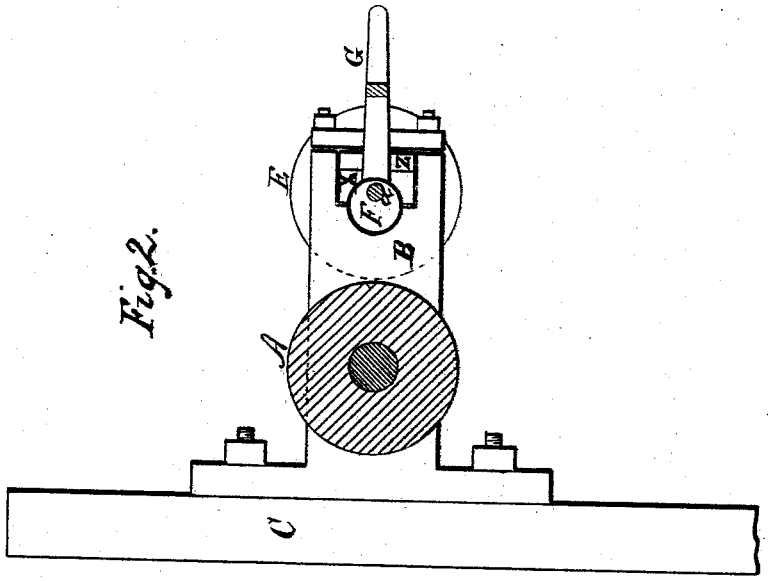
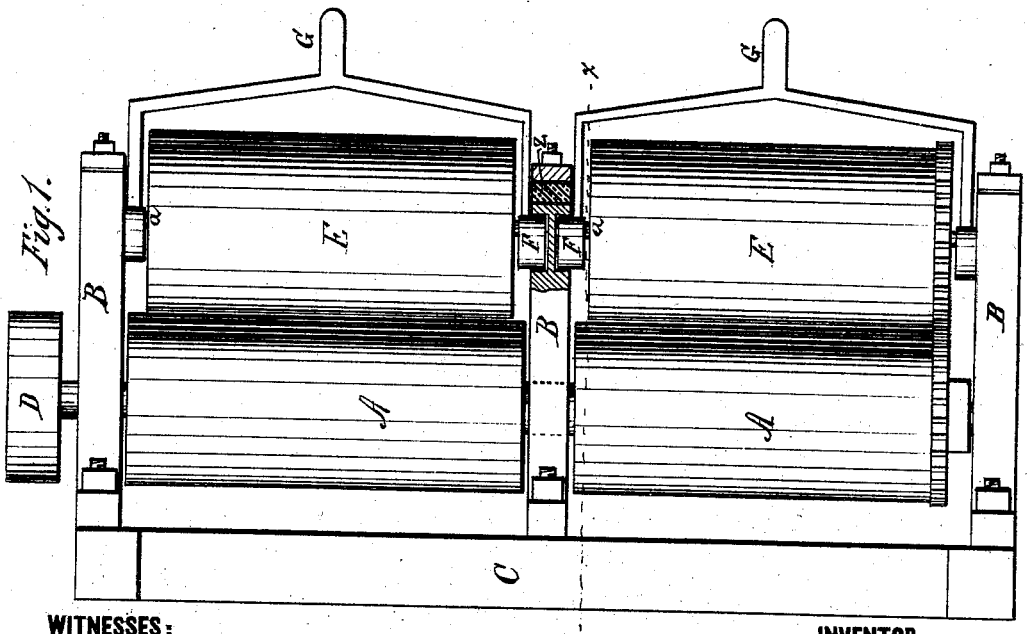


Fig. 1.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN L. SHEPPARD, OF CHARLESTON, SOUTH CAROLINA.

IMPROVEMENT IN BALE-BAND TIGHTENERS.

Specification forming part of Letters Patent No. **165,374**, dated July 6, 1875; application filed June 12, 1875.

To all whom it may concern:

Be it known that I, JOHN L. SHEPPARD, of the city and county of Charleston, and State of South Carolina, have invented a new and Improved Bale-Band Tightener; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 is a plan view. Fig. 2 is a transverse vertical section of Fig. 1, through the line *x x*.

The object of this invention is to provide a device to be used in connection with baling-presses, for the purpose of tightening the bands upon the bales when the latter are being prepared for market. It consists in a large roller journaled in a frame attached to the baling-press, and driven continuously by power applied through a band and pulley. Journaled in frames by the side of said large roller are a number of smaller rollers, whose peripheries touch that of the larger one. Said smaller rollers are journaled eccentrically in secondary bearings, which latter are also journaled in the frame-work. To said secondary bearings are attached lever extensions, by means of which the pressure of the smaller roller upon the larger one may be regulated.

In the drawing, A represents the large roller, journaled in the frame-work B, attached to the side of the press C, and driven continuously by power applied through the pulley D. E are the smaller rollers, which are journaled at *a* eccentrically in the secondary bearings F. These said rollers may be made to gear either by a frictional contact or through a set of cog-wheels with the large rollers. Said bearings F move also in bearings X in the frame B, which are provided with the lever extensions G, by means of which the pressure of one roller upon the other is regulated. Behind the bearings X are located springs or elastic cushions Z, by means of which the pressure of the rollers is rendered uniform.

The operation of this device is as follows: The bale being compressed and the band passed around the same, with one end through the buckle attached to the other end, the free end is passed between the rollers E and A. Now, as the lever G is depressed, the roller E is brought closer to the roller A by reason of the eccentric bearing of the smaller roller and the bale-band is drawn up tightly by the frictional contact, the degree of constriction of the bale depending upon the pressure upon the lever G, which latter I may arrange to be operated by a weight or spring instead of the hand. When the bale is sufficiently compressed the band is released by elevating the lever, and is, as usual, locked in the buckle.

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

1. The combination of a revolving roller, pivoted concentrically, with the other smaller roller, journaled eccentrically in movable bearings, substantially as and for the purpose described.

2. The combination of the roller A, the smaller rollers E, the spring Z, and the lever G, substantially as and for the purpose described.

JOHN L. SHEPPARD.

Witnesses:

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