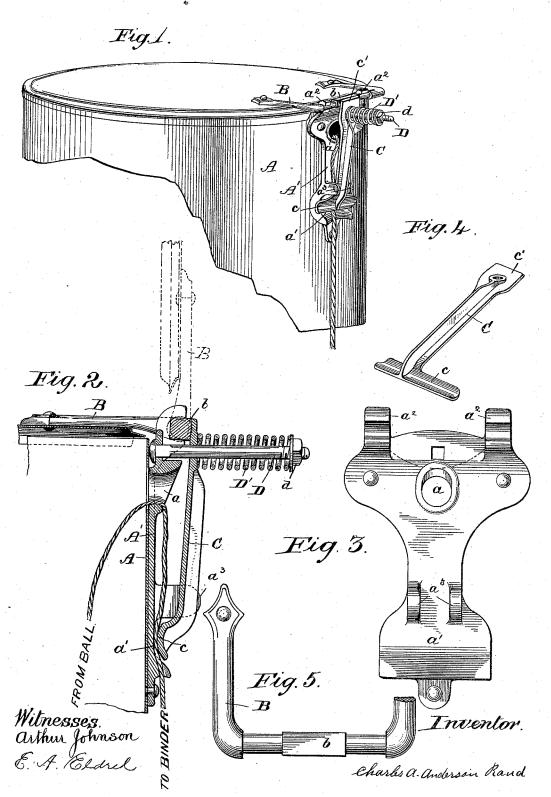
C. A. RAND.
TWINE BOX AND TENSION FOR SELF BINDING HARVESTERS.

No. 526,459. Patented Sept. 25, 1894.



United States Patent Office.

CHARLES A. ANDERSON RAND, OF CHICAGO, ILLINOIS.

TWINE-BOX AND TENSION FOR SELF-BINDING HARVESTERS.

SPECIFICATION forming part of Letters Patent No. 526,459, dated September 25, 1894.

Application filed July 25, 1894. Serial No. 518,599. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. ANDERSON RAND, a citizen of the United States, residing at Chicago, in the county of Cook and State of 5 Illinois, have invented certain new and useful Improvements in Twine-Boxes and Tensions for Self-Binding Harvesters, of which the following is a description, reference being had to the accompanying drawings, in which-

Figure 1 is a perspective view of as much of a twine box as necessary to show my invention; Fig. 2, a side sectional elevation of same parts. Figs. 3, 4 and 5 are detail views of the parts of the box hinge and tension.

The object of my invention is to obtain a device secured to the can that shall apply tension upon the twine as it is drawn therefrom; and that shall hold the can lid firmly in its open and closed position.

The twine can A may be considered as of the usual kind, and having any convenient location on the machine in order that twine may be drawn therefrom by the automatic binding attachment. A tension plate A' se-25 cured to the side of the can A, has an aperture a, and a surface a', preferably raised, and against which the twine may be drawn, the said aperture matching a similar aperture

in the said can. This plate serves as the sta-30 tionary part of the hinge by having notched lugs a^2 , in which the cylindrical portions of the removable hinge piece B, secured to the can lid, may lie. A tension bar C is held to the plate A' by a bolt D having an adjustment nut d, and a spring D', or by any other

well known means. The lower part of this bar is adapted to apply the required pressure upon the twine to give the proper tension. I throw the lateral extensions c, which press upon the twine as it passes over the pad a', 40 the amount of tension being regulated by means of the adjustment nut d acting upon the spring D'. The upper end c' holds the movable hinge piece B in the concaved projections a^2 , and the part b of the said hinge 45 is so shaped that the said bar C presses thereagainst, holding it in either its closed or opened position. As shown in Fig. 2 this result is obtained by making the part b square in cross-section. The wings a3 preferably cast 50 upon the plate A' serve to hold the tension bar C in place, and prevent the twine from escaping laterally.

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

The combination of the plate A' having the notched lugs and the tension pad a', with the hinge B, and the tension bar C having the pad c adapted to co-operate with the pad a' and act as a tension, and the part c'adapted 60 to press upon and hold the hinge b in place, and the spring D' suitably supported and adapted to force the bar C against the said hinge and tension pad, substantially as described.

CHARLES A. ANDERSON RAND.

Witnesses:

M. E. HOLTON, J. F. STEWARD.