

(No Model.)

2 Sheets—Sheet 1.

J. E. MANSFIELD.
BALING PRESS.

No. 364,836.

Patented June 14, 1887.

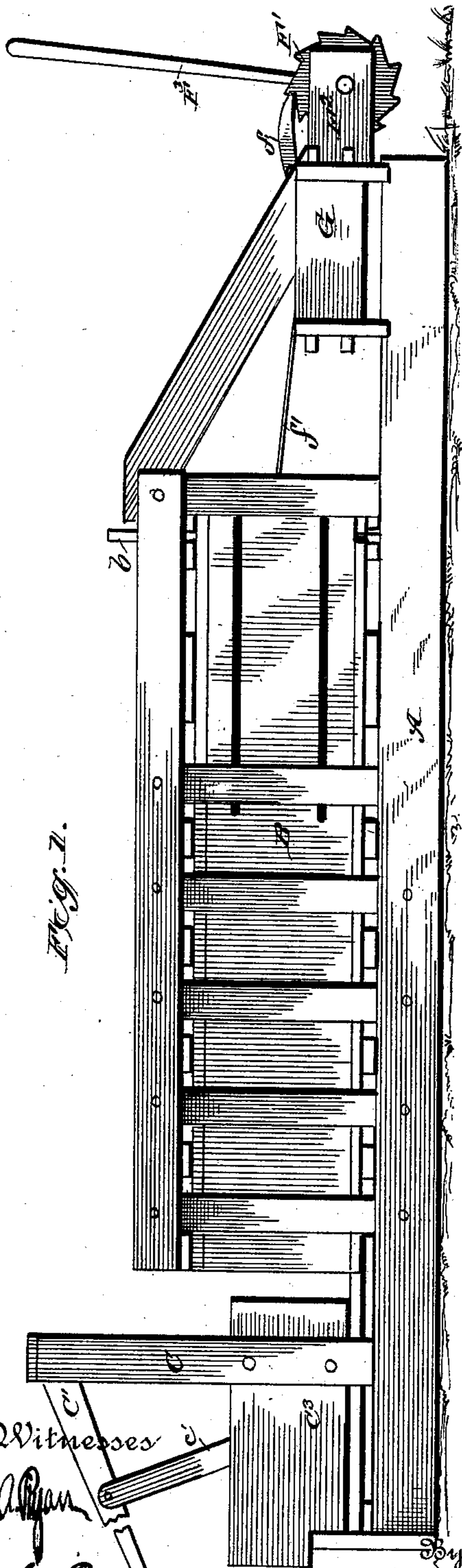


Fig. 1.

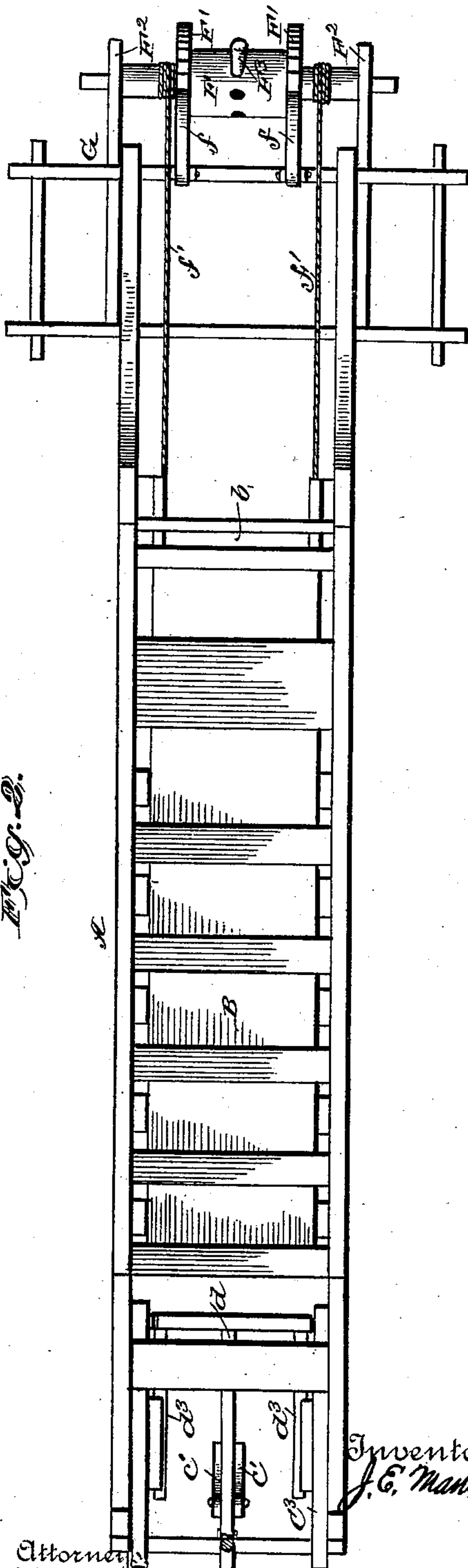


Fig. 2.

Witnesses
J. A. [Signature]
[Signature]

By [Signature] Attorneys

[Signature]

Inventor
J. E. Mansfield

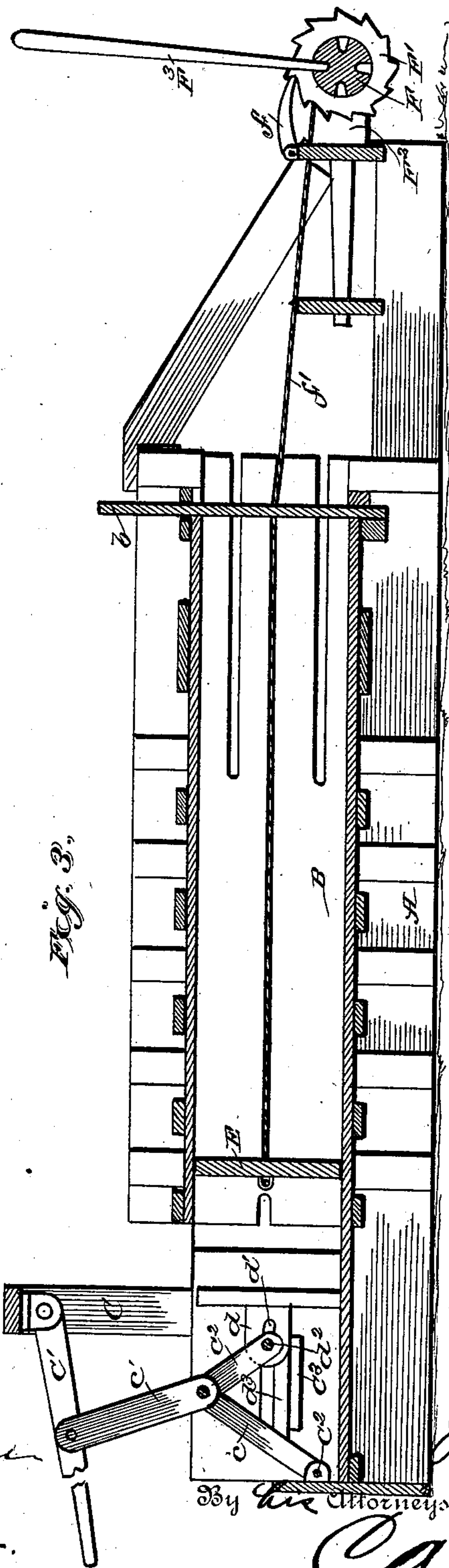
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Witnesses
Jas. A. Ryan
L. S. Hyer.

J. E. Mansfield Inventor

By his Attorneys,

C. A. Howells

UNITED STATES PATENT OFFICE.

JAMES EDWARD MANSFIELD, OF SHERMAN, TEXAS.

BALING-PRESS.

SPECIFICATION forming part of Letters Patent No. 364,836, dated June 14, 1887.

Application filed April 26, 1887. Serial No. 276,224. (No model.)

To all whom it may concern:

Be it known that I, JAMES EDWARD MANSFIELD, a citizen of the United States, residing at Sherman, in the county of Grayson and State of Texas, have invented a new and useful Improvement in Baling-Presses, of which the following is a specification.

My invention relates to baling-presses; and it consists in the construction of the same, which will be more fully hereinafter described, and pointed out in the claims.

The object of my invention is to provide a baling-press which is simple and effective in its construction and operation, strong and durable, easily handled, and readily understood, positive in its action and ultimate results, and cheaply manufactured. I attain this object by the construction illustrated in the accompanying drawings, wherein like letters of reference indicate similar parts in the several views, and in which—

Figure 1 is a side elevation of my improved baling-press. Fig. 2 is a top plan view of the same. Fig. 3 is a longitudinal vertical section thereof.

A indicates the base-rest or supporting frame-work, which may be suitably mounted upon and attached to a movable vehicle, and has a baling-box, B, mounted on the top portion thereof. The general construction of this baling-box B is of the ordinary form, and it will be readily understood. This baling-box B has a gate, *b*, at one end, sliding in ways, and which may be removed when desired or found necessary. At one end of the baling-box a compressing attachment is mounted and secured to an upright frame-work, C. This compressing attachment consists of a lever, C', pivotally connected to the cross-piece of the frame C, and is provided with double connecting-strips *c'*, which are secured at their lower ends to a short connecting-lever, *c*, which is fulcrumed at the point C² in the rear portion of the frame-work A. These connecting-strips *c'* and strip or lever *c* are also in connection with two short connecting-plates, *c²*, which are secured to a plunger, D. In the rear of this plunger D a projecting strip, *d*, is attached or formed integral therewith, having an enlarged slot, *d'*, therein, in which a pin, *d²*, connecting the two short connecting-plates *c²*, passes and has slight movement. To each

side of the said plunger D, and projecting rearwardly therefrom, are two guide-strips, *d³*, which engage with guideways in the portion C³ of the supporting-frame C. The plunger D is adapted to be forced into the opening of the box B, adjacent thereto, and by means of the lever C' the hay or straw is compressed and forced into the said baling-box against the gate *b*, hereinbefore described. When a sufficient quantity of hay or straw has been forced into the said box B, a gate, E, which has been resting on the top of the baling-box, will be inserted in the opening of said box adjacent to the plunger D, and the baling process will be as follows: On the rear of the frame A, opposite the gate *b* of the baling-box B, a windlass mechanism is mounted and supported, which consists of a drum, F, having ratchet-wheels F' on each side thereof, said windlass being pivotally mounted or revolving in projections or arms F², extending outward from the cross-frame G. The ratchets F' on the windlass-drum F are engaged by pawls *f* and operate in conjunction therewith, as will be readily understood. The outer portion of the said drum F, on each side of the ratchet-wheel F', has a cord or rope, *f'*, passing therearound, which extends forward through the baling-box B and around the gate E, the said cord having been arranged within the baling-box before the hay or straw had been inserted therein. When the hay or straw has been thus inserted, as hereinbefore described, and the gate E placed in the opening of the box B adjacent to the plunger D, the windlass-drum F, operated by a bar, F³, will be revolved, and the said gate E gradually drawn in upon and producing a gradual pressure against the hay which has been placed within the baling-box. When the desired form of bale has been completed, suitable fastening or securing wires or bale-ties may be placed therearound and retain the bale thus formed in its desired bulk. The gate *b* will then be removed by being drawn upward through the baling-box B and the bale removed from the box at the end thereof adjacent to the windlass-drum, and be transported to a suitable place of deposit, when the same operation may be repeated as often as is necessary or desirable.

In lieu of the drum F, operated by the bar F³, as described, horse-power mechanism may

be applied in connection therewith in any desired well-known manner, and the same end attained.

The parts of the device will all be constructed of such material as is applicable to the purpose to resist the strain and pressure brought to bear thereagainst. The device may also be so mounted as to be readily transported from one position to another, thereby rendering it convenient and generally useful.

It is obvious that many minor details of construction and arrangement of parts may be made and substituted for those shown and described without in the least departing from the nature and principle of my invention.

Having thus described my invention, I claim—

1. In a baling-press, the combination of the baling-box having end-gates *b* and *E*, the plunger mechanism arranged at one end of said baling-box, and the windlass-connecting mechanism at the opposite end, substantially as described.

2. In a baling-press, the combination of the baling-box *B*, mounted upon a suitable frame, the plunger *D*, operated by suitable lever mechanism, the windlass *F*, situated at the opposite end of the press, the gate *E*, and the cord *f'*, surrounding the said gate and attached to the windlass-drum *F*, substantially as and for the purpose specified.

3. In a baling-press, the combination of the

baling-box *B*, having gates *b* and *E*, a windlass mechanism operating the cord in connection with said gate *E*, and means, as herein set forth, for operating said windlass, substantially as described.

4. In a baling-press, the combination of the baling-box *B*, the plunger *D*, sliding in ways in the frame *C*, the lever mechanism for controlling the movement of said plunger *D*, the gate *E*, the windlass-drum *F*, and the cord surrounding the said gate *E* and attached to and operated by said windlass-drum, as herein specified.

5. In a baling press, the combination, with the baling-box having a gate, *b*, closing one end thereof, the plunger *D*, sliding in ways, the lever mechanism for controlling the movement of said plunger; mounted in the suitable frame-work *C*, the windlass *F*, having ratchets *F' F'* arranged on each side thereof, pawls *f*, engaging the said ratchets *F'*, the gate *E*, and the cord *f'*, surrounding said gate and passing through the baling-box and attached at its ends to the windlass-drum *F*, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JAMES EDWARD MANSFIELD.

Witnesses:

D. E. EMERSON,
GEO. H. GORDON.