A. O. HARRIS.

HAND OPERATED BALING PRESS.

APPLICATION FILED NOV. 9, 1918.

1,321,036.

Patented Nov. 4, 1919.

2 SHEETS—SHEET 1.

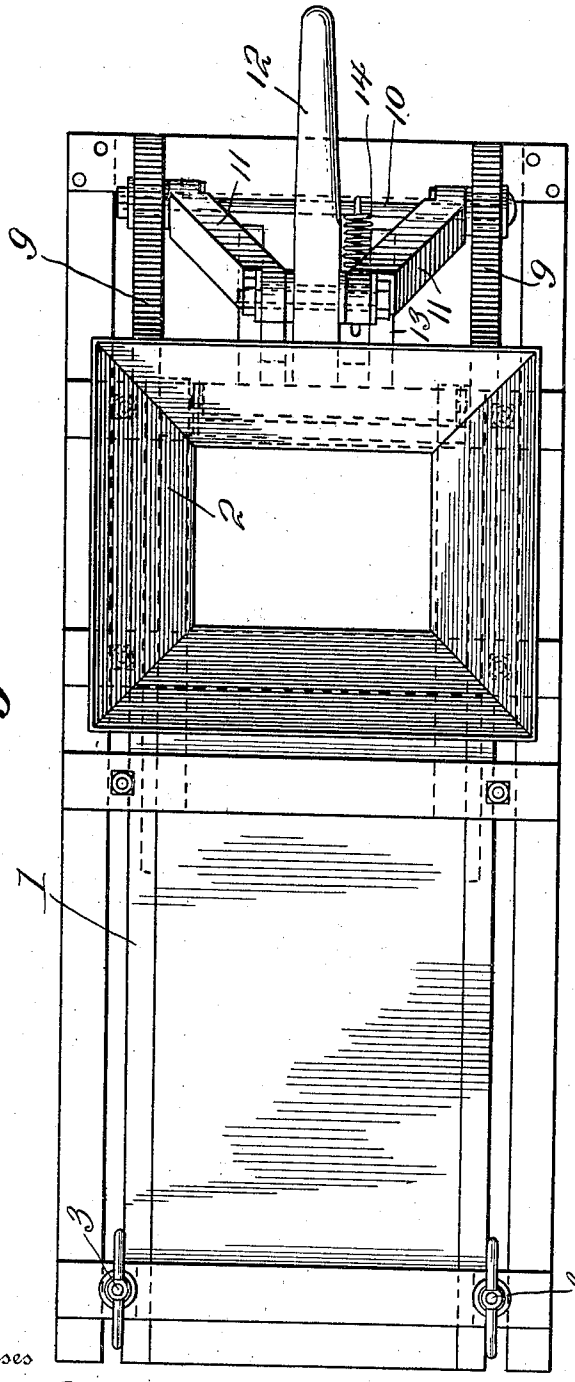

Fig. 1.

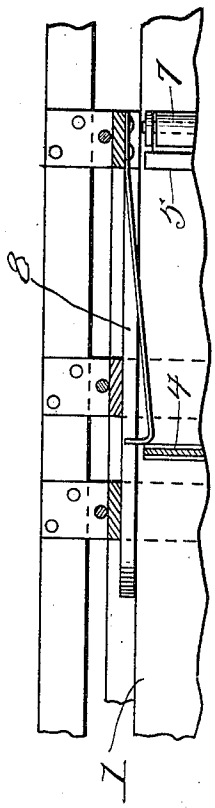

Fig. 4.

Witnesses

W. N. Lybrand

Inventor

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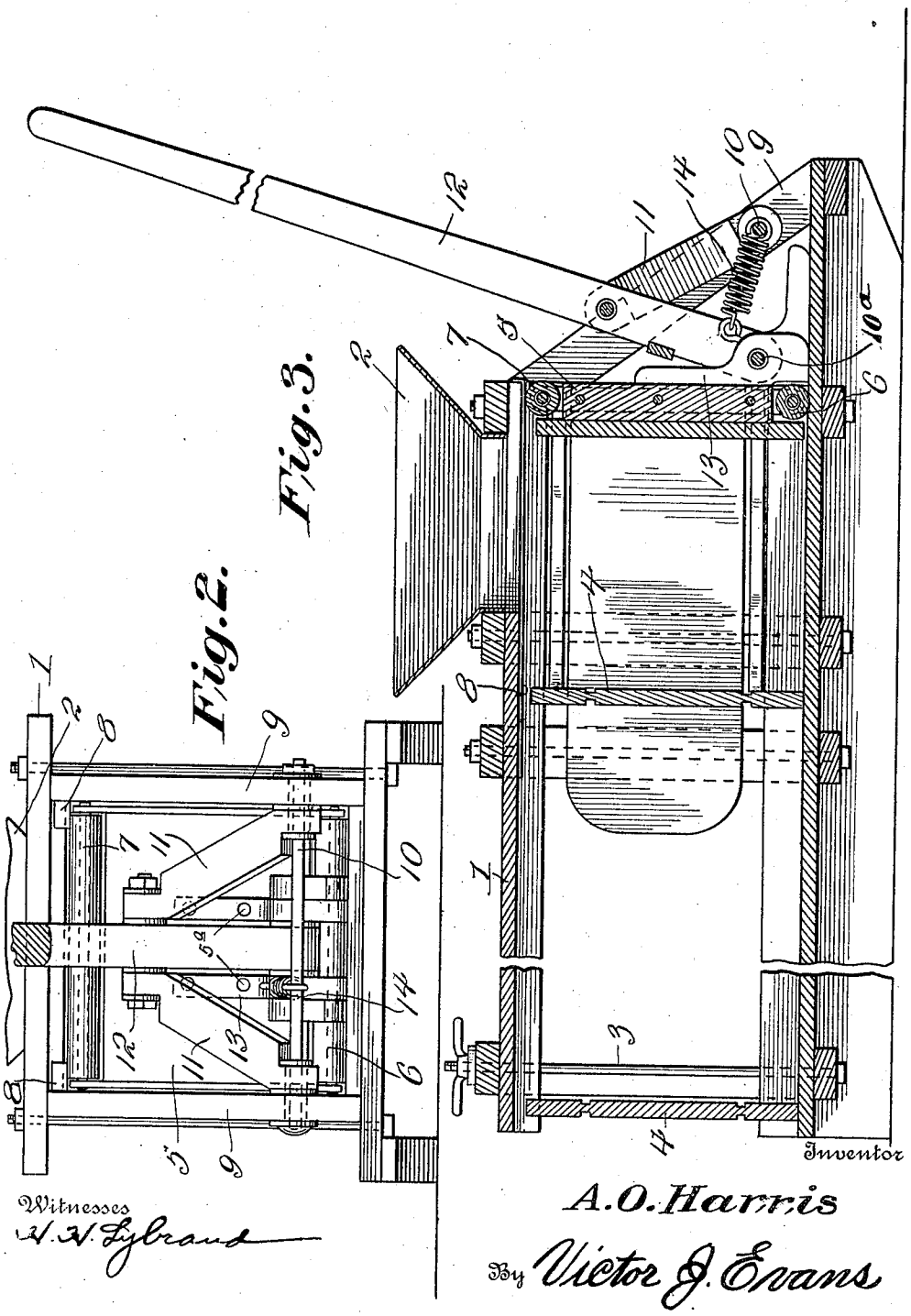

Fig. 2.

Fig. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

ALBERT O. HARRIS, OF WINNSBORO, TEXAS.

HAND-OPERATED BALING-PRESS.

1,321,036. Specification of Letters Patent. Patented Nov. 4, 1919.

Application filed November 9, 1918. Serial No. 261,907.

To all whom it may concern:

Be it known that I, ALBERT O. HARRIS, a citizen of the United States, residing at Winnsboro, in the county of Wood and State of Texas, have invented new and useful Improvements in Hand-Operated Baling-Presses, of which the following is a specification.

This invention relates to hand operated baling presses and it consists in the novel features hereinafter described and claimed.

An object of the invention is to provide a press of the character stated which is of simple and durable structure and which may be conveniently and easily used for baling material as for instance hay and straw.

With this object in view the press comprises a box or body provided with a hopper of usual pattern and having clamping rods located at the delivery end thereof. A plunger is slidably mounted in the box or body and is provided at its upper and lower edges with rollers adapted to engage the bottom and guides provided in the box or body whereby the plunger may move in the box or body without friction. A shaft is supported upon the base of the box or body and links are pivoted on the shaft. A lever is fulcrumed between the links and its working end is pivotally connected with shoes which are disposed against the outer surface of the plunger and are connected therewith. A spring is connected at one end with the shaft and at its other end with one shoe and serves as means for returning the lever, plunger and shoes to normal position.

In the accompanying drawing:—

Figure 1 is a top plan view of the baling press.

Fig. 2 is a fragmentary end view of the same.

Fig. 3 is a longitudinal sectional view of the same.

Fig. 4 is a fragmentary horizontal sectional view of the same.

The baling press comprises a box or body 1 which is preferably rectangular in form and which is provided at its top side with a hopper 2 of usual pattern. The delivery end portions of the top and bottom of the box or body are provided with clamp rods 3 which may be used for springing or drawing the said sides toward each other whereby frictional contact may be established between the top and bottom sides of the body and the bale of material in a usual manner. Partition boards 4 of usual pattern are used within the box or body.

A plunger 5 is slidably mounted in the box or body 1 and the said plunger is provided at its lower edge with a roller 6 adapted to move along the upper surface of the bottom of the box or body and at its upper edge with a roller 7 adapted to move along guides 8 provided at the top side of the box or body.

Inclined braces 9 are located at the end of the box or body 1 and carry a shaft 10. Links 11 are pivotally mounted upon the shaft 10 and a lever 12 is fulcrumed between the upper free ends of the links 11. The lever 12 carries at its working end shoes 13 which bear against the outer surface of the plunger 5 and are connected at 5^a, Fig. 2, to said plunger so as to move therewith. The working end of the lever 12 is pivotally connected to a rod 10^a, Fig. 3, that extends transversely through the shoes 13 as shown in Fig. 3. A retractile spring 14 is connected at one end with one shoe 13 and at its other end with the shaft 10. The spring 14 is under tension with a tendency to hold the working end of the shaft 12 at a lowered position and the shoes 13 and the plunger retracted with relation to the box or body 1. The shoes 13 are fixed to the plunger 5 in the manner before described.

In operation the hay or other material is inserted in the box or body 1 through the hopper 2 in a usual manner and the operator grasps the upper end of the lever 12 and swings the same in a downward direction whereby the free ends of the links 11 are swung downwardly and the plunger 5 and shoes 13 are moved forwardly along the box or body. Thus the material which is deposited in the box or body in advance of the plunger 5 is compressed in the box or body. When pressure is removed from the power end of the lever 12 the said end ascends or rises under the influence of the spring 14. The operation above described may be repeated until a completed bale of material is formed in the box or body in a usual manner.

Having described the invention what is claimed is:—

A baling press comprising a box having a hopper, a plunger movable in the box, rollers carried by the plunger below and above and in parallelism therewith to bear

against the bottom and top walls of the box, diagonal braces exterior of the box and interposed between the extended bottom wall thereof and the upper portion of one end of the box, a transverse shaft carried by and extending between said braces, links mounted to swing on said shaft, a hand lever pivoted between said links, a shoe pivotally connected with the lower end of said lever and attached to the outer side of the plunger and movable therewith on the bottom wall of the box, and a retractile spring interposed between the said shaft and the shoe.

In testimony whereof I affix my signature.

ALBERT O. HARRIS.