

*A. P. Boren,*

*Baling Press.*

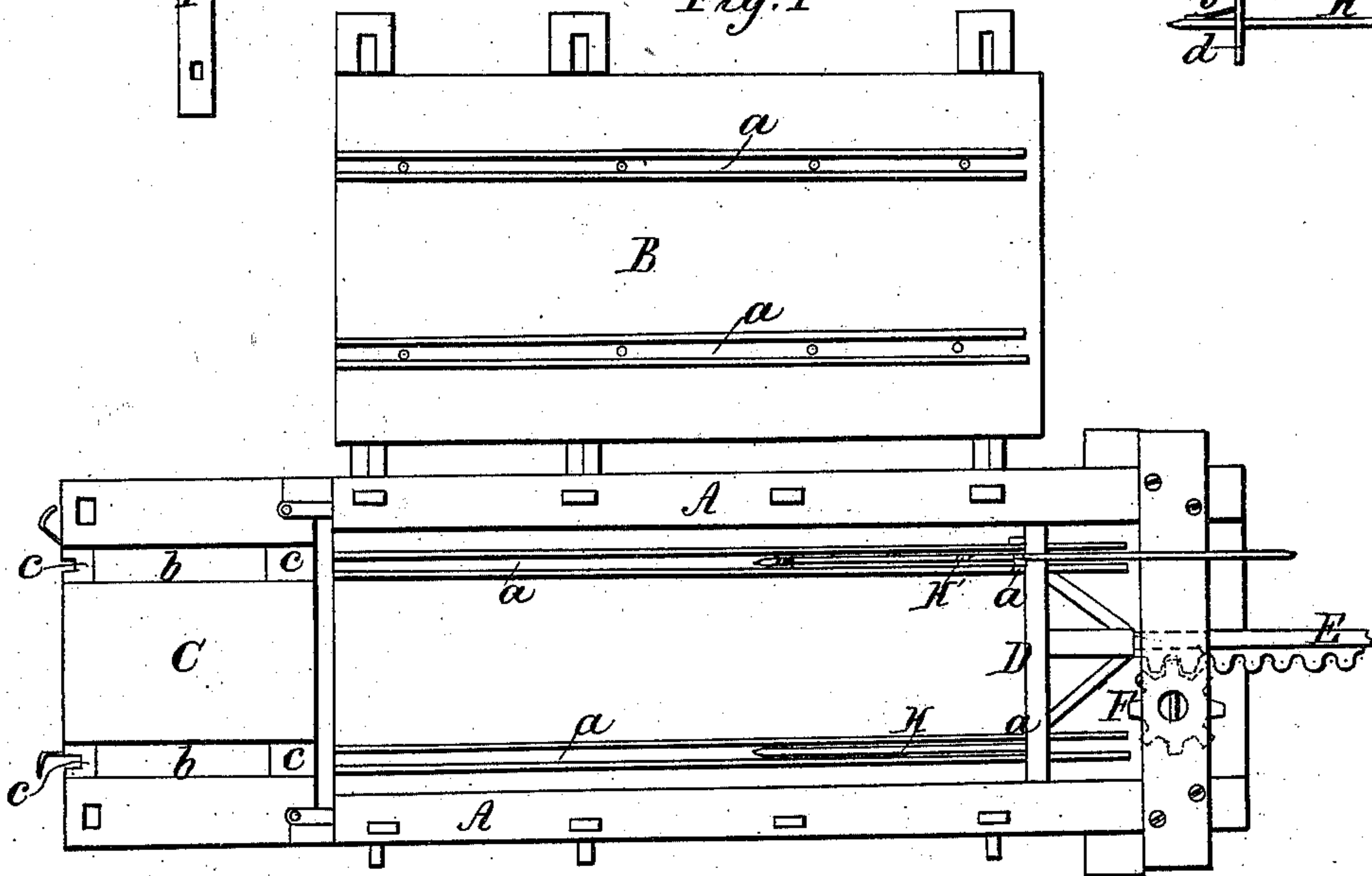
*No. 90,152.*

*Patented May 18, 1869.*

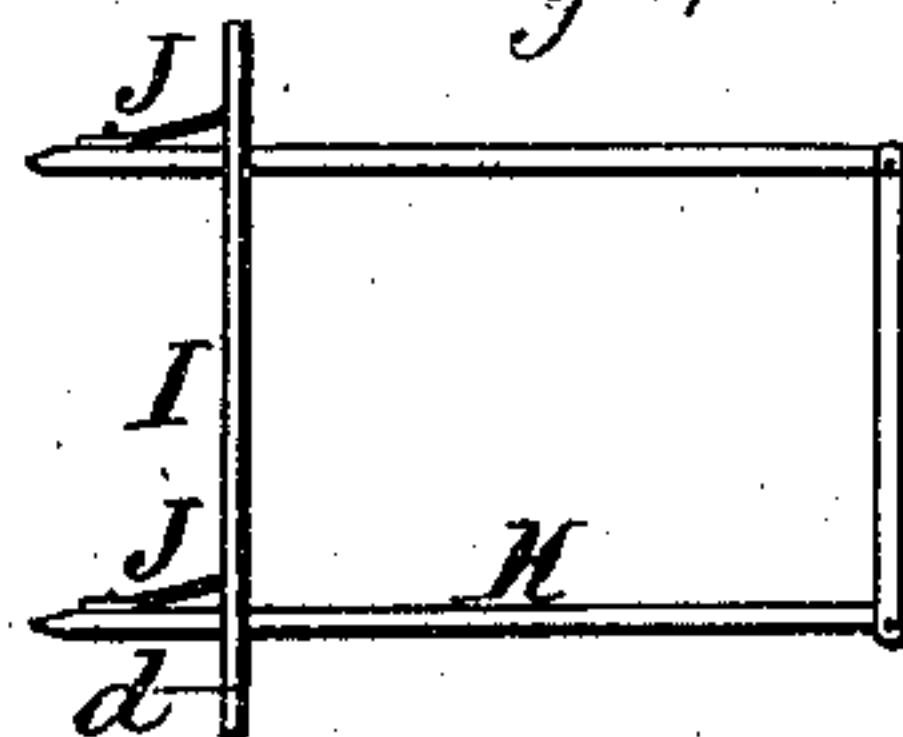
*Fig. 3*



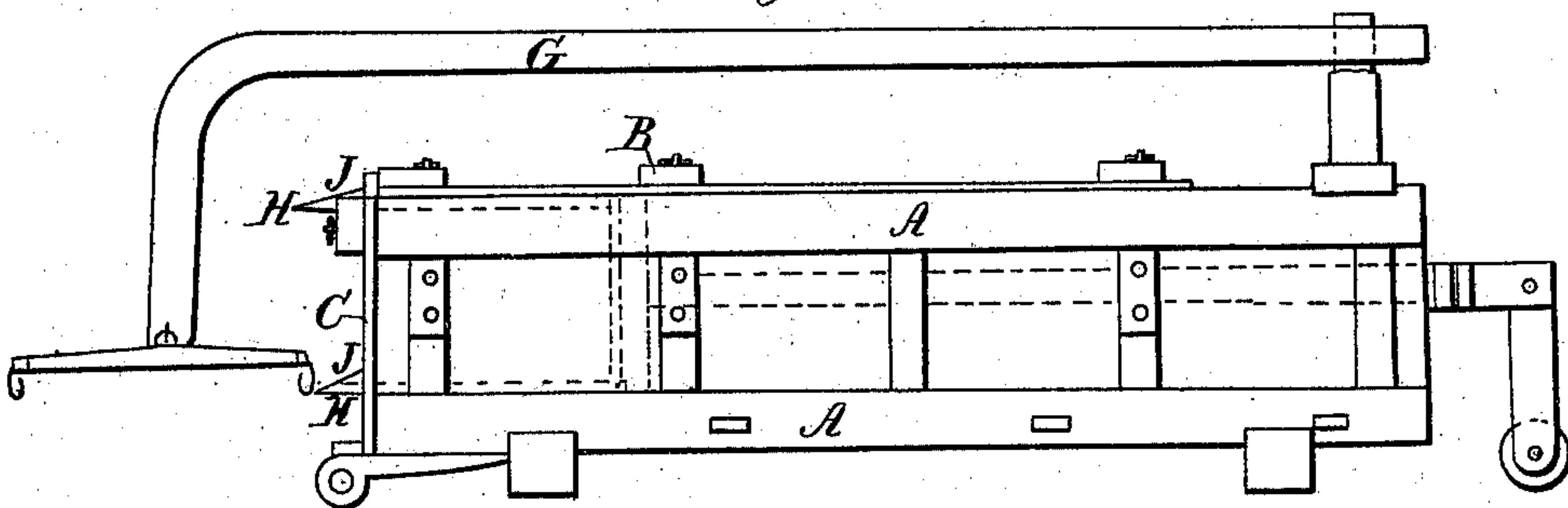
*Fig. 1*



*Fig. 4*



*Fig. 2*



*Witnesses*

*Wm. K. Seaman*  
*Wm. Dennis*

*Inventor*

*Addison P. Boren*  
*By his Atty J. Dennis, Jr.*



# United States Patent Office.

ADDISON P. BOREN, OF GREENSBOROUGH, NORTH CAROLINA.

Letters Patent No. 90,152, dated May 18, 1869.

## IMPROVEMENT IN BALING-PRESSES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, ADDISON P. BOREN, of Greensborough, Guilford county, in the State of North Carolina, have invented certain new and useful Improvements in Baling-Presses; and I hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings, forming part of this specification.

The nature or essence of my invention consists in providing, for presses used for baling hay, cotton, or other material, temporary bands or clamps, to be placed in the press, and so applied as to clamp and hold the compressed bale until it is removed from the press and secured by its permanent bands, grooves being provided in the sides of the press and in the follower, and spaces in the end, to receive the parts of the clamps, as will be hereinafter fully set forth.

In the drawings before mentioned—

Figure 1 is a plan, and

Figure 2, an elevation of one of my presses.

Figure 3 shows one of the yokes belonging to the clamps, and

Figure 4, a clamp, with a yoke upon it.

In these drawings—

A is a strong frame, to which plank or other material is applied, to form a suitable box for the body of the press;

B is a hinged cover, turned back, for the purpose of filling the press; and

C is a hinged end, represented as turned down, in order to show more clearly its construction.

The follower D is operated by the rack-bar E, worked by the pinion F, which may be turned by a lever, G, made long enough to permit the horse operating it to pass entirely around the press.

The clamps H are formed each of three bars, connected at their ends by joints or hinges, and have each a yoke, I, provided with openings, to receive the end-bars of the clamps, which have on them spring-catches J, to secure the yoke, when the bars have entered far enough to allow the catches to act.

The bottom of the press, the cover, and the follower, are each provided with grooves or recesses *a a*, to receive the bars of the clamps H, and they may be formed as depressions in the surface, or by fastening strips upon the surface, as may be preferred; and the end, C, is provided with spaces *b b*, to receive the yokes I, and has also cross-pieces *c c*, on the lower one, on which the projections *d d*, on the yokes, rest, and support the yokes, until they receive the bars of the clamps H.

### Operation.

The follower being drawn back, and the top opened to receive the material for a bale, the end, C, is put

up, and the yokes I placed in the spaces provided for them, as already described.

One end-bar of each of the clamps H is then laid in the grooves in the bottom of the press, so that the middle bars will stand in the grooves on the follower, and the other end-bars being turned back over the follower, so as to be out of the way, the press is filled.

Strips, as required, may be laid horizontally across the yokes I, and the clamp-bars against the follower, while the press is filling, to hold the better those edges of the bale.

When the press is filled, the clamp-bars, that were turned over the follower, are brought down upon the contents, and the cover B is then brought down upon them, receiving them in the grooves *a a* upon it.

The rack is then operated to compress the material within the press, the follower advancing, and carrying with it the clamps H, the bars of which, guided by the grooves above and below, enter the yokes I, and the follower being driven forward till they have passed through far enough for the catches J to act, the bale is then securely held by the clamps.

The end, C, may then be dropped, and the follower advanced again to push the bale out.

The cover is then thrown back, the follower returned to its former place, and another set of clamps and yokes being put in place, as before, a new bale is formed, while the hands designated for that part of the work are securing the first bale with proper bands, so as to release the clamps used on it for another operation.

In place of the spring-catches, described as holding the yoke on the clamp, I contemplate using a spring-bolt, attached to the yoke, and adapted to fit a hole or notch in the clamp; also, making a notch on one or both sides of the clamp, and providing a link, with a taper slot, wide enough at one end to be slipped over the end of the clamp, and narrow enough at the other to be held by the notch or notches aforesaid, when the narrow part of the slot is brought down upon the clamp.

What I claim as my invention and improvement in baling-presses, is—

1. The clamps H, having their parts hinged together, in combination with the yokes I, when arranged so as to be placed in the press before filling, and so as to clamp and secure the bale automatically the instant the compression is effected, substantially as described.

2. In combination with clamps and yokes, arranged as above claimed, the grooves or guides *a*, whereby the clamps are guided into the yokes while the bale is being compressed, substantially as described.

ADDISON P. BOREN.

Witnesses:

W. B. FARRAR,

J. A. PRITCHETT, Jr.