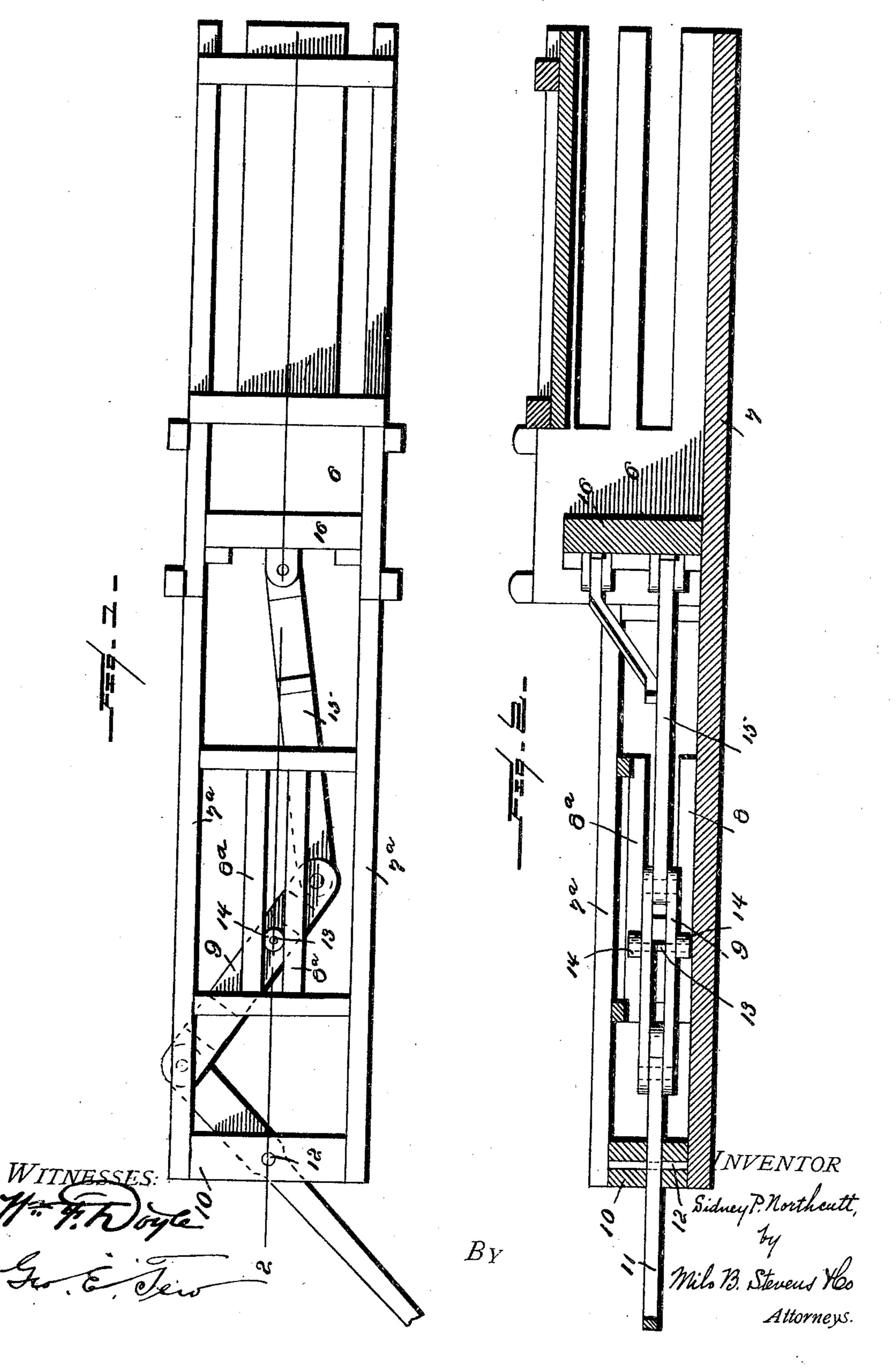
S. P. NORTHCUTT.

BALING PRESS.

APPLICATION FILED MAY 13, 1905.



UNITED STATES PATENT OFFICE.

SIDNEY P. NORTHCUTT, OF BERWICK, MISSOURI.

BALING-PRESS.

No. 803,126.

Specification of Letters Patent.

Patented Oct. 31, 1905.

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To all whom it may concern:

Be it known that I, Sidney P. Northcutt, a citizen of the United States, residing at Berwick, in the county of Newton and State of Missouri, have invented new and useful Improvements in Baling-Presses, of which the following is a specification.

This invention is a baling-press characterized by improved means for reciprocating the plunger which compresses the hay or other material in the press-box. The principle of a toggle is utilized to compound or increase the leverage and to transmit the pressure from an operating-lever to the plunger.

In the accompanying drawings, Figure 1 is a plan of the press. Fig. 2 is a central vertical coefficient on the line 2.2 of Fig. 1

tical section on the line 2 2 of Fig. 1. Referring specifically to the drawings, 6 indicates the press-box, the lower boards 7 of 20 which are elongated to form a support for a lower track 8 for the fulcrum-block of the intermediate lever 9, as well as a support for the fulcrum-block 10 of the main lever 11, to which the power is supplied by attachment 25 of a team or otherwise. The top of the block 10 is connected by tie-beams 7^a to the front end of the press-box, and these beams support an upper track 8° for the fulcrum of the lever 9. The main lever is pivoted at 12 upon the 30 block 10 and is connected to the intermediate lever 9, which is preferably formed of spaced beams or plates, as shown. The fulcrum-pin 13 of this lever extends above and below the same between the guide-tracks 8 and 8°, where 35 it has antifriction-rollers 14 bearing upon said tracks. The inner end of the intermediate lever 9 is pivoted to the connecting-rod 15, which is in turn pivoted to the plunger 16, which slides in the press-box. When the le-40 ver is swung, the toggle or double toggle, formed by the levers 11 and 9 and the plunger 16, straightens, and the plunger is accordingly advanced, the fulcrum of the lever 9 traveling in the tracks 8 and 8^a. Continued 45 swing of the main lever flexes the toggle to the other side and retracts the plunger. The plunger thus advances and retracts on one stroke, and the team is then turned around for the next or opposite stroke, traveling 50 back and forth in the segment of a circle. In this respect the construction is advantageous

over those presses where the team has to travel

in one direction for the advance of the plun-

ger and in the opposite direction for the retraction.

The hay or other material to be baled is fed through an opening in the top of the pressbox in the usual manner while the plunger is retracted. The arms of the intermediate lever 9 are preferably of unequal length, with 60 the longer arm connected to the main lever, so that the leverage is correspondingly increased. The press is simple and cheap in construction and capable of production without special parts or castings.

Among the advantages resulting from the use of the construction shown over presses having a single lever is that the side friction is, to a large extent, taken off the feed-box and plunger and put on the wheels 14. The 70 power is also compounded and the travel of the horse decreased. A further reason is that the rebound of the plunger is caught on the middle section, and the sweep is not so liable to strike the team on the heels. There is a 75 decided advantage in a short stroke of, say, one-fourth circle as compared to the half-circle required for the full stroke in devices heretofore patented.

Inasmuch as the middle section or lever 9 80 works between upper and lower tracks, the sweep does not tend to lift, but is kept horizontally in line with the plunger.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a baling-press, in combination, a pressbox, a plunger therein, guides connected to the press-box, an intermediate lever having a traveling fulcrum in the guides and connected to the plunger, and a swinging main lever 90 connected to said lever.

2. In a baling-press, in combination, a pressbox, a plunger therein, a lever connected to the plunger and having on opposite sides thereof guide-tracks for its traveling fulcrum 95 supported upon the press-box, and a main lever connected to said lever and constructed to swing to both sides thereof.

In testimony whereof I have signed my name to this specification in the presence of 100 two subscribing witnesses.

SIDNEY P. NORTHCUTT.

Witnesses:
GEO. WOGOMAN,
D. S. MAJOR.