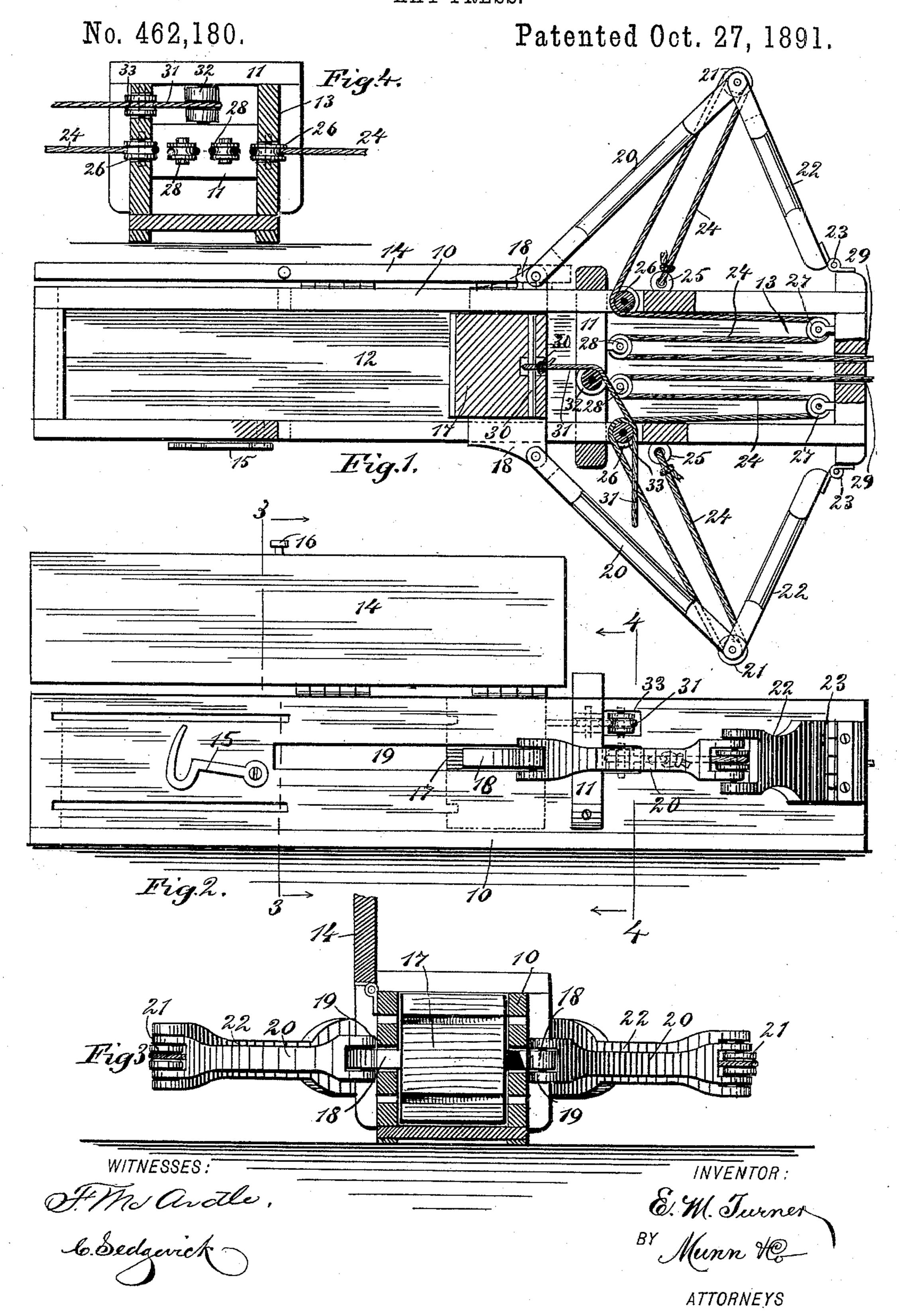
E. M. TURNER. HAY PRESS.



United States Patent Office.

E. MANUEL TURNER, OF WILMINGTON, OHIO.

HAY-PRESS.

SPECIFICATION forming part of Letters Patent No. 462,180, dated October 27, 1891.

Application filed May 1, 1891. Serial No. 391,185. (No model.)

To all whom it may concern:

Be it known that I, E. MANUEL TURNER, of Wilmington, in the county of Clinton and State of Ohio, have invented a new and Im-5 proved Hay-Press, of which the following is a full, clear, and exact description.

My invention relates to improvements in hay-presses; and the object of my invention is to produce a cheap and simple press which 10 will operate rapidly and well and will make a bale at one motion.

To this end my invention consists in a hay-press constructed substantially as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a sectional plan view of the hay-20 press with the door or cover open. Fig. 2 is a side elevation of the same. Fig. 3 is a broken vertical cross-section on the line 33 in Fig. 2, [looking in the direction of the arrows; and Fig. 4 is a cross-section on the line 44 in Fig. 25 2, looking in the direction of the arrows.

The main frame of the press consists of an elongated rectangular case 10, which is divided near one end by a transverse partition 11 into compartments 12 and 13, the compart-30 ment 12 serving as a press-box, and the compartment 13 affording space for the operating cables. The press-box 12 is provided with a a door or cover 14, which is hinged to the main frame, and a suitable catch 15 is secured to 35 the side of the case and is adapted to engage a stud 16 on the edge of the door and hold the same closed.

Within the press-box is a follower 17, which is adapted to slide in the box, and on each 40 side of the follower are projecting ears 18, which extend outward through slots 19 in the sides of the box, and the ears are pivoted to levers 20, which extend outward and forward, and which are provided at their outer ends 45 with pulleys 21. The outer ends of the levers 20 are also pivoted to the outer ends of levers 22, and the inner ends of the levers 22 are hinged to the front end of the main case, as best shown at 23 in Fig. 1. The levers 20 and 50 22 thus form toggle-joints, and when the levers are forced inward toward the case the follower 17 will be forced backward in the l

press-box 12, and when the levers are thrown out at the center the follower will be drawn

forward, as shown in Fig. 1.

On each side of the case, near the forward end, are cables 24, which are secured to eyes 25 on the sides of the case, and these cables extend outward around the pulleys 21 in the toggle-levers, thence inward through slots 60 in the sides of the case and near the partition 11, the cables passing over suitable guidepulleys 26, thence around pulleys 27 in the front end of the compartment 13, thence rearward around pulleys 28 in the rear end of said 65 compartment, the pulleys being secured to the partition 11, and thence outward through slots 29 in the front end of the case, and when power is applied to the cables at their front ends they will be drawn over the several pul- 70 leys and will force the toggle-levers against the side of the case, thus pushing back the follower in the manner described. A pin 30 extends transversely through the front end of the follower 17, and a cable 31 is tied around 75 the center of the pin and in a recess of the follower, and this pulley extends forward and outward over guide-pulleys 32 and 33 and through a slot in the side of the case. When the follower is forced backward by the tog- 80 gle-levers in the manner described, it is again drawn forward by the cable 31, and any convenient power may be used for the purpose, or it may be drawn forward by hand. The machine is operated as follows: The hay to 85 be pressed is placed in the press-box 12, and the cables 24 are drawn forward by means of suitable power, and the central portions of the toggle-levers 20 and 22 will thus be brought inward toward the case and will push the 90 follower 17 backward, so as to thoroughly compress the hay in the press-box, making the bale in one operation, and the follower is then drawn back by means of the cable 31.

It will be noticed that the means of apply- 95 ing power to the follower is extremely simple and that it is also very efficient.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

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1. A hay-press comprising a case having a press-box in one end, a follower held to slide in the press-box and provided with ears which extend laterally through the slots of the case,

toggle-levers pivoted to the ears of the follower and to the forward end of the case, said levers having pulleys at their center joints, cables secured to the sides of the case and extending around the pulleys in the toggle-levers and inward through slots in the side of the case, thence over suitable guide-pulleys and outward through the front end of the case, and means for returning the follower to the front end of the press-box, substantially as described.

2. A hay-press comprising a case divided by a transverse partition to form a press-box in one end, a follower held to slide in the press-box and provided with laterally-extending ears which move in slots in the press-

box, toggle-levers pivoted to the ears and to the main case, said toggle-levers carrying pulleys at their joints, cables secured to the sides of the case and extending around the 20 toggle-levers, thence inward over suitable guide-pulleys and through slots in the case, and thence around guide-pulleys and out through the front end of the case, and a cable secured to the follower and extending over 25 suitable guide-pulleys and through the transverse partition and the side of the case, substantially as described.

E. MANUEL TURNER.

Witnesses:

P. J. WEIMAR, T. S. EWELL.