

No. 762,395.

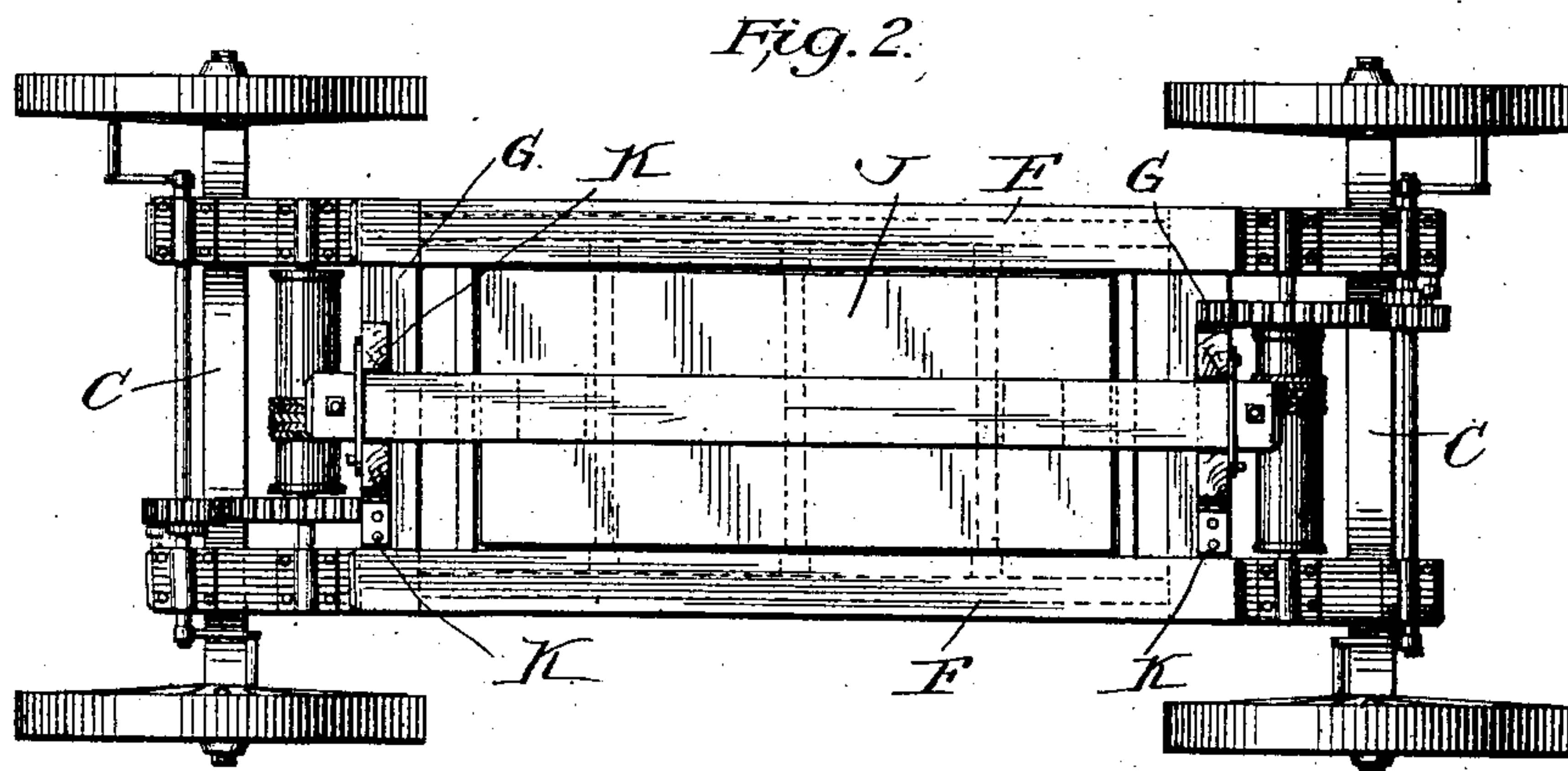
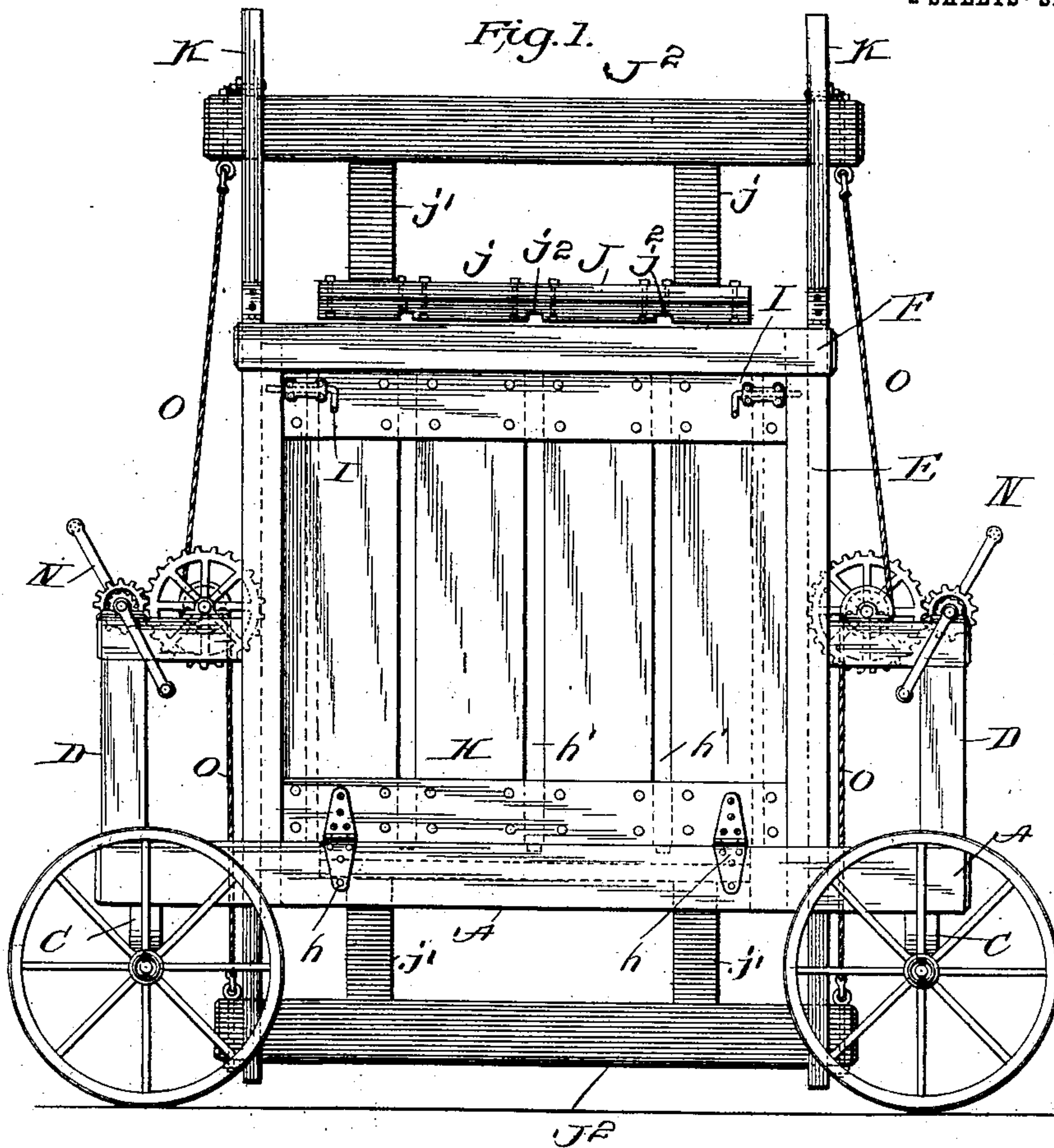
PATENTED JUNE 14, 1904.

W. EISENHAUER.
BALING PRESS.

APPLICATION FILED AUG. 21, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses:

J. M. Fowler

A. M. Perkins

Inventor:

Wm. Eisenhauer

By his Atty
Baldwin Davidson Wright

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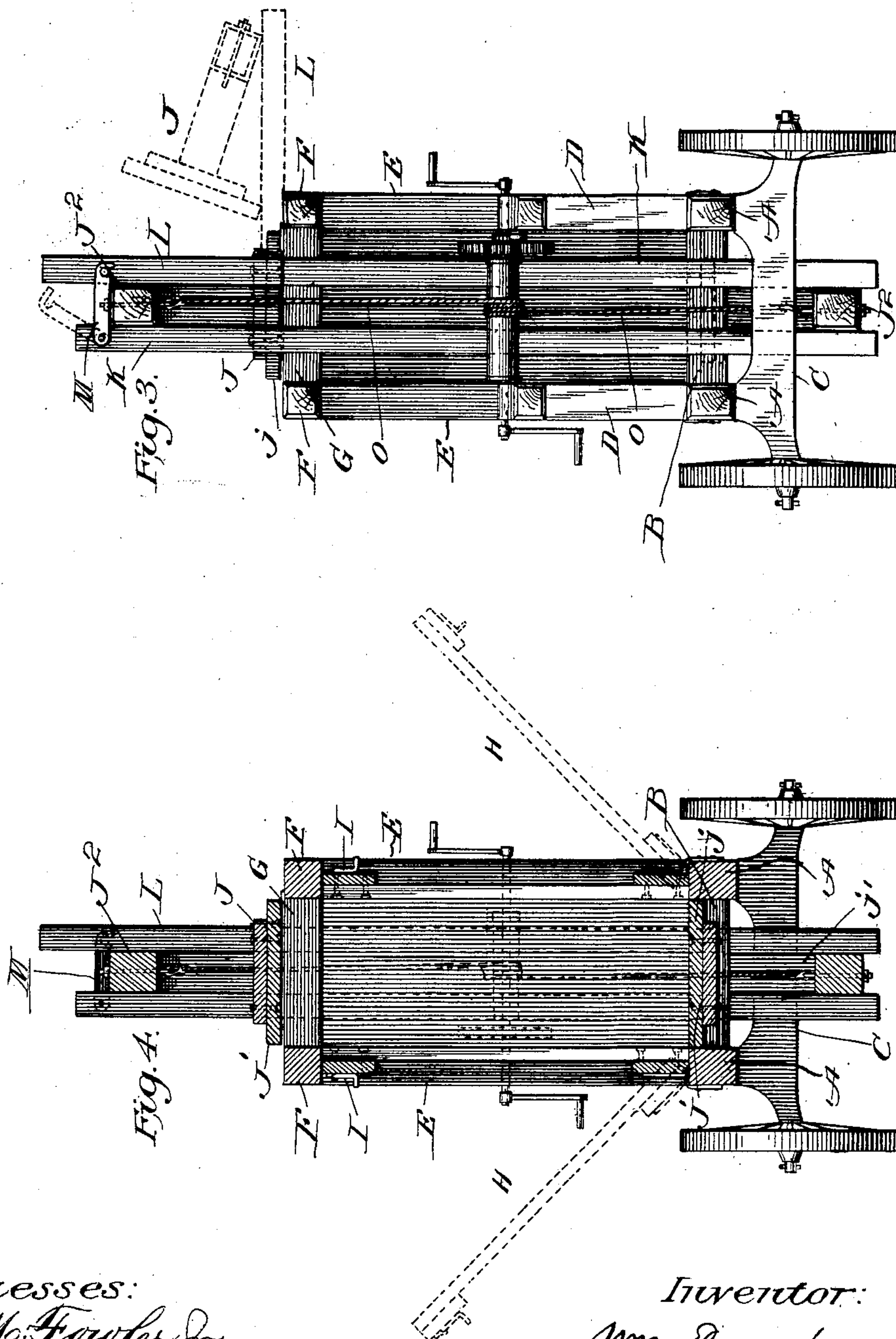
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UNITED STATES PATENT OFFICE.

WILLIAM EISENHAUER, OF SPOKANE, WASHINGTON.

BALING-PRESS.

SPECIFICATION forming part of Letters Patent No. 762,395, dated June 14, 1904.

Application filed August 21, 1903. Serial No. 170,342. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM EISENHAUER, a citizen of the United States, residing at Spokane, in the county of Spokane and State of Washington, have invented certain new and useful Improvements in Baling-Presses, of which the following is a specification.

The object of my invention is to provide a baling-press especially adapted to bale grain, hay, or straw, such as the straw of oats, wheat, barley, rye, and the like.

In carrying out my invention I provide a baling-box which is permanently closed at front and rear, is open at top and bottom, and has hinged doors on opposite sides. Through the top and bottom plungers operate in opposite directions to compress the hay or straw contained in the baling-chamber, and these plungers are operated by windlasses arranged at the front and rear ends of the machine. The side doors have openings through which the baling-wires may be inserted, and the plungers have grooves to receive the wires. The upper frame, which guides the upper plunger, is hinged in such manner that the plunger may be removed to one side in order that the hay or straw may be inserted into the baling-chamber in the proper manner.

My improvements are illustrated in the accompanying drawings, in which—

Figure 1 shows a side elevation of a baling-machine embodying my invention. Fig. 2 shows a top plan view thereof. Fig. 3 shows a rear end elevation. Fig. 4 shows a transverse section of the machine.

The machine may be mounted on suitable stationary standards, or it may be mounted on wheels. In the drawings I have shown it mounted on wheels.

The base or lower frame comprises longitudinal parallel side beams A and front and rear parallel cross-beams B, arranged some distance from the extreme ends of the longitudinal beams A. The axles C are secured to the under sides of the longitudinal beams A near their opposite ends, and from the opposite ends of the longitudinal beams A extend upwardly standards D, which support the windlass-carrying frame hereinafter referred

to. Four vertical corner-beams E extend upwardly from the junction of the beams A and B, and these are connected at their upper ends by upper longitudinal beams F and cross-beams G. The front and rear ends of the frame are closed by boards. The top and bottom of the box is open, while the side doors H are hinged at their lower ends to the bottom beams A, as indicated at *h*. The upper ends of the side doors are provided with bolts I. The doors are formed with vertical slots *h'*, through which baling-wires may be inserted. Upper and lower plungers J J' are arranged to move vertically in the baling-chamber. These are similar in construction, each being formed with a piston or follower *j*, connected by posts *j'* to a cross-beam J². Each plunger is formed with transverse grooves *j*² to receive the baling-wires. The cross-beams J² are guided by vertically-arranged guide-strips K, which project from the upper and lower ends of the baling-chamber, but outside the front and rear ends of the baling-box. As indicated in Fig. 3, the strips preferably extend from top to bottom of the machine; but the strips on one side have hinged portions L, (indicated particularly in Fig. 3,) which permit the upper beam J² and the plunger J, attached thereto, to be removed to one side, as indicated in Fig. 3, thus opening the baling-chamber to receive the bundles of hay or straw to be baled. Hooks or catches M may be employed for locking the sections L of the strips in a vertical position when desired.

A windlass N of ordinary construction is mounted on the frame D at the front and rear ends of the machine, and each windlass is connected by ropes O with the upper and lower beams J². After the baling-chamber is filled and the plungers are arranged end to end in the manner shown in Fig. 1 the hay may be compressed between the plungers by properly operating the windlasses. When the hay has been put under proper compression, the baling-wires may be inserted through the openings *h'* and the grooves *j*², after which the bolts I may be withdrawn, the side doors H opened, and the bale removed. In filling the

bal-ing-chamber with grain-hay I preferably first arrange two bundles with the grain-heads pointing toward one end of the machine, then two bundles with the heads pointing toward the opposite end, and so on until the box is full. This of course is done when the plunger is removed to one side, as indicated in Fig. 3. After a sufficient number of bundles of grain have been arranged in this way in the baling-chamber the plunger is raised and the section L of the strips is locked by the catches M.

An important feature of the invention is that the front and rear ends of the baling-chamber are closed, so that the grain ends of the bundles are not allowed to protrude through openings therein, which would result in threshing out some of the grain. In order to accomplish this, I have arranged the guide-strips K above and below the baling-chamber. The beams J² move only to the upper and lower ends of the chamber, the plungers being extended into the chamber in the manner clearly indicated in Fig. 1.

Another feature incident to the construction of my machine is that by making the ends of the baling-chamber closed the bales when finished will be smooth and even instead of being ragged, as they would be if openings were left in the baling-chamber for the passage of the plungers or their supporting-beams.

Bales made by my improved machine are compact and smooth, there is practically no waste of grain in the baling, and the bales may be handled and stored readily and economically.

I claim as my invention—

1. A baling-press, comprising a baling-chamber closed at front and rear and provided with hinged side doors, a plunger for compressing the hay within the baling-chamber, a cross-beam to which the plunger is attached, guide-strips for the cross-beam which extend above the top of the baling-chamber and which have hinged portions above the baling-chamber permitting the cross-beam to be transferred to one side of the press, and the plunger to be withdrawn from the baling-chamber and removed to one side of the top thereof, and means for locking the hinged portions in place when they are in a vertical position.

2. A baling-press, comprising a baling-chamber closed at front and rear and open at top and bottom, hinged side doors for the baling-chamber, upper and lower plungers working vertically in the baling-chamber, cross-beams at top and bottom of the press to which the plungers are attached, guide-strips for the cross-beams which extend above the top and below the bottom of the baling-chamber and which have hinged portions above the baling-chamber permitting the upper cross-beam and plunger to be removed to one side of the top of the baling-chamber, a windlass, and connections between the windlass and the cross-beams by which the plungers are operated.

In testimony whereof I have hereunto subscribed my name.

WILLIAM EISENHAUER.

Witnesses:

L. J. BIRDSEYE,
HARRIS BALDWIN.