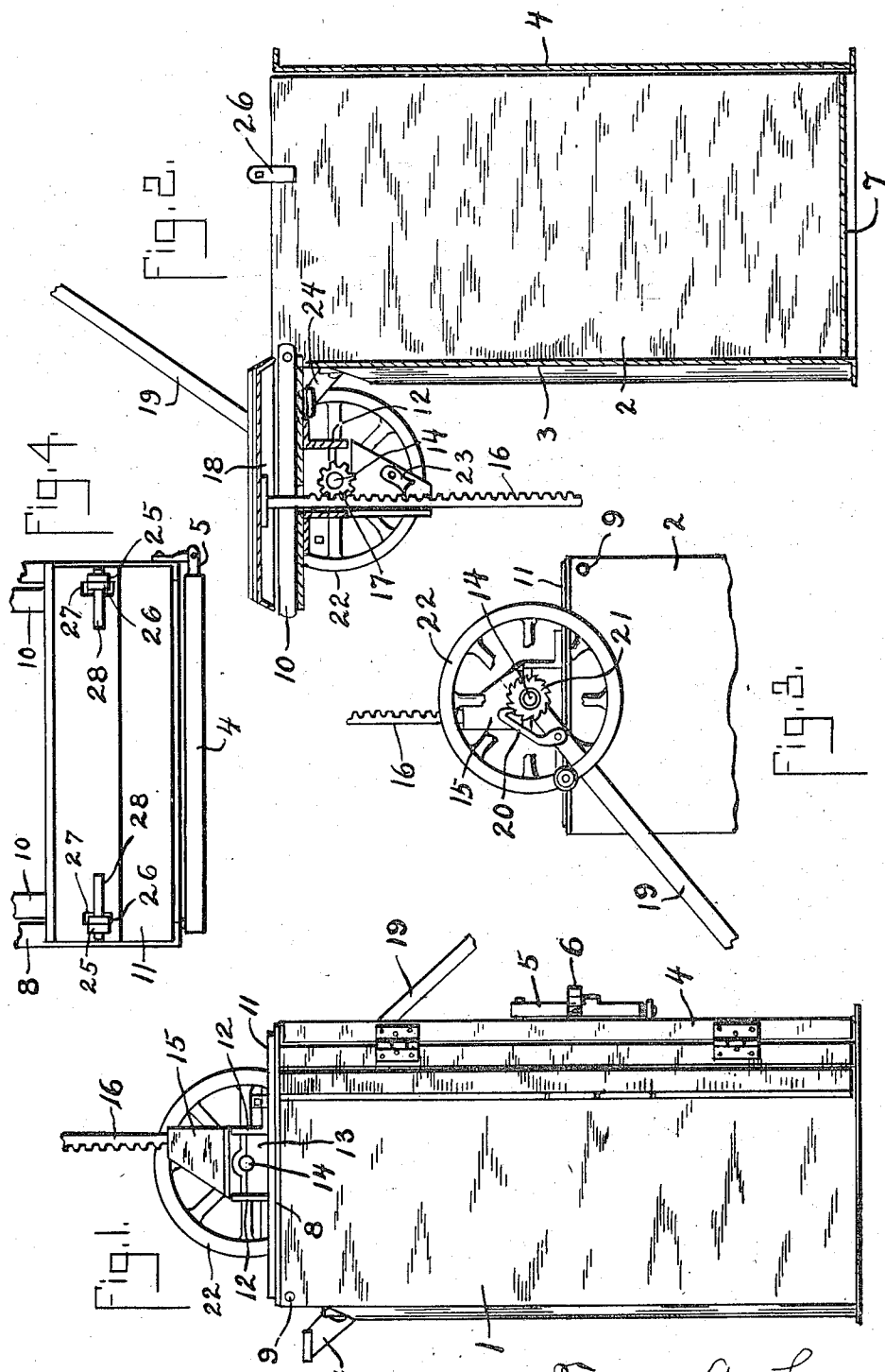


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BALING MACHINE.  
APPLICATION FILED JULY 2, 1914.

1,133,048.

Patented Mar. 23, 1915.

2 SHEETS—SHEET 1.



Inventor

Witnesses

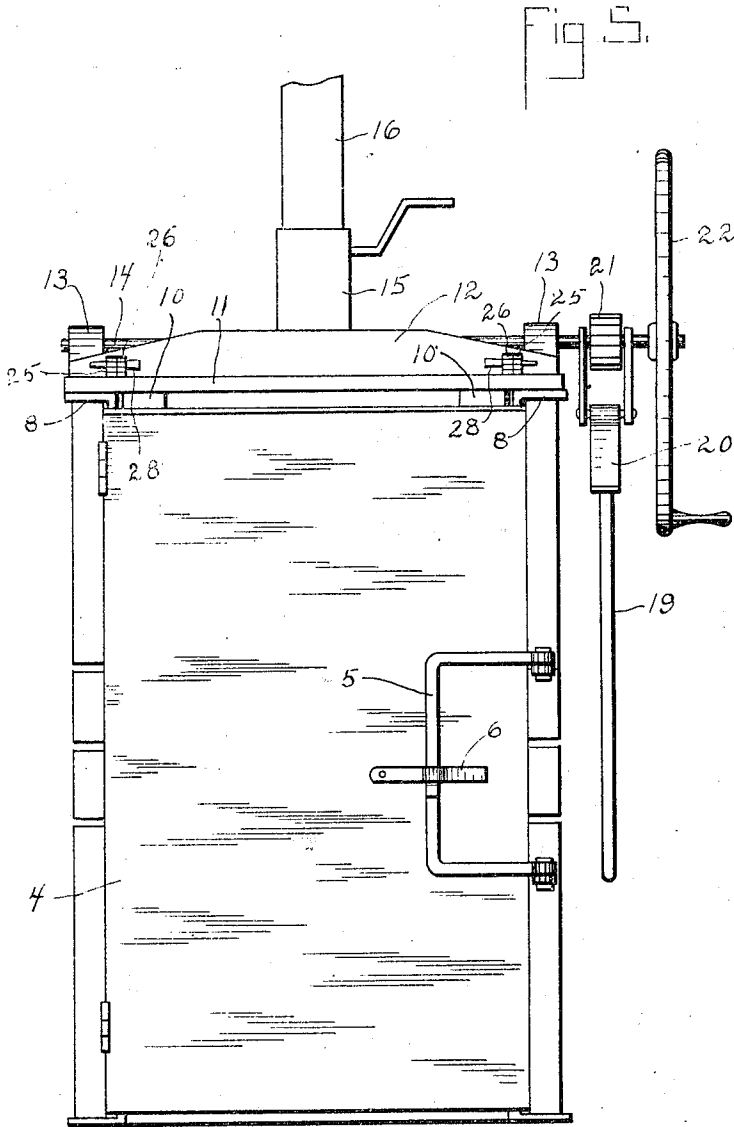
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# UNITED STATES PATENT OFFICE.

FRED A. LUNDAHL, OF MOLINE, ILLINOIS.

## BALING-MACHINE.

1,133,048.

Specification of Letters Patent.

Patented Mar. 23, 1915.

Application filed July 2, 1914. Serial No. 848,527.

*To all whom it may concern:*

Be it known that I, FRED A. LUNDAHL, a citizen of the United States, residing at Moline, in the county of Rock Island and State of Illinois, have invented certain new and useful Improvements in Baling-Machines, of which the following is a specification.

My invention has reference to baling presses, and is intended more specially for use in baling old paper, rags, and similar waste material, for the purpose of disposing of the same commercially. In some machines of this kind as now constructed openings are provided in the side of the receptacle through which the material may be introduced into the machine, and the height to which the receptacle can be filled is limited by said opening.

The chief purpose of the present invention is to provide a receptacle for the paper which can be filled at the top, and the construction of which machine is specially adapted thereto, so as to leave the entire top of the compartment open to receive the material.

In the drawings; Figure 1 is a side elevation of my invention. Fig. 2 is a vertical section thereof, showing the machine in position to be filled. Fig. 3 is a detail, showing the rack operating means, in side elevation, with parts thereof cut away. Fig. 4 shows the forward part of the top of the receptacle in detail with the locking means thereon. Fig. 5 is a front elevation of my device, in closed position.

Similar parts are indicated by corresponding reference numbers throughout the several figures.

My device embodies a compartment inclosed by side walls 1 and 2, a rear wall, 3, and a door 4, hinged at one of its sides to the wall 1. The door 4 extends from the top to the bottom of the receptacle, and can be fastened in closed position by means of the frame 5, pivoted to the wall 2, and adapted to be swung inwardly against the face of the door 4, and held in such position by means of a latch 6 pivoted to the face of the door so as to turn downwardly in front of the frame 5, such downward movement being limited by a projection on the edge of the frame. The door is thus held against pressure from within. The side and rear walls are united at their lower end by a plate 7, forming a floor therefor. The in-

closing walls and door are preferably formed of sheet metal, and the side walls are provided at their upper ends with flanges 8, outwardly projected.

At the upper end and rear of the receptacle is supported a rod 9, forming a pivot for a pair of bars 10, to which are attached a plate 11, which rests normally upon the flanges 8. Secured to the plate 11 is a pair of angle plates 12, between which is held a boxing 13, in which is journaled a shaft 14. Mounted on the angle plates 12 is a housing 15, in which a rack 16 has vertical movement, such rack being in engagement with the pinion 17 on the shaft 14, and adapted to be operated thereby. To the inner end of the rack 16 is secured a plunger 18, which comes in contact with the material in the receptacle and forces it downwardly upon the downward movement of the rack. Such downward movement may be effected by means of a hand lever 19, provided with a dog 20 adapted to engage the teeth of a ratchet wheel 21 fixed on a shaft 14 at one side of the machine. Such shaft is also provided with a hand-wheel 22 by means of which the rack and plunger may be rapidly raised. Such rack may be held from movement in either raised or lowered position by means of a reversible trip 23, pivoted in the housing 15, and adapted to engage the teeth of the rack.

To fill the machine the plunger 18 is raised to its highest point, and the plate 11 and mechanism supported thereby tipped rearwardly into the position shown in Fig. 2, completely opening the upper end of the receptacle for the admission of material thereto. In this position the plate 11 rests upon stop 24 fixed to the plate 3 at the sides thereof. After the receptacle has been filled to the top the plate 11 and plunger mechanism are returned to their former position, and the rack 16 operated to reduce the material to the least possible space. To hold the plate 11 and appurtenant parts from upward movement during the compressing operation the plate 11 is provided with perforated ears 25, (Fig. 4), and similar ears 26 are secured to the side plates 1 and 2, said last named ears passing through openings 27 in the plate 11, when said plate is closed. In this position the perforations in the pairs of adjacent ears are in register, and by means of pins 28 passing through such openings, such ears are locked together,

preventing movement of the plate 11. When the plunger mechanism is in the position shown in Fig. 2, it can be easily raised to a vertical position by means of a hand lever 5 19, and then lowered into position at the upper end of the receptacle.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is:

10 1. A baling press comprising a suitable receptacle provided with a hinged closure at one of its sides; means for holding said closure normally in closed position; a hinged cover for said receptacle, adapted to be tipped rearwardly to completely open 15 the top thereof; compressing mechanism mounted in said cover; and means for locking said cover in closed position.

20 2. A baling press comprising a receptacle; a door hinged at one side thereof; locking means for said door; a plate hingeably mounted at the upper part of said receptacle and adapted to be tipped rearwardly to clear the upper part of the said recep- 25 tacle; means to support said plate when turned rearwardly; means for locking said plate in closed position; and mechanism carried by said plate, for compressing the contents of said receptacle.

30 3. A baling press comprising a receptacle, provided at its upper part with outwardly projecting flanges; a hinged closure at one side of said receptacle and means for locking the same; a plate hingeably secured to 35 said receptacle and normally supported

upon said flanges; a shaft mounted on said plate; a pinion fixed on said shaft; a rack vertically movable in said plate and engaged by said pinion; a compressing device on the lower end of said rack; means for 40 suitably actuating said shaft to raise or lower said rack; and means for locking said plate in closed position.

4. A device of the class described, comprising a suitable receptacle having one of 45 its sides hingeably attached at one of its sides and provided at the opposite side with fastening means; a plate hingeably mounted in the upper part of said receptacle, and capable of being turned rearwardly to open 50 said receptacle; means for supporting said plate in open position; means for locking said plate in closed position; a shaft rotatably mounted on said plate; a pinion on 55 said shaft; a rack vertically movable in said plate, and engaged by said pinion; a plunger on the lower end of said rack; a ratchet wheel on said shaft; a hand lever pivoted on said shaft, provided with a pawl adapted to engage said ratchet wheel to suitably op- 60 erate said shaft, or aid in raising said plate from rearward position; and means for operating said shaft to elevate said rack and plunger.

In testimony whereof I affix my signature 65 in presence of two witnesses.

FRED A. LUNDAHL.

Witnesses:

W. N. HASKELL,  
H. E. SUDLOW.