(No Model.) 2 Sheets—Sheet 1

L. F. GRESSETT.

HAY PRESS.

No. 493,996. Patented Mar. 21, 1893

Fig. 4.

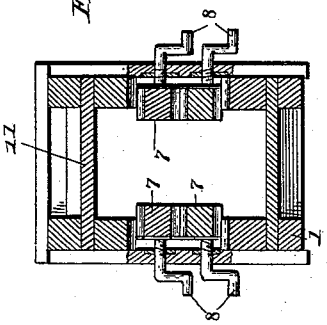


Fig. 5.

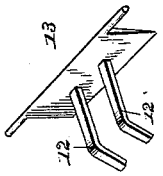


Fig. 6.

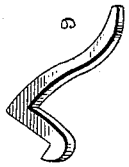
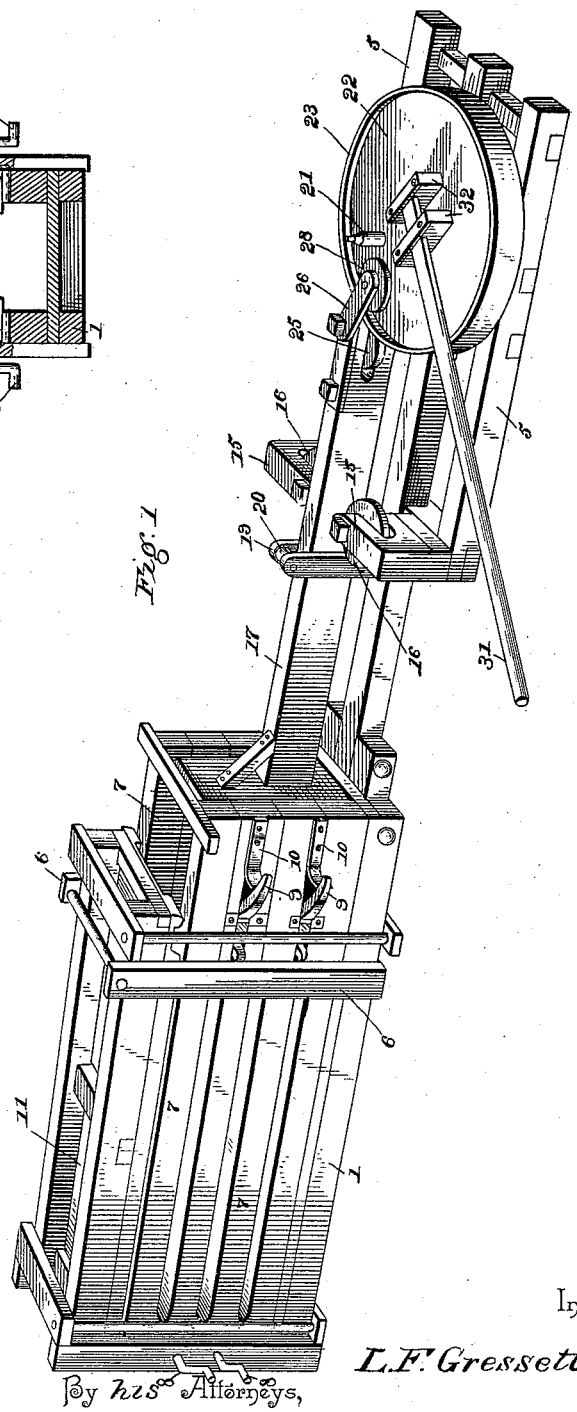


Fig. 1.



Witnesses

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(No Model.) 2 Sheets—Sheet 2.

L. F. GRESSETT.

HAY PRESS.

No. 493,996. Patented Mar. 21, 1893.

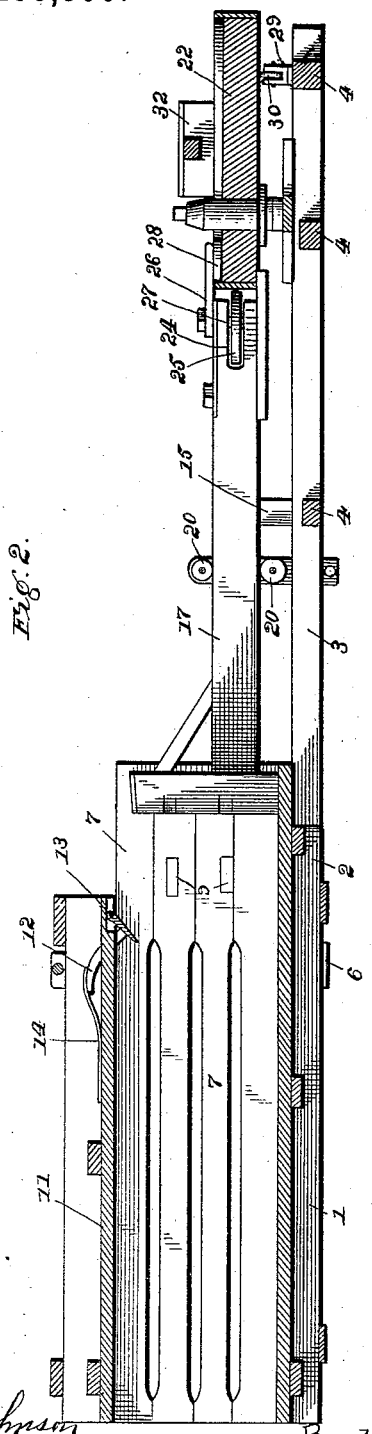

Fig. 2.

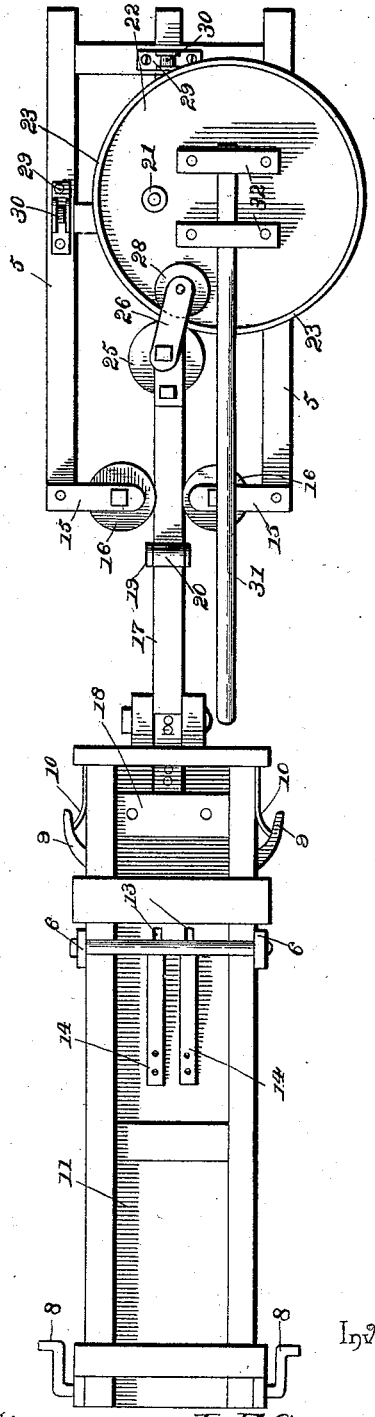

Fig. 3.

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UNITED STATES PATENT OFFICE.

LAWRENCE FRANKLIN GRESSETT, OF BALLINGER, TEXAS.

HAY-PRESS.

SPECIFICATION forming part of Letters Patent No. 493,996, dated March 21, 1893.

Application filed October 3, 1892. Serial No. 447,632. (No model.)

To all whom it may concern:

Be it known that I, LAWRENCE FRANKLIN GRESSETT, a citizen of the United States, residing at Ballinger, in the county of Runnels and State of Texas, have invented a new and useful Hay-Press, of which the following is a specification.

My invention relates to improvements in presses for baling hay, &c., and the objects in view are to provide a cheaply-constructed, durable, easily-operated, and powerful press adapted to conveniently and compactly bale the hay.

Various other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings: Figure 1 is a perspective view of a press embodying my invention. Fig. 2 is a longitudinal vertical section of the same. Fig. 3 is a plan. Fig. 4 is a transverse section through the rear end of the press. Fig. 5 is a detail in perspective of the spring detent in the upper side of the press. Fig. 6 is a similar view of the detents employed at the sides of the press.

Like numerals of reference indicate like parts in all the figures of the drawings.

The bed of the press comprises a pair of opposite longitudinal side-sills 1, connected at intervals by suitable tie-bars which support the floor of the press. Blocks 2 are securely bolted intermediate the side-sills, and embrace the rear end of a forwardly-extending beam 3. The beam 3 has let therein a series of three transverse beams 4, and the same are connected by opposite longitudinal beams 5, thus forming, a short distance in advance of the baling-chamber, a power-supporting platform to be hereinafter described. Vertical standards 6 rise from the beams 1, and are securely bolted, that is the front standards, with a series of longitudinal side-strips 7. The central strips 7 of the series are unbolted or disconnected from the rear standards, but are borne upon by opposite pairs of cranked adjusting-screws 8, that are passed through threaded perforations formed in the rear standards. By means of these set-screws the side-walls of the press, at their rear ends, may be compressed, or the exit of the press decreased in size as is common and for the well-known purpose. L-shaped detents 9 are pivoted in the side walls in advance of the front pair of standards, and springs 10 are secured to the side-walls and have their rear ends engaged under, and bearing upon, the tails or front ends of the detents, whereby their rear ends are spring-pressed into the press.

The standards extend above the side walls and support the rear roof 11 of the press, and said roof is provided, at its front end, with a pair of openings through which project the arms 12 of a transverse detent 13. These arms are borne upon by the free front ends of a pair of flat springs 14, that are secured to the upper side of the roof.

At opposite sides, and at the rear corner, of the power-supporting frame, previously described, a pair of standards 15 are mounted, whose inner edges are recessed and have journaled therein, upon vertical axles, guide-rollers 16, whose adjacent faces are spaced apart. Between these guide-rollers there is mounted for reciprocation the plunger 17, which is provided at its inner or rear end with the usual plunger-head 18. The plunger is further supported and guided by means of a pair of metal straps 19, rising from the beam 3, and above and below the plunger is journaled a pair of friction-rollers 20.

Upon a casting mounted on the power-supporting frame there is located a vertical axle 21, and eccentrically mounted upon the axle and adapted to revolve is a disk or wheel 22, whose periphery is provided with a tire or flange 23, that extends above the upper side of the wheel. The outer end of the plunger is bifurcated, at 24, and has journaled within this bifurcation a loose roller 25, adapted to ride over the aforesaid tire of the power-wheel 22. A link 26 is pivotally connected with the axle 27 of the said roller 25, embraces the edge of the tire of the eccentrically-mounted power-wheel, and within the same is provided with a small guide-roller 28, that is designed to ride around the inner edge or periphery of the wheel. At intervals, brackets 29 are mounted on the power-supporting frame and arranged in a circle, and in each bracket an anti-friction-roller 30 is located. This completes the construction of the press, with the exception of the draft-pole 31, which is mounted upon the disk or wheel and secured by

clips 32. The roof of the press is slightly shorter than the remainder thereof, so that an opening is formed at the front of the press through which the material to be baled may be passed.

In operation, the press is operated by horse-power, in this instance, but may be operated by other means if desired, but in either instance the power-wheel is revolved, and being eccentrically mounted and connected with the plunger, draws the same in and out of the press at each revolution of the wheel, said wheel being balanced and partly supported during its revolutions by means of the small anti-friction rollers 30. At each outward reciprocation of the plunger the material to be baled is fed into the opening in rear of the plunger, and is squeezed or compressed by the plunger-head against the usual head-block. It will be obvious that by the construction of press thus described I am enabled to produce a cheap and simple press, that is strong and durable and powerful in its operation.

It is to be understood that changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having described my invention, what I claim is—

1. In a press, the combination with the baling chamber, the power platform, and the stub shaft, of the eccentrically mounted grooveless power wheel 22, provided on its periphery with a tire 23 that extends above the upper side of the wheel forming a peripheral flange, the friction rollers mounted on the platform at intervals and supporting the power wheel, the plunger 17, having its front end bifurcated and provided with a roller 25, to ride over the outer face of the tire of the power wheel, a link 26 pivoted to the end of the plunger by the same bolt that forms the journal for the roller 25, and the roller 28 journaled on the end of the link and engaging the inner surface of the tire, and resting on the plain upper face of the power wheel, substantially as described.

2. In a press, the combination with the baling-chamber, the beam 3 projecting therefrom, the transverse beams mounted thereon, the casting mounted on the beams and provided with a vertical axle, the disk having the peripheral flange mounted eccentrically on the axle, the draft-pole mounted on the disk, the anti-friction rollers located in the path of the disk, the plunger mounted in the baling-chamber and bifurcated at its front end, a shaft passed therethrough, a wheel mounted on the shaft within the bifurcation, a loose connection between the end of the plunger and flange of the power-wheel, a loose roller on the link engaging the periphery of the power-wheel, standards at opposite sides of the plunger, guide-wheels journaled therein and embracing the plunger, metal straps secured to the main beam and embracing the plunger, and pulleys or rollers journaled in the straps above and below the plunger, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

LAWRENCE FRANKLIN GRESSETT.

Witnesses:
H. C. JORDAN,
T. M. RABB.