No. 809,867. PATENTED JAN. 9, 1906.

J. UNFRIED.

BALING PRESS.

APPLICATION FILED MAR. 9, 1905.

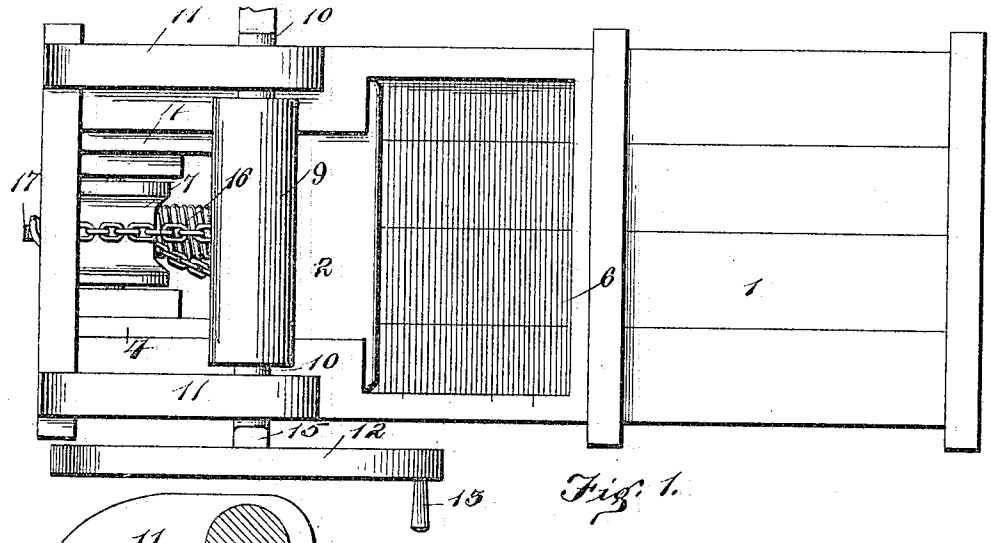


Fig. 1.

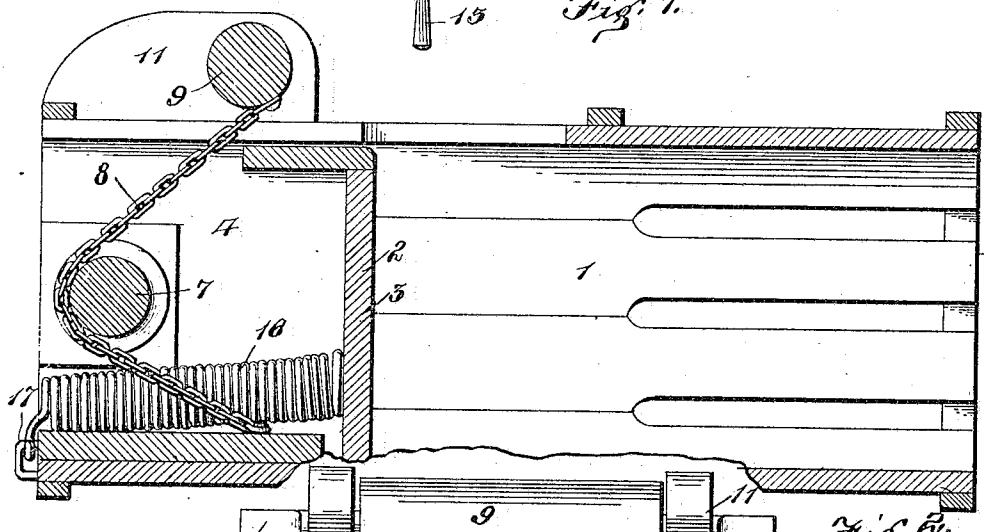


Fig. 2.

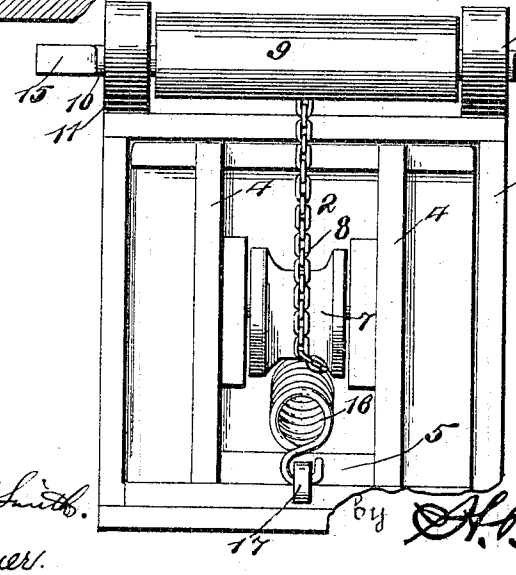


Fig. 3

Witnesses
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UNITED STATES PATENT OFFICE.

JOSEPH UNFRIED, OF GROESBECK, TEXAS.

BALING-PRESS.

No. 809,867. Specification of Letters Patent. Patented Jan. 9, 1906.

Application filed March 9, 1905. Serial No. 249,226.

To all whom it may concern:

Be it known that I, JOSEPH UNFRIED, a citizen of the United States, residing at Groesbeck, in the county of Limestone and State of Texas, have invented certain new and useful Improvements in Baling-Presses; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in baling-presses; and it consists of certain novel features of construction, combination, and arrangement of parts hereinafter described and claimed.

The object of the invention is to provide a simple, inexpensive, durable, and highly-efficient device of this character which may be effectively operated by hand-power.

The above and other objects, which will appear as the nature of my invention is better understood, are accomplished by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a top plan view of a hay-press or baling-press constructed in accordance with my invention. Fig. 2 is a vertical longitudinal sectional view through the same, and Fig. 3 is a rear end elevation.

Referring to the drawings by numeral, 1 denotes the casing or body portion of my improved press, which may be of any desired form and construction and in which is mounted to reciprocate the usual sliding plunger 2. As shown, the plunger consists of a head 3 and two vertically-disposed spaced arms 4, which extend rearwardly and are slidably engaged with a guide 5, which is provided upon the bottom of the body or casing 1 at its rear end. The casing 1 has the usual opening 6 in its top to permit the hay or other material to be baled by the press to be inserted, and any suitable means (not shown) may be provided at the front end of the casing for the purpose of closing the same.

In order to reciprocate the plunger 2, I journal between the arms 4 of the plunger 2 a pulley or antifriction device 7 and pass over or about the latter a chain or other flexible connection 8. Said chain extends substantially vertically and has its lower end secured upon the bottom of the body or casing 1 at a suitable distance in from its rear end, and the upper end of said chain 8 is secured to and wound upon a suitable drum 9, secured upon a winding-shaft 10, which is disposed transversely and mounted in suitable bearings 11, provided upon the top of the casing 1. It will be seen that when the winding-shaft 10 is turned in the proper direction to wind the chain 8 upon the drum 9 the plunger 2 will be moved forwardly to compress the hay or other material in front of it, owing to the engagement of the chain 8 with the pulley 7. In order to rotate the shaft 10, I preferably provide a large crank-wheel 12, which may be removably secured upon either end of the shaft 10. Said wheel may be provided with one or more handles 13, and its hub is formed with a polygonal opening, which is adapted to fit the similarly-shaped ends 15 of the shaft 10. Any suitable means may be provided for retracting or returning the plunger 2; but I preferably employ a coil-spring 16, which has one of its ends secured upon the inner face of the head 3 of said plunger and its opposite end secured, as shown at 17, at the rear end of the body or casing 1.

The construction, operation, and advantages of my improved press will be readily understood from the foregoing description, taken in connection with the accompanying drawings.

It will be seen that when the shaft 10 is rotated in the proper direction by turning the wheel 12 the chain 8 will be wound upon the drum 9 and will straighten to nearly a vertical position and thereby force the plunger 2 forwardly in the casing 1. As soon as the shaft 10 is released the coil-spring 16 will return the plunger to its normal or retracted position to permit the insertion of more hay or other material through the opening 6 in the casing 1.

While I have shown and described the preferred embodiment of my invention, it will be understood that I do not wish to be limited to the precise construction herein set forth, since various 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 thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A press of the character described, comprising a casing having a feed-opening in its upper side and having a drum mounted on its upper side near one end, and further provided in its lower side at the said end with a longitudinally-disposed guide element; a

plunger in the casing having vertical, longitudinally-disposed, parallel side walls bearing between the upper and lower sides of the casing and on opposite sides of and guided by said guide element, a pulley mounted between said parallel side walls of the plunger and carried by the latter, a flexible element engaging said pulley and connecting said drum and said guide element, and a spring connected to the casing and the plunger, said spring acting to retract the plunger, and said drum, flexible element and pulley acting to move the plunger in the opposite direction.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOSEPH UNFRIED.

Witnesses:
C. L. WATSON,
TOM L. COX.