(No Model.)

W. H. WENK, Jr.

CIDER PRESS.

No. 598,456. Patented Feb. 1, 1898.

FIG. 1.

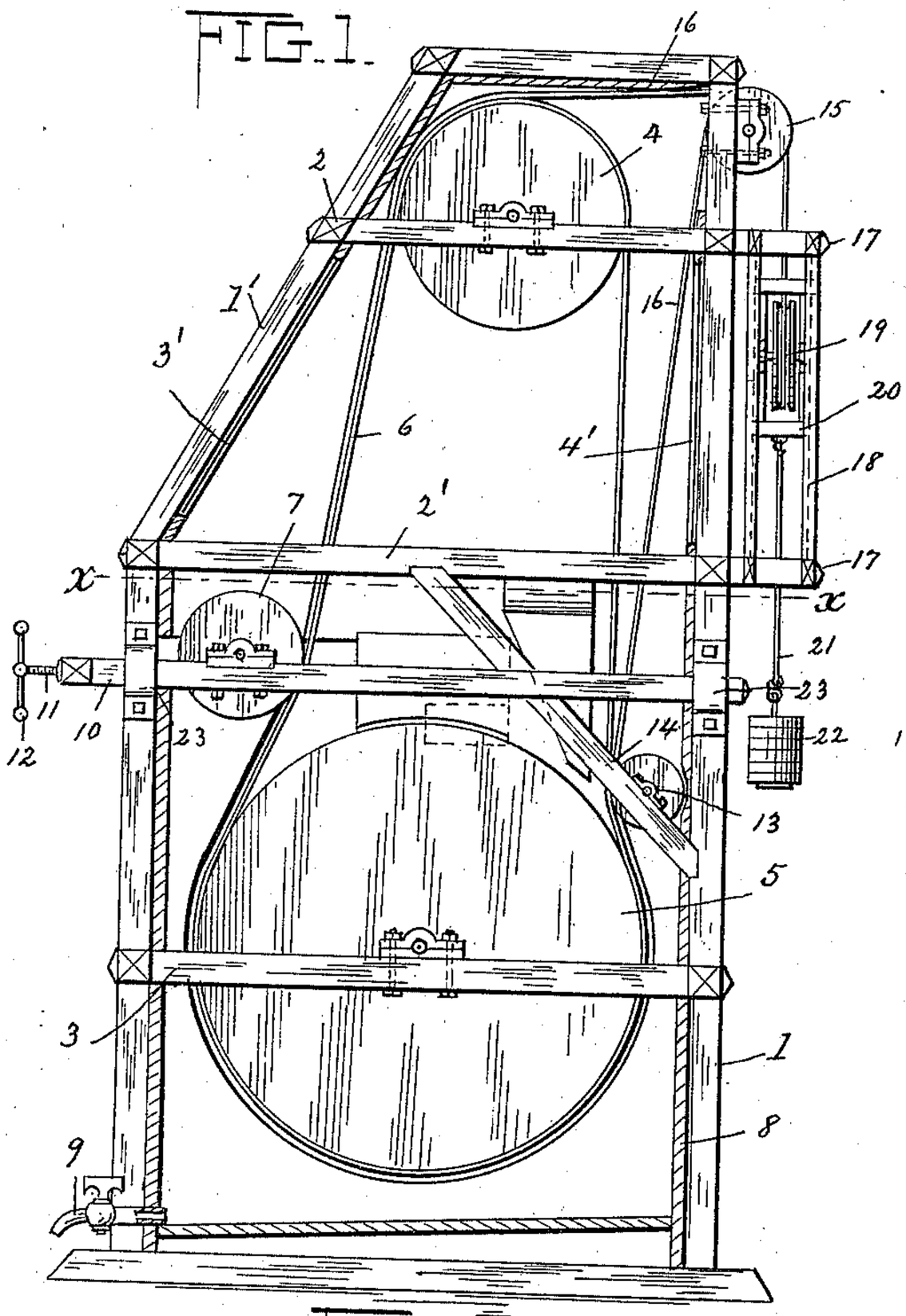


FIG. 2.

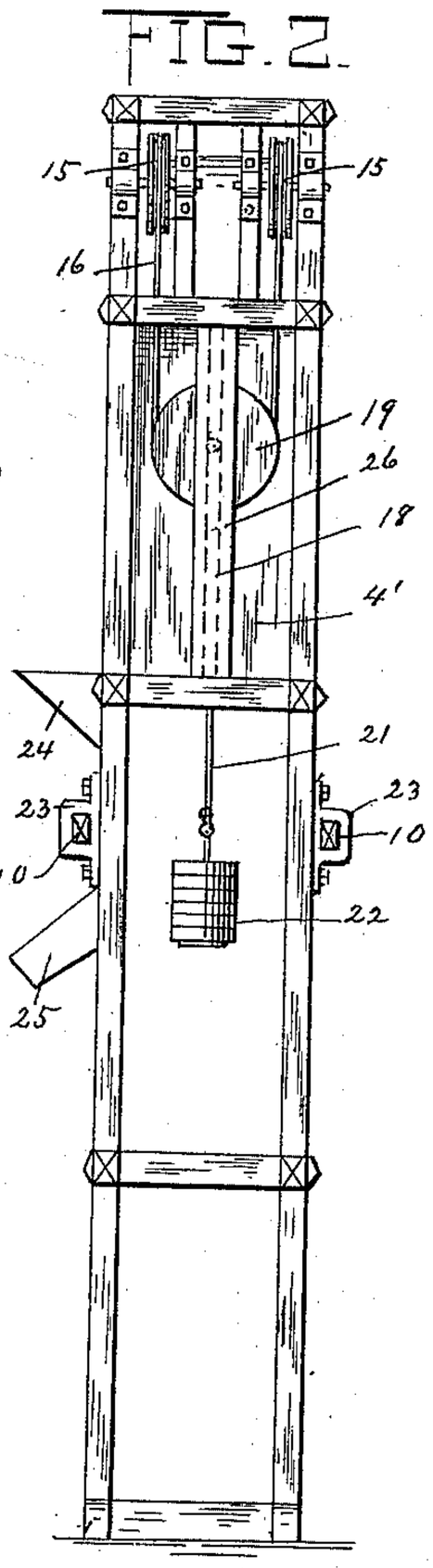
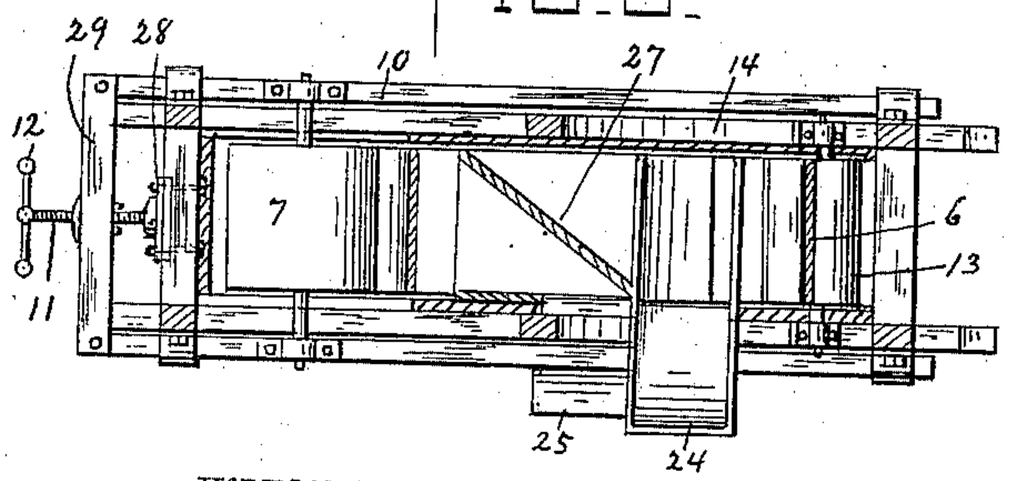


FIG. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

WILLIAM H. WENK, JR., OF MADISON, MICHIGAN.

CIDER-PRESS.

SPECIFICATION forming part of Letters Patent No. 598,456, dated February 1, 1898.

Application filed February 27, 1897. Serial No. 625,291. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. WENK, Jr., a citizen of the United States, residing at Madison, in the county of Livingston and State of Michigan, have invented certain new and useful Improvements in Automatic Roller Cider-Mills; and I do hereby 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 cider-mills; and the object of the same is to provide a tension-regulating device for the crushing-rollers, whereby the pressure of the crusher may be varied according to the fruit being operated upon.

The invention consists of certain novel features of construction hereinafter particularly described and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a side elevation of the machine, the end wall being removed. Fig. 2 is a section on the line X X of Fig. 1, and Fig. 3 is an end elevation.

Referring to the accompanying drawings, 1 indicates the framework, to which is secured the casing 1′, entirely inclosing the machine, and journaled interiorly thereof to the cross-pieces 2 and 3 are the crushing-rollers 4 and 5, respectively. Passed around these rollers is an endless belt 5, of common cider-cloth. The inlet 24 is provided adjacent to the rollers 5 and opens into the interior of the casing for the purpose of permitting the passage of the fruit to be crushed to the crushing-roller.

Journaled at the upper end of the rear wall of the casing are the pulleys 15. The cross-pieces 2 and 2′ of the frame extend beyond the rear wall of the casing, and connecting them are the guides 18. These guides are slotted, and adapted to slide between them is the frame 20, which carries the pulleys 19. Around this pulley and the pulleys 15 is an endless rope 16, which passes around the rollers 4 and 5, being guided by the pulley 13, journaled upon the brace 14 of the frame. A rod 21 is connected at one end to the lower end of the sliding frame and at its opposite end carries the weight 22. This serves to take the slack out of the rope 16 and at all times to keep said rope taut.

I provide glass doors 3′ and 4′ in the front and back of the casing and also provide a similar door in the side thereof, so that the interior may be inspected.

For varying the pressure of the rope upon the crushing-belt I provide the roller 7, which extends through the slots 7′ in the side wall of the casing and is journaled upon the arms 10 of a sliding frame. These arms 10 pass through guides 23 upon the vertical uprights of the frame, one arm moving on either side of the casing, and are connected at their front ends by the cross-piece 29. This cross-piece 29 is provided with a screw-threaded perforation through which the adjusting-screw 11 passes, the inner end of the screw being rotatably secured in a casting 28 upon the front face of the framework. The outer end of the screw is provided with an operating-handle 12, by means of which it may be rotated for moving the frame with the pulley 7 either toward or away from the crushing-belt. By means of this arrangement the pressure of the rope upon the belt may be varied, the slack being taken up by the sliding frame and weight 22. Thus the pressure of the crushing-belt against the fruit contained therein may be varied according to the size and character of the fruit being operated upon. The exit 25 is provided for the crushed fruit, and for deflecting the same thereinto the partition 27 is placed at an angle across the top of the crushing-roller, as will appear from the drawings. Thus the fruit passing inwardly from the inlet-opening is deposited upon the roller and passes around the same, the partition deflecting it into the outlet when it has passed around the roller.

In the bottom of the casing beneath the crushing-roller I provide the vat 8, which is controlled by the faucet 9, through which the cider may be drawn from the casing.

From the above description it will be seen that I have produced a cider-mill in which the pressure may be easily and conveniently varied according to the size of the fruit to be operated upon, and that the taking up of the slack caused by said adjustment is automatic.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

1. In a cider-mill, the combination of the crushing-rollers, an endless belt passed thereround and adapted to receive the fruit to be crushed, a frame slidable upon suitable supports, a pulley journaled in said frame, an endless rope or band passing around said pulley and around the endless belt, a weight attached to the frame, and means for varying the pressure of said rope or band upon the endless belt, the sliding frame and weight removing the slack from the rope or band, substantially as described.

2. In a cider-mill, the combination of crushing-rollers, an endless belt passing thereround, pulleys journaled in the upper portion of the frame of the mill, a frame sliding in guides carried by the framework of the mill, a pulley carried by the sliding frame, a rod attached to said sliding frame and carrying a weight at its extremity, an endless rope or band passing around the crushing-belt and the pulleys journaled in the framework of the mill and in the sliding frame, and means for varying the pressure of said rope or band upon the crushing-belt, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

WILLIAM H. WENK, JR.

Witnesses:
PHILMON MERRILL,
WILLIAM THIEBOLT.