

No. 616,006.

Patented Dec. 13, 1898.

A. L. NEUBERT.
BUNG BRANDING MACHINE.

(Application filed June 22, 1897.)

(No Model.)

2 Sheets—Sheet 1.

FIG. 1.

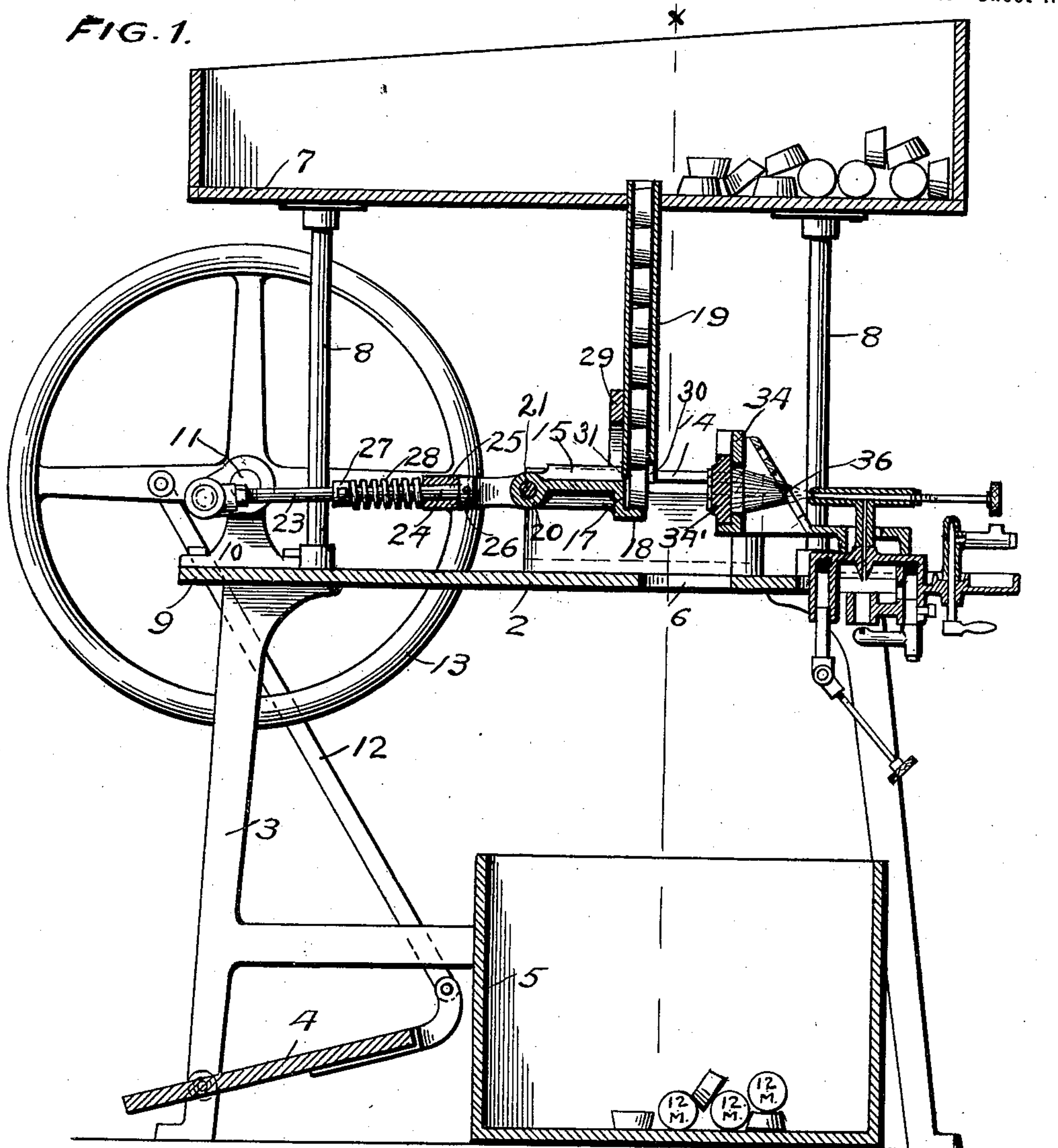


FIG. 3.

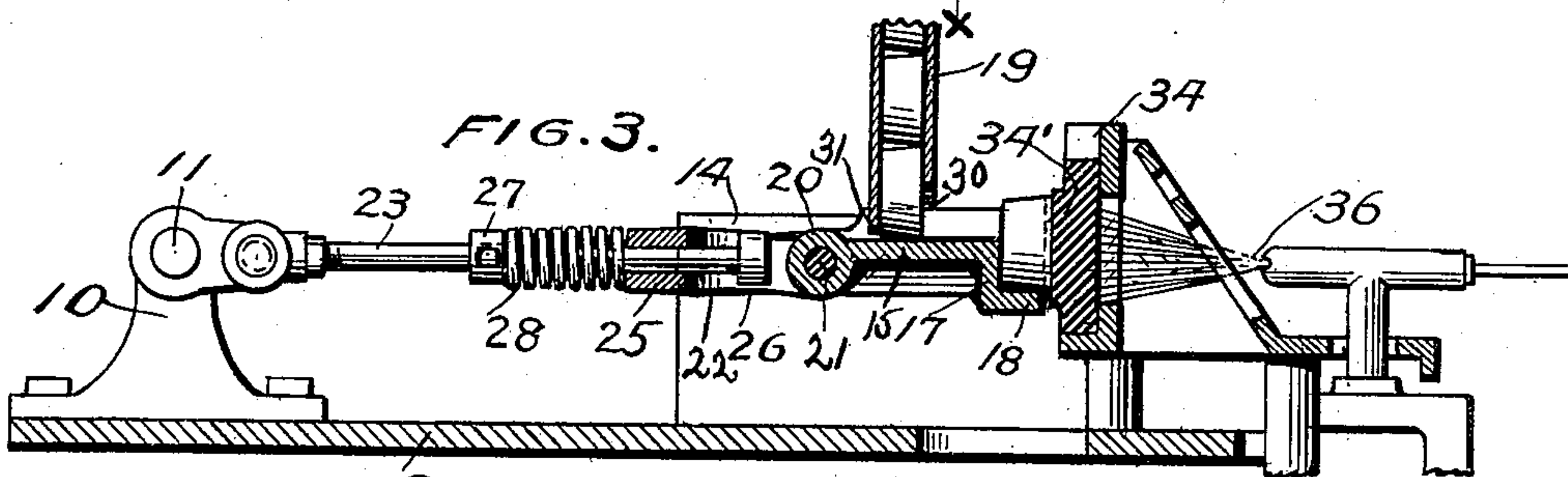
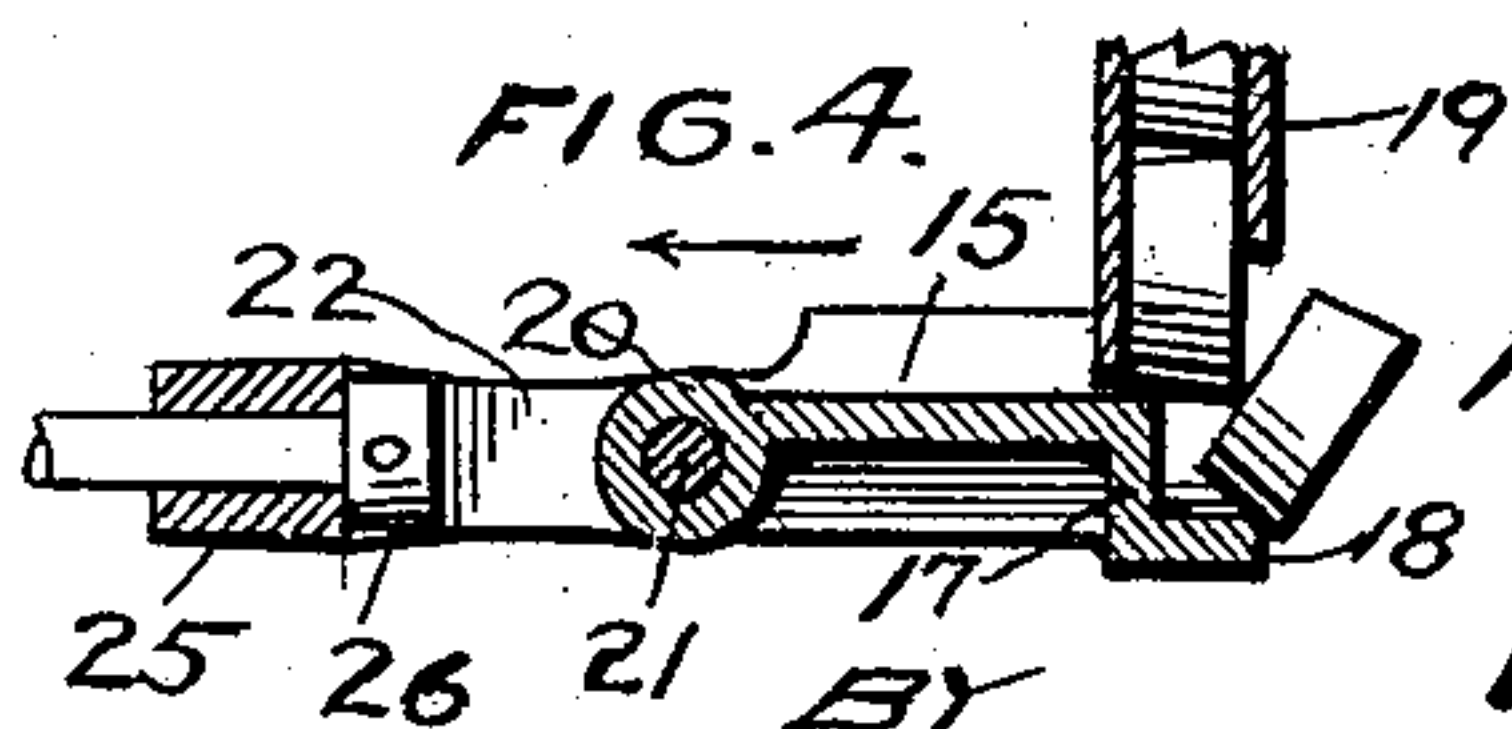


FIG. 4.



WITNESSES.

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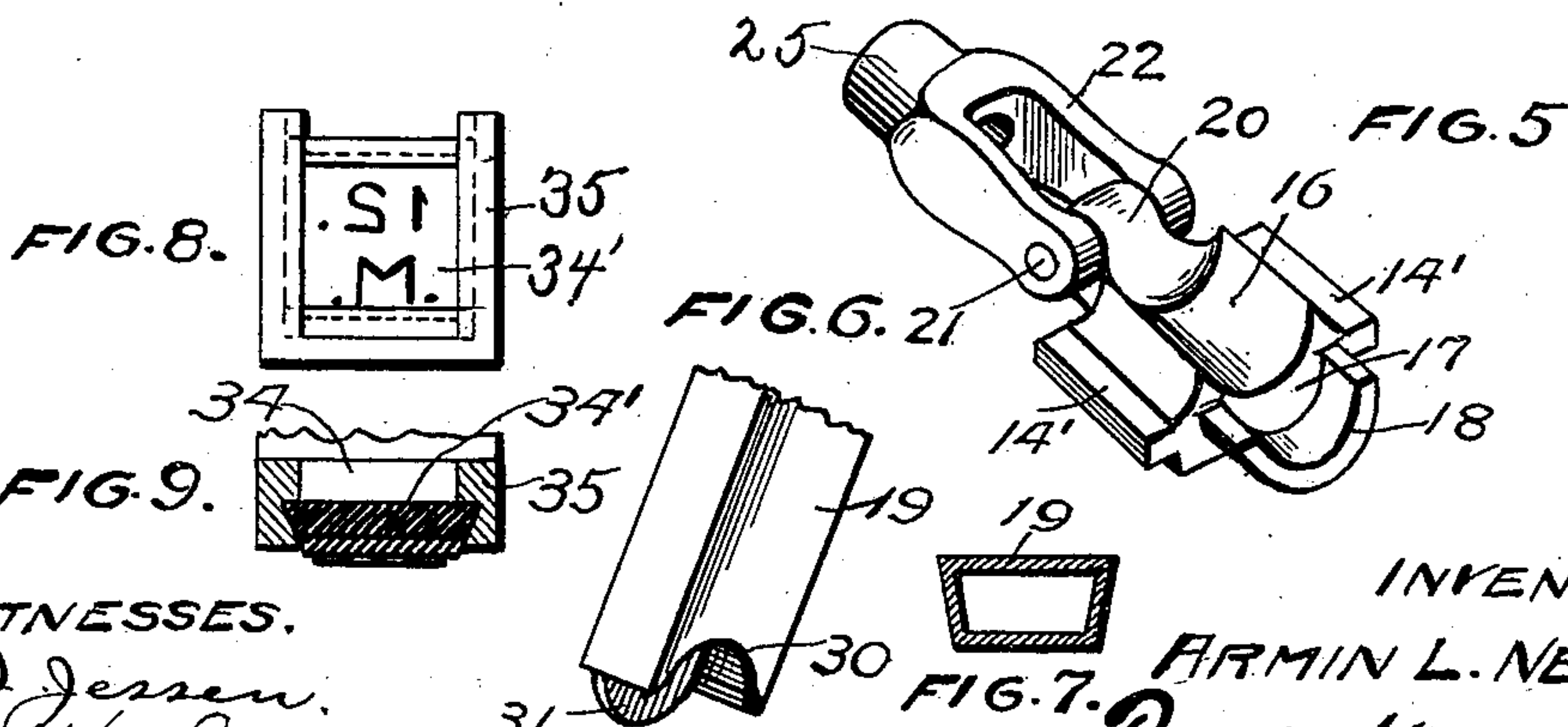
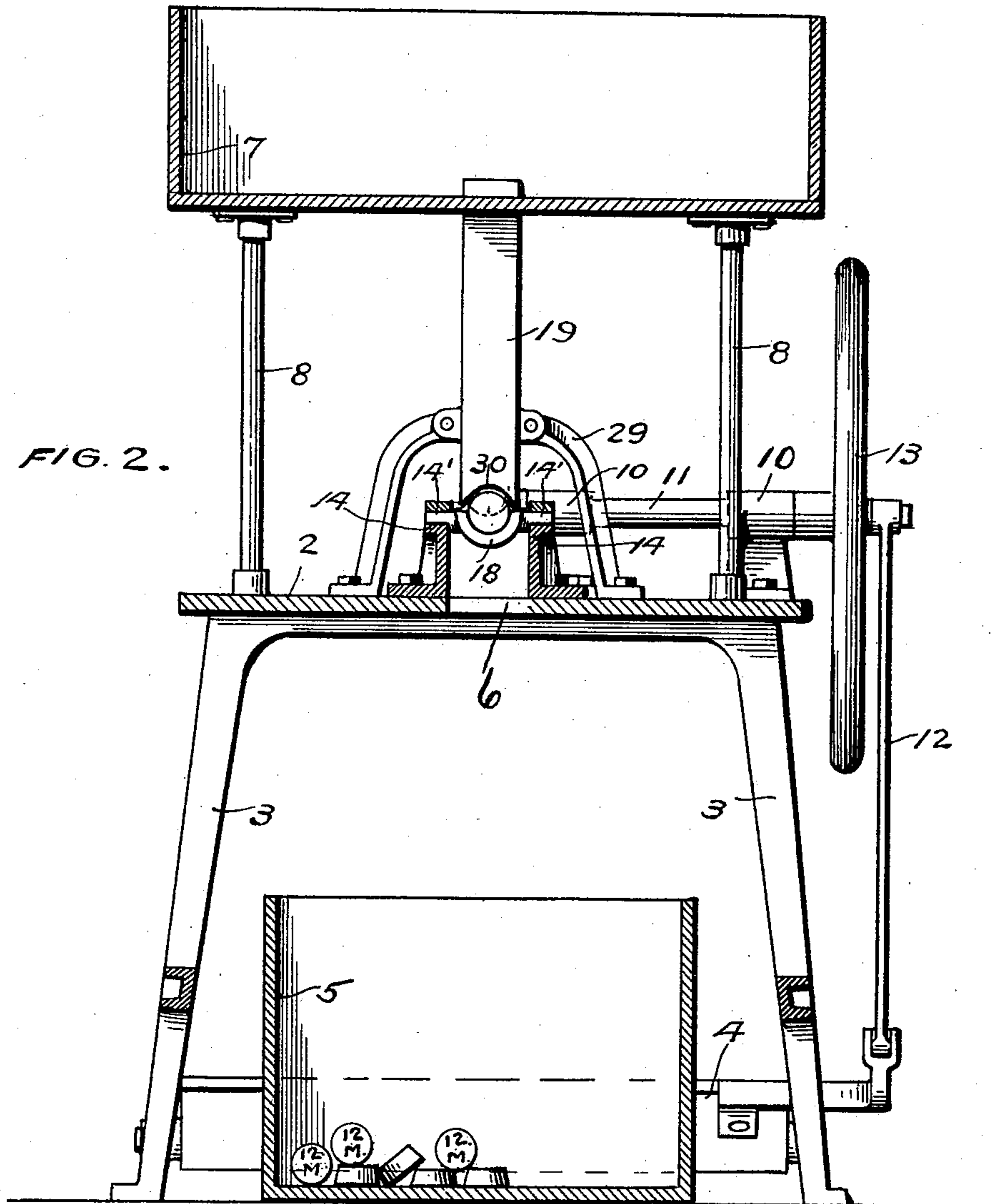
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WITNESSES.

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UNITED STATES PATENT OFFICE.

ARMIN L. NEUBERT, OF MINNEAPOLIS, MINNESOTA.

BUNG-BRANDING MACHINE.

SPECIFICATION forming part of Letters Patent No. 616,006, dated December 13, 1898.

Application filed June 22, 1897. Serial No. 641,770. (No model.)

To all whom it may concern:

Be it known that I, ARMIN L. NEUBERT, of the city of Minneapolis, county of Hennepin, State of Minnesota, have invented certain new and useful Improvements in Bung-Branding Machines, of which the following is a specification.

My invention relates to means for branding barrel and keg bungs.

Heretofore machines have been devised for branding corks and like articles which are compressible and easily burned to effect the imprint; but I am not informed of the existence of any means which may successfully be used for branding wooden or like incompressible bungs. The difficulty in a great measure has been to provide any means by which the irregularly-shaped bung can be held and when so held to provide effective means for holding them in strong contact with the hot brand and perform the operations with any degree of rapidity.

The object of my invention is to provide a machine especially adapted for branding wooden or like bungs and to provide such a machine which shall be of a simple construction, of low cost both to the manufacturer and purchaser, and, further, which may be operated by the person who feeds the bungs to the machine.

The invention consists in the combination, with the feed-chute for the bung, of a reciprocating member, a brander into contact with which the bung is moved by said reciprocating member, and said chute being adapted to interpose a second bung into the path of the first bung to discharge the same after the operation of branding is completed.

The invention further consists in constructions and combinations of parts, all as hereinafter described, and particularly pointed out in the claims.

The invention will be more readily understood by reference to the accompanying drawings, in which—

Figure 1 is a longitudinal and vertical section of a machine embodying my invention. Fig. 2 is a transverse sectional view thereof on the line *x x* of Fig. 1. Fig. 3 is a somewhat enlarged detail view taken from Fig. 1 and showing the reciprocating member in its forward position. Fig. 4 is a detail showing

the bung being tilted from the reciprocating member or carrier. Fig. 5 is a perspective view of the reciprocating member. Fig. 6 is a perspective view of the lower end of the chute. Fig. 7 is a horizontal section of the chute. Figs. 8 and 9 show the construction of the brander.

As shown in the drawings, the actual operating parts of my machine occupy but little space. For convenience, however, they are arranged upon a raised base or table 2, supported by legs 3 and having beneath it the treadle 4 and space for the box 5, into which the branded bungs fall. The base is provided with an opening 6, through which the bungs drop. At a convenient height above the table or base 2 I arrange the feed-box 7, into which a large number of bungs are dumped. This box is supported by light standards 8. On the rear end 9 of the table I provide bearings 10 for the crank-shaft 11, which shaft is operated by a connecting-rod 12 from the treadle 4 and is kept in steady rotation by a suitable fly-wheel 13. Above the opening 6, near the forward end of the table 2, I arrange the horizontal guides 14 for the reciprocating member 15. This member or carrier is clearly shown in Fig. 5 and, as there shown, is provided with a concave recess or trough 16 in its top, at the forward end of which is the shoulder 17. On the forward end of the member 15 and at the lower edge of the shoulder 17 I provide the concave ledge or lip 18, upon which the bungs drop from the vertical chute 19 when said member is drawn back. The moving member is provided with finished edge parts 14', confined between the guides 14, and it is also provided at its rear end with an eye 20 to receive the pivot-pin 21, by which the yoke or fork 22 is attached to the moving member. The crank-rod 23 has its end 24 slidably arranged in the sleeve or shank 25 of the yoke 22, and within the yoke the end of the rod is provided with a head or collar 26, so that upon the backward movement of the crank-arm the moving member or carrier will also be drawn back. An adjustable collar 27 is arranged upon the crank-rod, and between it and the end of the yoke I provide a compression-spring 28. The chute 19 extends through the bottom of the feed-box 7 and is preferably supported by

arms or standards 29 extending up from the base 2. The chute has the same interior form as the longitudinal section of the bung to be fed into the same, so that it is impossible to
 5 get a bung into the chute with its wrong side to the brander. In its forward side the chute is at the bottom provided with a notch or opening 30 large enough to allow the top of
 10 a bung to pass through the same, while the rearside is provided with a depending extension 31, which approximately fits the groove in the moving or reciprocating member. The notch or opening 30 is of less height than the bung, and a bung cannot pass out of the
 15 chute until it drops over the shoulder 17 and falls upon the ledge 18. The brander is arranged in front of the reciprocating member, being held between vertical guides 35, supported upon the base 2. The brander has
 20 upon its inner surface the desired marks or letters of the brand and is heated by a suitable torch 36. The torch illustrated in Fig. 1 is adapted for use with gasolene, but in place thereof I may substitute a gas-torch or
 25 any other means of heating the brander-iron. The particular means of heating the brander is not an important feature of my invention. For convenience I preferably arrange the brander in two parts 34 and 34', the latter
 30 being slipped into transverse guides in the face of the heavier block 34. The type or letters are upon the thinner portion 34' and are thus made interchangeable. A change of type may be made without much delay, as
 35 the large block 34 is not allowed to cool when the change is made and the thinner portion will heat quickly from contact therewith.

The operation of my machine is as follows: The entire machine is of such a height that a
 40 man standing at the same with his foot on the treadle 4 can readily reach over into the box 7 and feed the bungs into the chute. The fact that the chute conforms to the shape of the bungs prevents the man from putting the
 45 bungs into the chute wrong side around. Different chutes are provided where it is desired to brand some bungs upon the top and others upon the inner side or bottom. As the treadle is operated the crank-shaft is rotated, thereby
 50 reciprocating the rod 23, and as said rod presses upon the yoke through the medium of the spring 28 the slide or moving member 16 is reciprocated, moving first toward the brander and then away therefrom. The stroke
 55 of the reciprocating member 15 is less than the stroke of the crank, and in consequence when the end of the said member or the bung held therein strikes the brander-block the spring 28 will be compressed to allow the rod
 60 23 to continue its forward movement, so that the crank may maintain its steady revolution. By this means the reciprocating member is held against the brander for a moment to allow the burning of the wood of the bung. The
 65 reciprocating member pauses thus during the greater part of the forward stroke of the crank. Upon the backward stroke of the

crank the head on the end of the connecting-rod 23 engages the yoke of the moving member and the member is drawn back by the
 70 outward stroke of the crank. The lower bung in the chute rides upon the concave surface of the top of the reciprocating member, and is thereby held back in the chute until the shoulder 17 has passed back out of contact
 75 with the bung, whereupon the bung will at once drop from the chute and lodge upon the ledge 18 and lean against the shoulder 17 or end of the moving member. At this instant said member starts forward toward the brander
 80 and the bung is carried and pressed against the heated surface thereof. While the top of the bung projects above the surface 16 of the moving member, yet it is allowed to pass from the chute by the opening 30 in the forward
 85 side thereof. On the backward stroke of the reciprocating or moving member the bung is carried away from the brander, and meantime the bungs in the chute have dropped and the lower one rests upon the moving member and
 90 before the opening 30 in position to engage the bung upon the ledge 18 and tilt the same therefrom, as shown in Fig. 4. The branded bung when thus thrown from the moving member drops through the hole 6 into the box
 95 5 beneath the machine. The brander 34 is kept at a red heat by the torch.

Obviously the machine may be operated by power instead of the treadle, and, further, suitable means might be provided for automatic-
 100 ally arranging and feeding the bungs into the chute; but as comparatively few bungs are branded at a time the foot-power and hand-feed fulfil the ordinary requirements.

Having thus described my invention, I
 105 claim as new and desire to secure by Letters Patent—

1. The combination, in a bung-brander, of a suitable chute, adapted to hold bungs arranged edgewise therein, with a reciprocating
 110 member operating at the end of said chute and having a surface which while opposite the chute prevents the discharge of a bung therefrom, said member having a lower sur-
 115 face or ledge to receive a bung from the chute, and said chute having a notch or opening in its end to permit the escape of a bung therefrom after the same has lodged upon said ledge and to interpose a second bung in the
 120 path of the one upon the ledge to tilt the same therefrom upon the backward movement of said reciprocating member, substantially as described.

2. The combination, in a bung-brander, of a suitable chute to receive bungs placed edge-
 125 wise therein, with the reciprocating member arranged beneath the lower end of said chute, the rear wall of said chute extending close to the top of said member and the front side of said chute provided with a notch or opening,
 130 said member provided with a shoulder and a ledge upon its front end to receive a bung dropped from the chute, a brander, and means for reciprocating said member to move the

bung upon the ledge thereof into contact with said brander, substantially as described.

3. The combination, in a bung-brander, of a suitable chute to receive bungs placed edge-wise therein, with the reciprocating member arranged beneath the lower end of said chute, the rear wall of said chute extending close to the top of said member, and the front side of said chute provided with a notch or opening, 10 said member provided with a shoulder and a ledge upon its front end to receive a bung dropped from the chute, a brander, means for reciprocating said member to move the bung upon the ledge thereof into contact with said 15 brander, and means in connection with said member to cause the same to pause and hold the bung in contact with the brander for a given time, substantially as described.

4. The combination, in a bung-brander, of 20 a reciprocating member, with a chute adapted to deliver a bung upon said reciprocating member and to interpose another bung into the path of the first bung during the backward movement of said member, to tilt the 25 first bung therefrom, substantially as described.

5. The combination, in a bung-brander, of a reciprocating member, with a chute arranged above said member and adapted to

deliver bungs thereon, the front side of said 30 chute being provided with a notch or opening to permit the first bung falling upon said member to be moved from beneath said chute, during the forward movement of said member, and also to permit said first bung to en- 35 gage the second bung falling upon said member to tilt the first bung therefrom during the backward movement of said member, substantially as described.

6. The combination, in a bung-brander, of 40 a reciprocating member, with a chute adapted to deliver a bung upon said reciprocating member and to interpose another bung into the path of the first bung during the backward movement of said member to tilt the 45 first bung therefrom, a brander, means for reciprocating said member to move the bung thereon into contact with said brander, and means in connection with said member to cause the same to pause and hold the bung 50 in contact with the brander for a given time, substantially as described.

In testimony whereof I have hereunto set my hand this 10th day of June, A. D. 1897.

ARMIN L. NEUBERT.

In presence of—

C. G. HAWLEY,
M. E. GOOLEY.