J. L. GOUDE.

BASE BALL PITCHING MACHINE.

APPLICATION FILED JAN. 12, 1915.

1,162,910.

Patented Dec. 7, 1915.

2 SHEETS—SHEET 1.

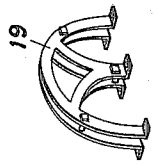


Fig. 6.

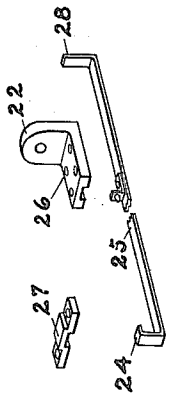


Fig. 5.

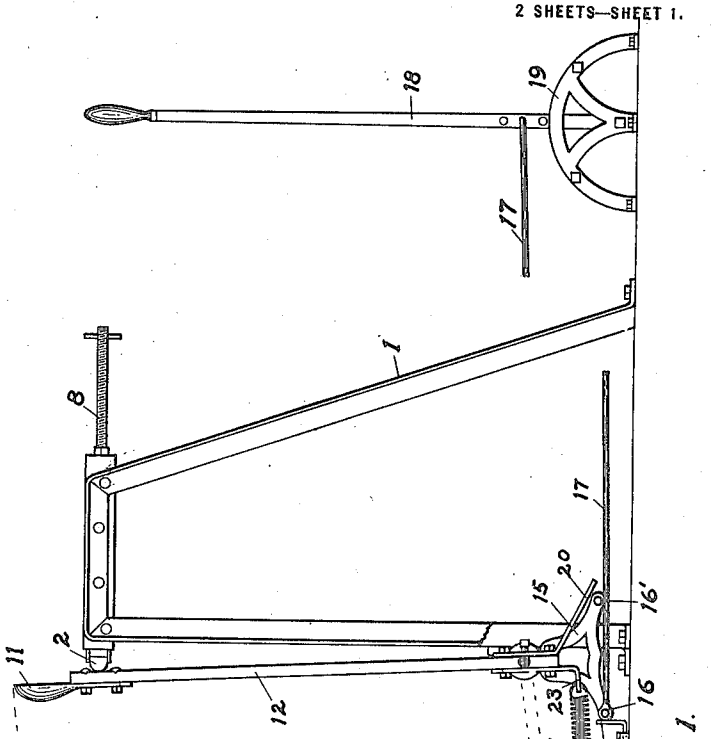


Fig. 1.

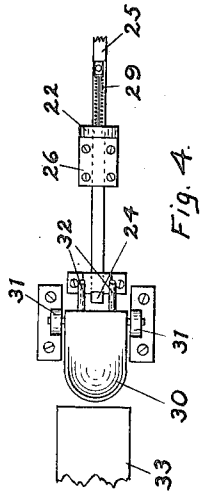


Fig. 4.

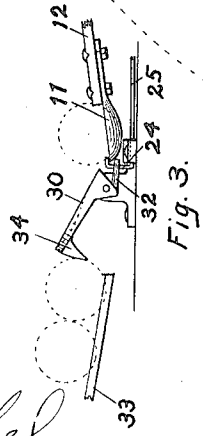


Fig. 3.

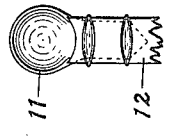
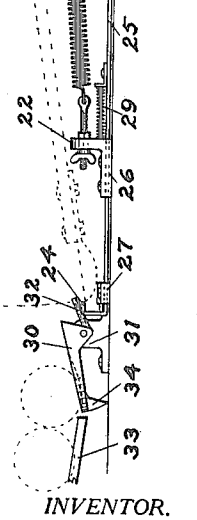


Fig. 2.



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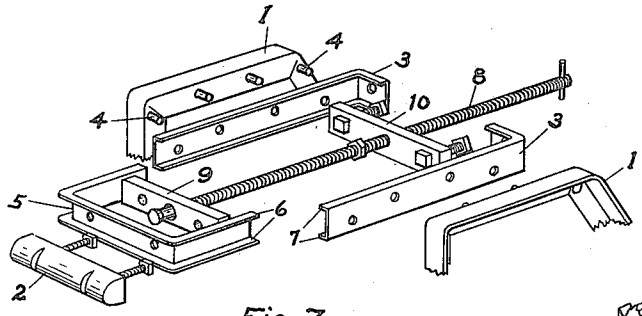


Fig. 7.

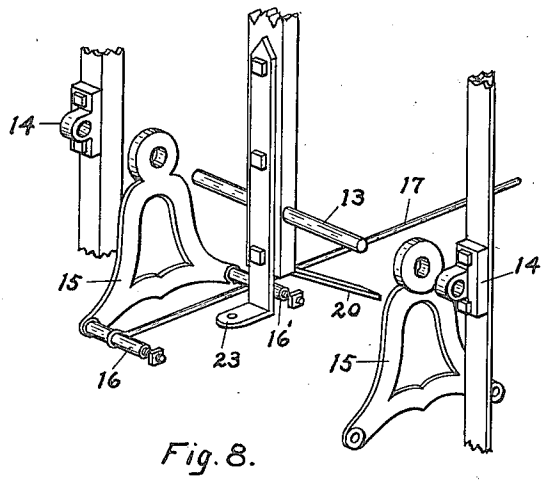


Fig. 8.

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UNITED STATES PATENT OFFICE.

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BASE-BALL-PITCHING MACHINE.

1,162,910. Specification of Letters Patent. Patented Dec. 7, 1915.

Application filed January 12, 1915. Serial No. 1,869.

To all whom it may concern:

Be it known that I, JAMES L. GOUDE, a citizen of the United States, residing at Spokane, in the county of Spokane and State of Washington, have invented a new and useful Base-Ball-Pitching Machine, of which the following is a specification.

My invention relates to improvements in machines for pitching a ball to be batted against a "field" arbitrarily arranged to imitate a base-ball field, and the objects of my invention are to provide a simple and easily operated machine for pitching the ball, that can be quickly installed and that will occupy a minimum of space. I attain these objects by the mechanism illustrated in the accompanying drawing, in which—

Figure 1 is a side view of the machine ready for operation, Fig. 2 is a front view of the cup used for retaining the ball when thrown, Fig. 3 is a side view of the trip used in automatically delivering the ball to the cup, Fig. 4 is a plan view of the trip, Fig. 5 is a detail view of the reciprocating bar and catch for retaining and releasing the cup, and the manner of securing it, Fig. 6 is a view of the arc used to guide the lever, Fig. 7 is a detail view of the adjustable bumper, Fig. 8 is a detail view of mechanism for securing and releasing the cup.

Similar characters refer to similar parts throughout the several views.

Referring to the drawing, 1 is a frame attached to the floor or a portable base, in which the bumper 2 preferably of resilient material is slidably mounted in the flanged pieces 3—3, which are solidly attached to each side of the frame 1 by the rivets 4, the bumper 2 being attached for this purpose to a sliding frame 5 made of flanged iron, the flanges 6—6 of which are constructed so as to slide within the flanges 7—7 of the side pieces 3—3. The bumper 2 and frame 5 are reciprocated for the purpose hereinafter described by the screw 8 one end of which is revolubly fastened to the bar 9 of the frame 5, the screw 8 passing through the screw-head 10 which is removably fastened to the flanged pieces 3—3. To retain the ball while thrown, and to throw the ball, a cup 11 is attached to a lever 12 which is pivotally mounted on the frame 1 by the bar 13 and blocks 14. On the bar 13 are mounted swinging frames 15—15 joined together by the cross-bars 16 and 16′, to one of which 16 is attached a rod 17 actuated by the lever 18 mounted in the arc 19. Attached to the lever 12 is a bar 20 so disposed that when the rod 17 is pulled the cross-bar 16′ will engage the bar 20 and thereby cause a backward movement of the lever 12. To throw the ball by the forward movement of the lever 12 a spring 21 is provided, which is attached at one end to the lug 22 and at the other end to the lug 23 attached to the lever 12. The lever 12 is engaged and released by the catch 24 at one end of the reciprocating bar 25 which passes through the block 26 on which the lug 22 is mounted, and the stay blocks 27—27, the other end of the reciprocating bar 25 being provided with a lug 28 adapted to be engaged by the cross bar 16. The bar 25 is held in operative position by the spring 29, one end of which bears against the bar and the other end against the block 26. To automatically feed the balls to the cup, a trip is provided consisting of a body portion 30 having a slightly concave upper surface pivoted at the forward end to lugs 31—31 and provided with pins 32—32 which extend forward so as to be engaged by the cup 11 on the downward movement of the lever 12. A trough 33 is provided to feed the balls to the trip, a projection 34 being provided to keep balls from rolling forward when the trip is sprung.

The operation is very simple, as will be seen from the drawing. When the lever 12 is in the position shown by Fig. 1, and the lever 18 is pulled forward, the cross-bar 16′ engages the bar 20, thereby causing the lever 12 to move backward into the position shown by the dotted lines. In its descent, the edge of the cup 11 engages the pins 32—32, upsetting the concave plate 30 and causing the ball to roll into the cup 11, and at the same time the edge of the cup 11 is secured by the spring catch 24 at the end of the reciprocating bar 25. On the lever 18 being released and pushed forward, the swinging frames 15—15 fall back and the cross bar 16 strikes the lug 28 on the reciprocating bar 25, thereby springing the catch 24 away from the edge of the cup 11, releasing the lever 12, which is caused to move forward by the spring 21 until it strikes the bumper 2, thereby throwing the ball. By moving the

bumper 2 backward and forward by the screw 8 the angle at which the ball is thrown may be varied. On being released, the trip 30 resumes its normal position and another ball rolls on to the plate.

Having thus described my invention, what I claim and desire to secure by Letters Patent is—

1. A device of the class described, having a frame, a lever normally in an approximately vertical position fulcrumed at its lower end to the frame, elastic means to maintain the lever in its normal position, and means to pull the lever to and secure it in an approximately horizontal position and to release the same, consisting of a frame mounted to swing below the lower end of the lever, having forward and rearward projections, a bar attached to the lower end of the lever adapted to engage the forward projection, and a reciprocating bar having one end normally held against the rearward projection by a spring, and a catch at the other end adapted to engage and secure the lever when in an approximately horizontal position.

2. In a device of the class described, the combination of a lever normally in an approximately vertical position fulcrumed at its lower end, elastic means to maintain the lever in its normal position, and means to secure the lever out of its normal position consisting of a reciprocating bar having a catch at one end adapted to engage the lever, and elastic means to maintain the bar in operative position.

3. In a device of the class described, the combination of a frame, a lever normally in an approximately vertical position fulcrumed near its lower end to the frame, elastic means to maintain the lever in its normal position, and means to move the lever out of its normal position consisting of a frame mounted at its lower end to swing into and out of engagement with the lever.

4. A device of the class described, consisting of a frame, a lever provided with a cup at its upper end fulcrumed at its lower end to the frame, maintained in an approximately vertical position by a spring; a reciprocating bar having a catch at one end adapted to engage the lever when in an approximately horizontal position maintained in operative position by a spring; a swinging frame adapted to engage the lever and the reciprocating bar; and an adjustable bumper to vary the normal position of the lever from a vertical.

5. In a device of the class described, the combination of a reciprocating bar provided with a catch, elastic means to hold the bar in operative position, and a swinging frame adapted to reciprocate the bar and release the catch.

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