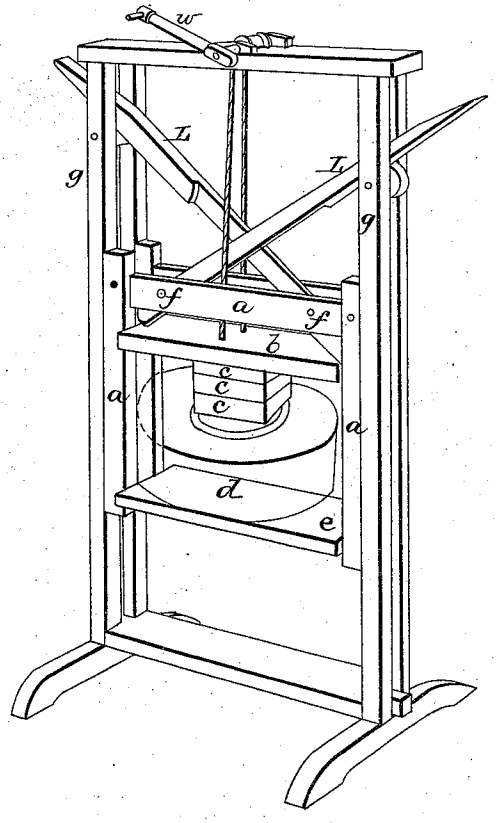
S. White,

Cheese Press,

No. 355, Patented Aug 15, 1837.



UNITED STATES PATENT OFFICE.

SULLIVAN WHITE, OF BRIDGEWATER, VERMONT.

PRESS FOR PRESSING CHEESE AND OTHER SUBSTANCES.

Specification of Letters Patent No. 355, dated August 15, 1837.

To all whom it may concern:

Be it known that I, SULLIVAN WHITE, of Bridgewater, in the county of Windsor and State of Vermont, have invented a new and useful Improvement in the Construction of Presses for Pressing Cheese and Other Matters, and the following is a full and exact description of the machine as invented or improved by me—viz.:

Let there be constructed, of wood or other materials, a frame of the following described dimensions: The height to be forty-two inches, and the width to be twenty-four inches. These dimensions are sufficient to press a cheese of the size of one-half bushel. Two upright posts, each two inches square, and forty-two inches high, are to be mortised, two inches asunder into a cross-piece, made hollow between the ends, so as to stand firm. Two other upright posts, of similar size and length are to be mortised into a similar cross-piece, two inches apart, in all respects like the former. These cross pieces are to be the pedestal or support of the frame. At the bottom is a girt twenty-four inches long and five and one-half inches wide and two inches thick, having a tenon on each end two inches square, resting on the cross-pieces between each of the sets of upright posts. The four posts are framed into the cap, two inches apart, so as to form a space two inches wide from top to bottom between each pair of posts.

Let there be constructed a smaller frame eighteen inches wide, the posts of which shall be eighteen inches high and six inches wide, and one and half inches thick. Let the bottom girt of this frame be boxed into the posts, two inches from the bottom, and let a tenon two inches square at each end of the bottom extend quite through the posts, to the extent of two inches, so as to pass through the space between the two upright posts at each end of the girt, so that when the smaller frame is raised or depressed, the posts of the larger frame shall operate as guides to direct the upward and downward motion of the smaller frame.

The girt above described is designed to receive the board, on which the cheese is placed for pressing. At the distance of seven inches from the top of the posts of the smaller frame, let a groove, or mortise be cut in the center of the posts quite through them, two inches wide, and quite to the top of the posts, so as to give motion to the follower, the tenons of which are to move easily in this mortise or groove. The follower is to be seven inches wide, twenty-two inches long between the ends of the tenons, and two inches thick. The follower passes quite across the smaller frame, seven inches below the top of the posts, having at each end a tenon two inches square, adapted to the groove or mortise in the posts. At the top of the smaller frame, and on each side of the mortise or groove, are inserted cross-bars, which do the office of a cap to confine the upper portion of the frame. The width of these cross-pieces is $3\frac{1}{2}$ inches, and one inch in thickness.

Letters *a*, *a*, *a*, *a*, show the smaller frame, *b* shows the cross follower resting on blocks, which lie on the follower immediately above the cheese. The blocks should be of different thicknesses and several in number to accommodate the different thicknesses of the cheese. These are marked *c*, *c*, *c*. The cheese hoop is marked *d*. The cheese board is marked *e*. This is secured in place by two ledges, adapted to the width of the bottom girt, on which the board rests. On the follower *b*, are seen the shorter ends of the levers, in the act of depressing the cross-follower. These levers are 34 inches in length, $1\frac{1}{2}$ inches thick and two inches wide at the bottom, and $\frac{3}{4}$ths inch wide at the top. The fulcrum, or pin on which the levers turn is shown by the letters *f*, *f*. Five inches from the top of the frame, between the two upright posts, on either side, are placed friction rollers two inches in diameter, over which the levers pass.

When the smaller frame is raised up the levers will pass through between the upright posts, and assume nearly an horizontal position. As the frame descends, the weight of the cheese and smaller frame, and if necessary other weights are suspended on the long ends of the levers resting on the friction rollers. In this case the aggregate weight of all these becomes the power acting on the long ends of the levers, and the force is increased with the descent of the frame, so that the greatest pressure occurs when most needed to complete the operation of the press. When the cheese is to be put in or taken out of the press, the frame is drawn up by means of a windlass, suspended from the cap piece at the top of the larger frame. The gudgeons of the friction pulleys are shown in the drawings and are

marked *g*, *g*. The windlass is shown at the top of the frame and marked W. Instead of the friction pulley any stationary body may be used, with nearly the same effect. The levers are marked L, L.

What I claim, and all I claim, is—

The above described arrangement and combination of the friction roller, or other stationary body, levers and sliding frame, by which the weight of the sliding frame, cheese and if necessary other weights, causes the action of the levers in such a manner, that their power is increased in proportion to the descent of the sliding frame, so as to secure an adequate pressure at the commencement of the operation, and an increased power proportioned to the descent of the sliding frame, thus applying the power when and where most required.

SULLIVAN WHITE.

Witnesses:
DAVID PEIRCE,
M. S. PEIRCE.