C. Stone, G. S. & F. K. Collins,

Cheese Press.

No. 2,747. Patented Aug. 6, 1842.

Fig. 2.

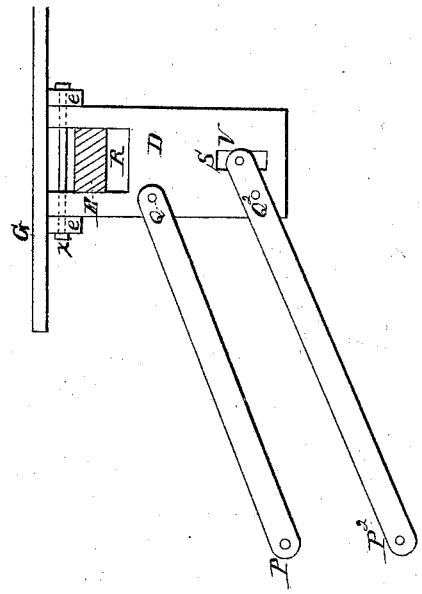


Fig. 3.

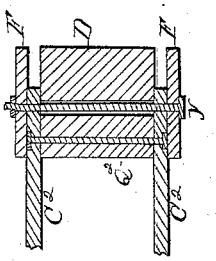
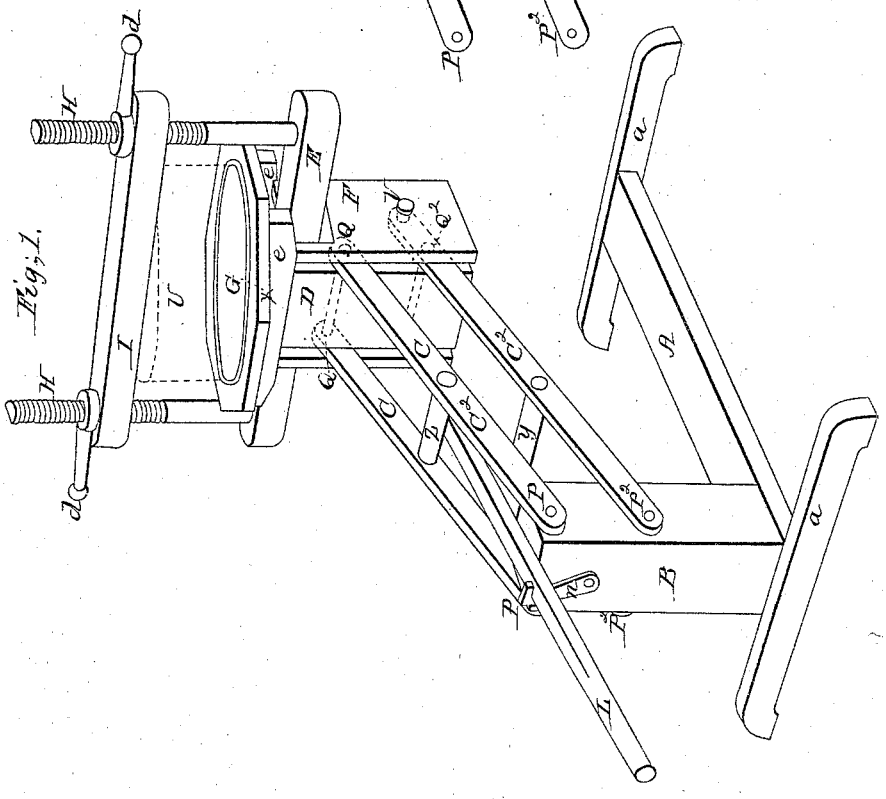


Fig. 1.



UNITED STATES PATENT OFFICE.

CHESTER STONE, OF ROOTSTOWN, AND FITCH K. COLLINS AND GEO. S. COLLINS, OF RAVENNA, OHIO.

SELF-ACTING CHEESE-PRESS.

Specification of Letters Patent No. 2,747, dated August 6, 1842.

To all whom it may concern:

Be it known that we, CHESTER STONE, of Rootstown, in Portage county and State of Ohio, and FITCH K. COLLINS and GEO. S. COLLINS, of Ravenna, in Portage county and State of Ohio, have invented a new and useful Machine for Pressing Cheese, to be entitled the "Buckeye Cheese-Press;" and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, of which Figure 1 is a perspective view and Fig. 2 a vertical section.

Our machine consists, first, a horizontal sill or foot piece or base (A) being a piece of wood two inches thick four inches wide and two feet long with two horizontal transverse sills or cross pieces (*a*) (*a*) mortised and tenoned at the ends to prevent its turning and for rendering said base A steady and firm; second—a standing post (B) being a block of wood four inches square and one foot long to the shoulder having a tenon at the lower end set into the upper side of the aforesaid foot piece or base A; third—four parallel levers (c c c^2 c^2) each one inch thick and three inches wide; two of them the upper ones c c being eighteen inches long and the other two c^2 c^2 sixteen inches. The long levers c^2 c^2 being united to each other by a horizontal transverse round or piece of wood y one inch in diameter and four inches long between the shoulders thereof having a tenon at each end one inch long which tenons are set into the levers connecting them firmly together near their centers. The short levers c c are firmly united by a round Z in like manner. These levers are connected to opposite sides of the standing post B by two pivots P passing through the post and one end of the levers: the long lever c^2 c^2 being fastened opposite to each other six inches above the foot piece; and the short levers opposite to each other and eleven inches above the foot piece five inches above the lower levers. Fourth—a falling post (D) being a vertical rising and falling block of wood four inches square and thirteen inches long. This post is connected with the levers at the ends opposite to the standing post by two pivots Q. The long levers being attached to the falling post by a pivot Q^2 two inches above the lower end of this post and fifteen inches from the lower pivot P^2 in the standing post; the short levers being connected to this post D by a pivot Q, seven inches above the lower end of the post five inches above the lower levers and fifteen inches from the upper pivot P in the standing post. A mortise R is made in the upper end of the falling post D at right angles to the levers and sufficient to permit the beam E to move in it without difficulty, and through the lower end another mortise S is made also at right angles to the levers sufficiently large to admit the horizontal rod V which passes through the rising and falling uprights F F attached to said beam E to play freely in said mortise S. Fifth—a beam or piece of wood (before referred to and lettered E) two inches square and two feet long, having a hole through each end to receive the two vertical screws H H which beam is placed in the mortise R in the upper end of the falling post D and at right angles to the levers. Sixth—two rising and falling uprights (F) (F) or pieces of wood one inch thick four inches wide and one foot long, having a mortise through their upper ends sufficient to receive the beam E to which they are made fast; being placed six inches from each other and three inches on each side of the center of the beam, on opposite sides of the falling post and parallel to this post; having their lower ends connected to the ends of the lower levers by a horizontal transverse rod V passing through the uprights and ends of the levers; which rod is six inches and a half below the lower side of the beam E and one inch and a quarter from the lower pivot of the falling post and sixteen inches and a quarter outward from the lower pivot of the standing post and being in a direct line with these lower pivots P^2 Q^2 of the posts, B, D. Seventh—a form (G) or piece of plank twenty inches square and one inch and a half thick, secured from warping by battens (*e*) (*e*) crossing its lower surface; which form rests upon the upper end of the falling post D and is fastened to the same by a pin X passing through the battens and upper end of the post. Eighth—two vertical screws (H) (H) rising from the ends of the beam being two feet long and one inch and a quarter in diameter, their lower ends being made fast to the beams which screws are

furnished with two screw boxes or nuts (*d*) (*d*). Ninth—a follower or upper basin (I) being a bar of wood say four inches wide and two inches thick having a hole through each end sufficient to receive the screws H H and which follower is forced down upon the cheese by the screw boxes or nuts *d d* above mentioned—said nuts being provided with handles for the convenience of turning them.

In using this press the falling post D is first raised as high as necessary by means of a hand lever (L) rested upon the top of the standing post as its fulcrum and bearing upon the lower side of the round (Z) which unites the upper levers near their center. The falling post is there made fast by a hook (*n*) fastened to the outside of the standing post B and passing over the hand lever. The curd being then placed upon the form G in a hoop V in the usual manner. The follower I is forced down upon the curd by means of the screw boxes *d* above its ends, thus giving a gentle pressure to the cheese at first; after which the hand lever is removed and the whole power of the levers of the press is left to act upon the cheese giving a greater or less pressure in proportion to the size of the cheese or the weight appended—the long levers c^2 c^2 causing the follower I placed upon the curd to descend more rapidly than the forms placed under it as said levers descend by means of the aforesaid arrangement—a contrary effect being produced in raising said levers—that is causing the follower to rise quicker than the form.

What we claim as our invention and desire to secure by Letters Patent is—

The application of the power of the screw and falling lever in a self acting press in manner as above described for the purpose of pressing cheese and other substances whether arranged precisely in the manner herein set forth or in any other mode substantially the same.

CHESTER STONE.
F. K. COLLINS.
GEO. S. COLLINS.

Witnesses:
H. N. STRONG,
A. B. GRIFFIN.