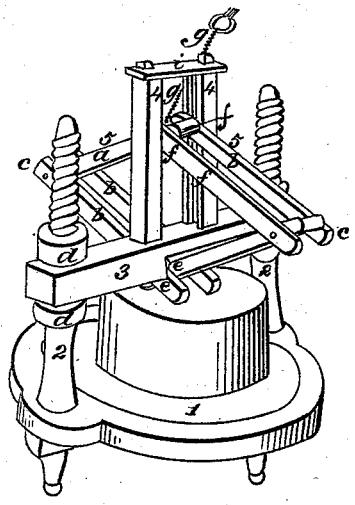
C. Stone, F. K & G. S. Collins,

Cheese Press.

No. 2,739. Patented July 28, 1842.



UNITED STATES PATENT OFFICE.

C. STONE, OF ROOTSTOWN, AND F. K. COLLINS AND GEO. S. COLLINS, OF RAVENNA, OHIO.

SELF-ACTING CHEESE-PRESS.

Specification of Letters Patent No. 2,739, dated July 28, 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, both of Ravenna, in Portage county and State of Ohio, have invented a new and useful Machine for Pressing Cheese, entitled "Stone and Collins' Self-Acting 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.

The nature of our invention consists in applying the combined power of the screw and joint-lever to pressing cheese.

To enable those skilled in the art to make and use our invention we will proceed to describe its construction and operation.

The machine consists of, first, a form (1.) being a circular piece of plank say two feet in diameter and one inch and a half thick secured from warping by a batten or narrow piece of wood crossing its lower surface and secured by iron screws in the middle of the lower surface of the form, which form is placed horizontal upon four legs say three inches long each; secondly, two wooden screws (2) (2) one inch and a quarter in diameter and eighteen inches long to the shoulder which screws stand upon opposite sides of the form, and perpendicular thereto, being placed over the ends of the batten above mentioned, and having a space between them of say nineteen inches: each screw having at its lower end a tenon say four inches and a half long which tenon passes through the form and end of the batten and is fastened by a key on the under side of the batten; thirdly, a cross bar or beam (3) being a bar of hard wood say two feet long and two inches square having a hole through each end sufficient to admit the wood screws above mentioned, which beam is secured and kept firm by four nuts or screw boxes (*d d*) one above and one below each end of the beam; fourthly, two uprights (4) (4) or pieces of wood say one inch and a half square, and ten inches long between the shoulders, having tenons on each end and being grooved on one side with a narrow groove running from shoulder to shoulder. These uprights stand upon the upper side of the beam perpendicular thereto and also to the form; being four inches apart and equally distant from the center of the beam: having their lower tenons set into the beam and being secured at the top by a cross piece (*i*) or small piece of wood which receives their upper tenons. Lastly, two levers (5) (5) each consisting of three pieces of wood all one inch and an eighth thick; one of which pieces (*a*) (*a*), is two inches wide, and the other two (*b b*) (*b b*) one inch wide each. These pieces are so joined together that the two narrow pieces constitute one part of the length of the lever and the wide piece the other part, making a joint (*c*) near the middle of each lever which joints are sustained by a pivot, and which for distinction we call the middle joints of the levers. The lower part of each lever is two inches longer than the upper part or part above the middle joint; the lower part being twelve inches long and the upper part ten inches. The lower or longer part of one lever being constituted of two narrow pieces and the lower part of the other of one wide piece. These levers two inches from the lower ends are connected to the lower side of the beam, with leather strings making the lower side of the beam their fulcrum, and are so attached as to cross each other at the place of their union with the lower side of the beam, which lower side of the beam as far as the levers strike it, is brought nearly to an edge making a pivot on which the levers turn in pressing. This union of the levers at the fulcrum or lower side of the beam we call the lower or fulcrum joint (*e e*) of the levers. From this lower or fulcrum joint, at which their lower ends cross each other as above stated, the levers pass outward from each other and upward to their middle joints; thence being bent inward and forming angles or elbows at their middle joints they pass upward and inward toward each other, until their upper ends meet between the uprights and over the beam where they are united by a pin or pivot forming a fourth or upper joint in the lever (*f f*), which upper joint is kept vertical to the lower or fulcrum joint by the two ends of its pivot moving in the grooves made in the uprights.

In using this press, the beam is first raised nearly to the top of the wood screws. The curd is then placed upon the form in

a hoop and covered with a follower or circular piece of board in the usual manner. The beam is then forced down by means of the screw boxes above its ends, giving a gentle pressure to the cheese before the lever is applied, it being important that the cheese should be pressed lightly at first. The whole press is then suspended by a cord (*g*) fastened to the upper end of the levers. Thus the weight of the press and cheese always determining the amount of pressure; hence the cheese is pressed more or less in proportion to its size.

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

The application of the power of the screw and joint lever, in a self acting press, for the purpose of pressing cheese, as herein described.

CHESTER STONE.
FITCH K. COLLINS.
GEO. S. COLLINS.

Witnesses:
FREDC. A. HUDSON,
ORNENG KNAPP.