C. D. Brand,

Cheese Press,

No. 43,086, Patented June 14, 1864.

Fig. 1

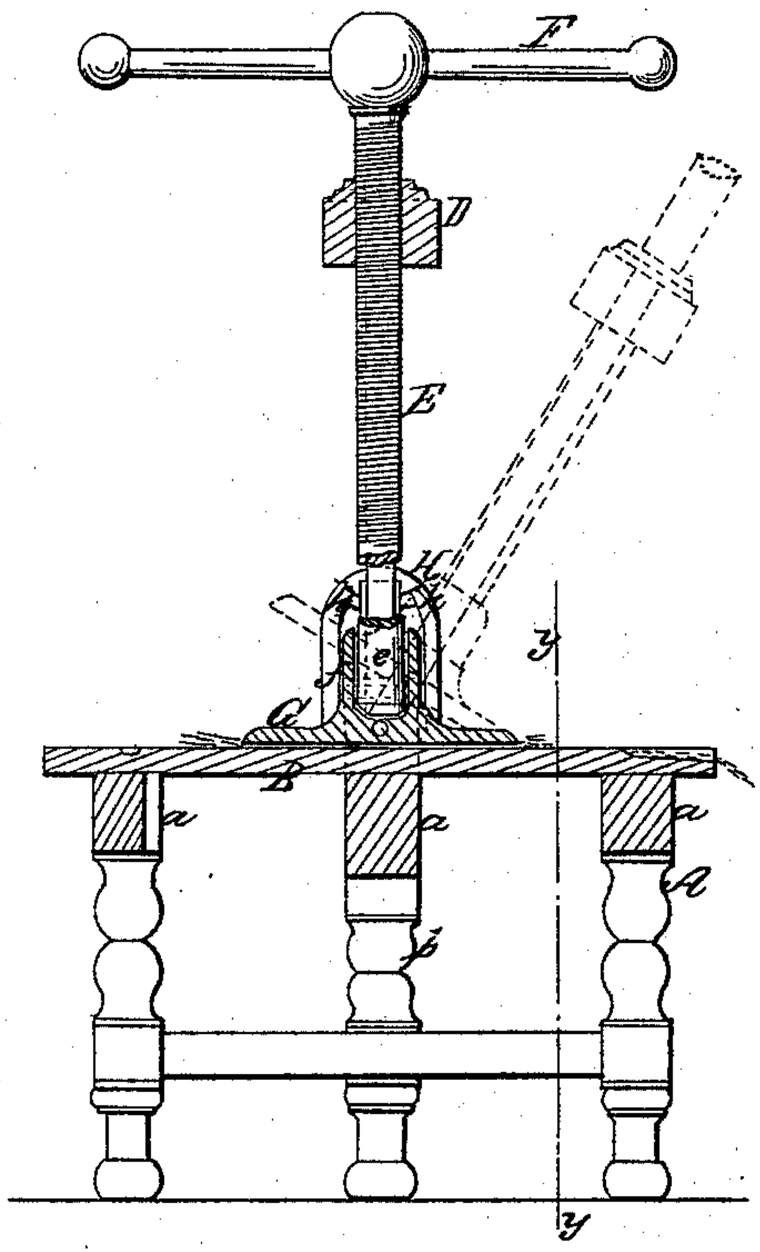


Fig. 2

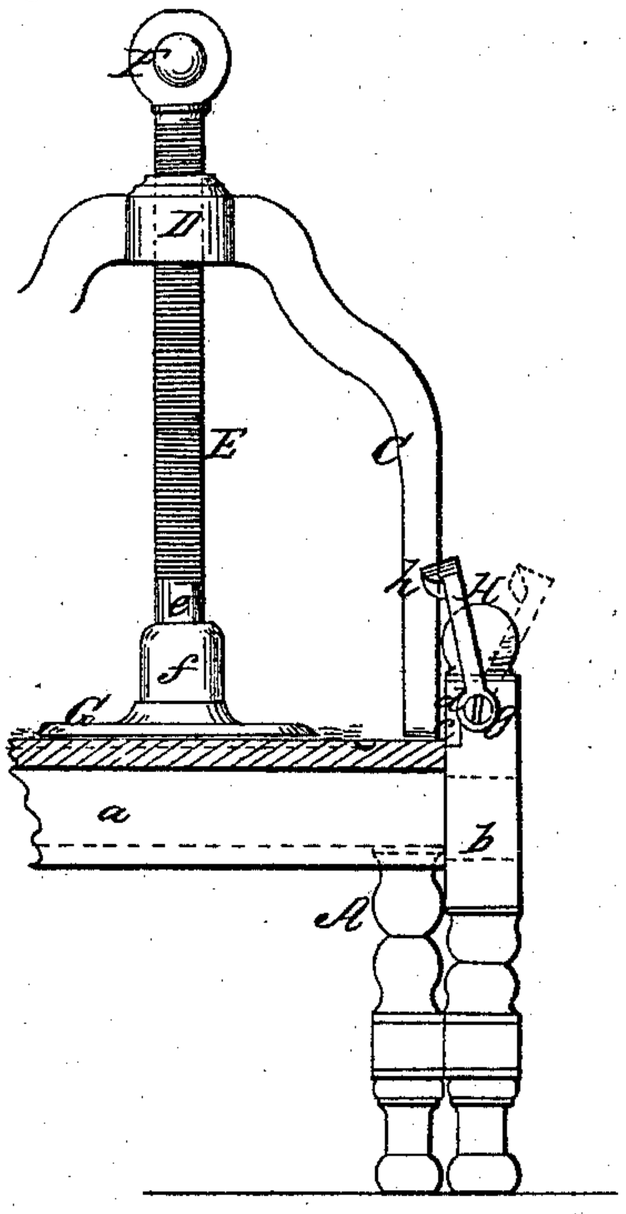
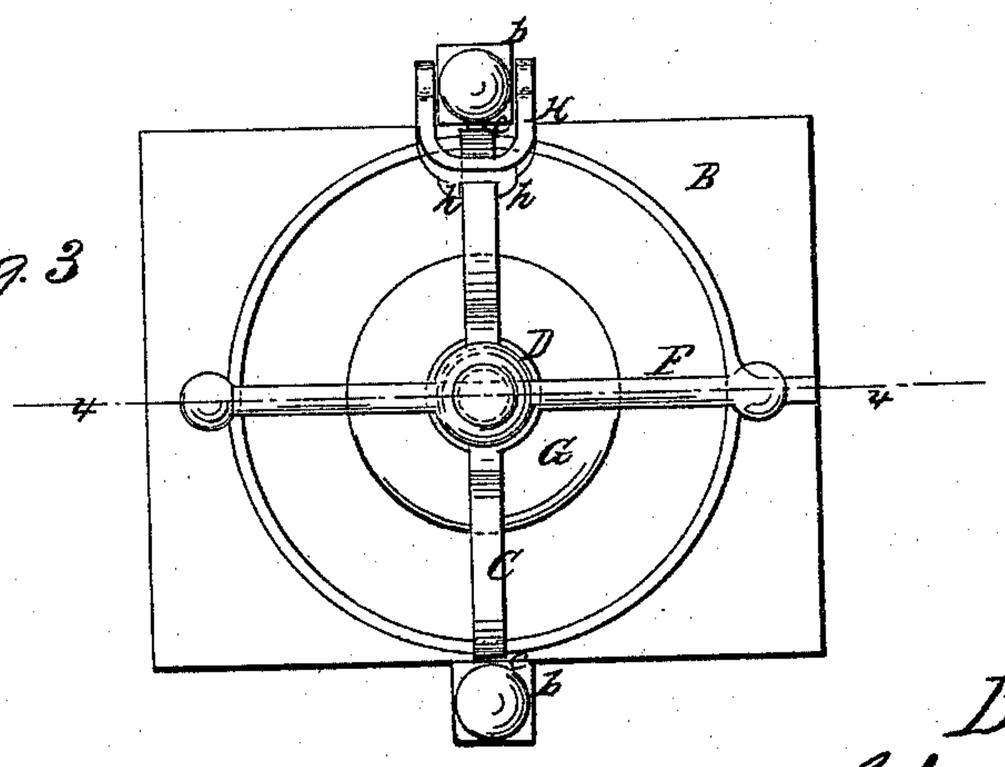


Fig. 3



Witnesses;
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UNITED STATES PATENT OFFICE.

CHARLES D. BRAND, OF OAK HILL, NEW YORK.

IMPROVEMENTS IN PORTABLE SCREW-PRESSES.

Specification forming part of Letters Patent No. **43,086**, dated June 14, 1864.

To all whom it may concern:

Be it known that I, CHAS. D. BRAND, of Oak Hill, in the county of Greene and State of New York, have invented a new and Improved Portable Screw-Press; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a vertical section of my invention, taken in the line *x x*, Fig. 3; Fig. 2, a vertical section of the same, taken in the line *y y*, Fig. 1. Fig. 3 is a plan or top view of the same.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to a new and improved portable screw-press for pressing cheese, expressing juice from fruit, pressing lard and other substances.

The object of the invention is to obtain a press of the kind specified which will admit of the screw, after the pressing operation has been performed, being turned down to a horizontal position, so as to be entirely out of the way, and allow the article which was compressed to be removed from the bed of the press with the greatest facility, there being no parts to interfere with the ready removal of the compressed article, the screw at the same time being capable of being adjusted and secured in an upright position, so that it may perform its work, in combination with the above.

The invention relates to an equalizer or regulator connected with the screw, and constructed and applied in such a manner that the follower, while being forced down under the action of the screw, will be retained in a horizontal position, and made to press the substance underneath it in an even manner, so as to leave a horizontal upper surface on the same, however irregular said upper surface might have been previous to its subjection to the pressure.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents a frame which I prefer to construct with six legs, having horizontal bars *a* at their upper ends, on which a bed-plate, B, is secured. Two of the legs designated by *b b*, which are at opposite sides of the frame A and at the centers of the sides, extend upward a trifle above the bed-plate B, as shown in Fig. 3, and in the inner sides of the upper parts of said legs, above the bed-plate B, there are fitted the journals *c c* of a bail, C, which may be of the shape shown in Fig. 2. These journals may be fitted in metal bushings or bearings *d* in the legs *b*, and are allowed to turn freely therein to admit of the bail being adjusted either in a horizontal or vertical position, as may be desired. At the center of the bail C there is a swell or hub, D, which is provided with an internal screw-thread to form a nut for a screw, E. (See Figs. 1 and 2.) The screw E has a handle or lever, F, passing through its outer or upper end, and the thread of the screw at its lower end is turned off to leave a smooth cylindrical surface, *e*. (See more particularly Fig. 1.)

G represents a follower, which may be of circular or other form, and provided at its center with an upright tubular projection, *f*, which receives the smooth cylindrical part *e* at the lower end of the screw E, the part *e* being allowed to turn freely in the projection *f* of the follower. The tubular projection *f* should be of such a height and the part *e* at the lower end of the screw E of such a length as to prevent the follower G from being canted out of a horizontal position when forced down under the action of the screw E. This will be fully understood by referring to Fig. 1. To the upper part of one of the legs *b* there is attached a fastening, H, which retains the bail C in an upright position when the screw E is at work. This fastening is constructed of metal, and is of U form, its ends being attached to the leg by a screw, *g*, passing through each end of it into the leg, the fastening being allowed to turn freely on the screws. The U-shaped bar has two lips or projections, *h*, *h*, at its center and inner side, and these projections, when the fastening is turned inward, catch over the sides of the bail, when the latter is in a vertical position, and retain the bail in such position. (See more particularly Fig. 2.)

From the above description it will be seen that when the bail C is secured in an upright position the screw E may be operated in the usual way, and the follower G forced down upon the substance underneath it without the liability of being canted out of a horizontal

position, as the tubular projection *f*, in which the smooth part *e* at the lower end of the screw E is fitted, and which I term an "equalizer" or "regulator," will prevent such a contingency, and it will further be seen that after the pressing operation has been performed the bail C and screw E after the screw has been turned upward a short distance, and the fastening H thrown outward and free from the bail, may be turned down in either direction to a horizontal position, and be entirely out of the way, so that there will be no parts to interfere with the removal of the compressed substance. This will be found extremely convenient in pressing cheese, as it admits of the hoop being readily emptied of its compressed contents, and readily filled for a succeeding operation.

The frame A may be of wood, the bail C of cast-iron, the screw E of wrought-iron. The follower and equalizer may be of either wood or metal.

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

In combination with the adjustable bail C, the fastening H, when constructed and operating as herein described.

CHAS. D. BRAND.

Witnesses:

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