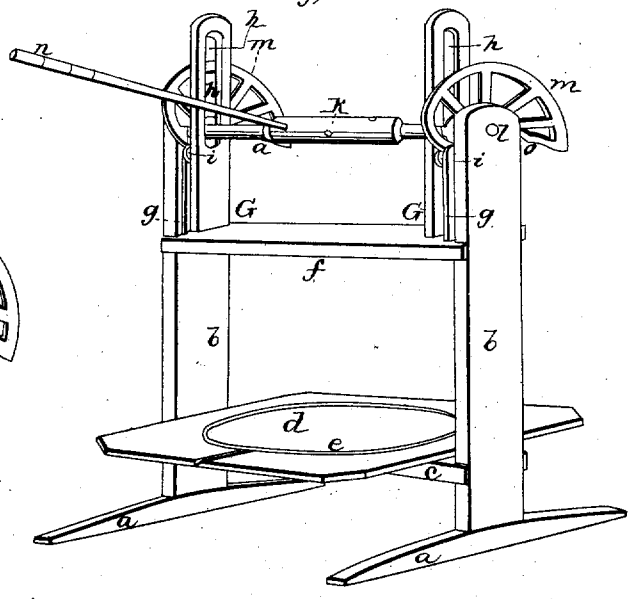
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Webb & Coe,

Cheese Press.

Patented Feb. 27, 1830.

Fig; 1.



Fig; 2.



AM. PHOTO-LITHO. CO. N.Y. (OSBORNE'S PROCESS)

Reynold Webb & Jonathan Coe
Sealed Patent X5854

The Schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said Reynold Webb & Jonathan Coe themselves of their improvement in the common press used for pressing Cheese &c.

To all person to whom these presents shall come. Be it known that we Reynold Webb & Jonathan Coe both of Madison, County of New Haven, State of Connecticut, have jointly invented a new & useful improvement in the common press used for pressing Cheese & for other similar purposes, which improvement or invention we specify and describe in manner following (viz.)

To show the nature, properties & extent of our improvement we have described a portable press of a size suitable for pressing the cheese made from an ordinary dairy & so constructed as to admit of a convenient application of the principle of our invention. The drawing annexed exhibits a perspective view of the machine here described. References are made to the same in this description. In the construction of the machine some kind of hard wood, such as oak or maple which will work neatly & fit accurately should be used. The foot pieces or sills (a. a.) are two feet long, two inches wide & two inches thick. To these foot pieces are firmly framed two upright or perpendicular pieces (b. b.) two feet four inches long three & a half inches wide & two inches thick. To these upright pieces & six inches distance from the foot pieces is fitted or framed a cross piece (c.) one foot & ten inches long seven inches wide & two inches thick. To form a hole to support the substance to be pressed. The joins the upright pieces in a direction perpendicular to the foot pieces. Upon this hole a board or plank (d) is placed of sufficient size to support the substance

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is to be fixed with a channel (c,) cut in a circular curved form & leading off from one edge of the frame in order to discharge any liquid matter which may be discharged— A second upright piece (f) parallel to the first. one foot & ten inches long, seven inches wide & two inches thick, is fitted with a notch at each end of the width of the perpendicular pieces so as to slide freely up & down as the pressure is applied or removed— Into each end of this last piece are framed two upright or perpendicular pieces (g.g.) (g.g.) & the two pieces which form each pair are three fourths of an inch distant from each other. The two outer pieces of each pair (g.g.) are four & a half inches long & three & a half inches wide & three fourths of an inch thick & rounded at top. The two inner pieces (g.g.) are one foot three inches long— three & a half inches wide & one inch thick & in the upper part of these inner pieces are two mortises or openings (h, h,) eight and a half inches long & two inches wide rounded at each end of the openings & the whole pieces rounded at the top—

Between each of these pairs of upright pieces & one & a half inch distance from the ends of the shorter pieces is placed a small wheel (i. i.) two inches in diameter & three fourths of an inch thick with pins running thro' the pairs of upright pieces & thro the centre of each wheel half an inch in diameter & the wheels & pins are formed of iron, brass, or other hard metal.

There is a third cross piece (K,) circular in its shape but largest in the middle. The circumference at the ends is six inches & in the middle eight inches with three or more holes near the middle one inch in diameter intended to receive a lever. This cross piece is one foot six inches long & in each end of it is placed a metal gudgeon (l) five inches in length which may run in a metal lay placed on the upper part of each upright piece (g. g.) & three inches from the top of the same. The gudgeons & boxes should be iron or brass or other hard metal.

The two ends of the circular cross piece are round square for

the distance of one inch & a quarter from each end, & each side of the square is one inch & a half. Upon these square pieces are fitted two curved or spiral, or double pieces made of iron or other hard metal (m, m,) five eighths of an inch in thickness with open work & braces so as to secure both lightness & strength, but where these are not regarded they can be solid. These are to be so fitted as to run upon the wheels (i, i,) with accuracy, when the circular cast piece (k,) is turned round by means of the lever (n,) of suitable length & size & fitted to enter the hole in the same. This lever also may have two or three or more notches or grooves cut round the same so that when a constant pressure is needed a weight may be hung upon the lever when in an elevated position) & not slide down towards the circular cast piece. The weight to be applied may be a stone, bag of sand, or other suitable heavy matter. When a constant pressure is not needed, any other common power may be applied. By varying the size & proportion of the parts pressed may be made larger or smaller according to the use to which they are to be applied. Also the curved spiral or scroll pieces (m, m,) of shape as represented in the annexed drawing will by means of the projections (o, o,) fitting to the wheels (i, i,) when the cast piece (k) is raised as high as it can be held up to support the cast piece (k) from descending by its own weight. wheels may be some convenience in using the press. The curved spiral or scroll pieces may be formed with the outer edge or projecting circumference more or less rapidly from the central point, but my experience leads me to the conclusion that a curve or spiral wheel of the form on the circumference, when it is first made to project one inch & a half distant, measured on a radius or coordinate from the centre of its motion in order to give it suitable strength & stiffness & of the distance of one inch measured from the first mentioned point upon the projecting, & diminishing then

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three inches from the centre of motion measured on a radius or ordinate; and again at the distance of twenty inches measured from the first mentioned point & measured on the same line or curve, as five inches & one quarter distant from the centre of motion measured on a radius or ordinate, is best adapted to the press of the size we have described & the same ratio of proportion for larger or smaller presses. Fig 2 Exhibits a spiral detached from the machine. To use the press the cross piece (f,) is raised by blocking on the substance to be pressed, till the small wheels (i, i,) come in contact with the spiral pieces (m, m,) & if you wish to move the cross piece (f,) thro' all the distance which it can be carried by the spirals (m, m,) you bring the wheels (i, i,) and the spirals (m, m,) in contact as near to the central points of the spirals (m, m,) as possible, then introduce the lever (n) into the holes in the circular cross piece (k,) & the weight or other power is applied to the lever (n) causing the cross piece (k) to revolve & carry with it the spirals (m, m,) which press upon the wheels (i, i,) which also revolve & the spirals (m, m,) press down the cross piece (f,) with great force upon the substance placed under it & intended to be pressed. While the cross piece (f,) by means of the mortises (h, h,) in the upright pieces (g, g,) is kept parallel to the base (c,) & table board (a,) & each side of the substance pressed is kept of the same thickness or width. This press is simple in its construction easily managed & kept in order. portable & possesses great power, which is easily brought into operation & very little retarded or diminished by friction. With perhaps slight variations in construction presses may be formed upon this plan, with the improvements adapted to almost any purpose for which presses are used. What we claim as our invention or improvement is the combination of the screw & nut or female screw & inclined plane by means of the circular cross piece, & the curved, spiral, or double spiral pieces attached to the said

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thereof & operating on the two small wheels as described & set forth in the foregoing specification whereby great power is obtained & that power made to operate in a convenient cheap & uniform manner with but a small loss of power by friction. And we do not claim as any part of our invention the whole or any of the parts of the above described proof, now or formerly in use in the particular size or shape of the same any further than is necessary to combine the above powers & bring them to operate in combination & remove or lessen friction during their operation

Witnesses
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Luther Crane

Reynold Webb
Jonathan Wood

Engd.
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