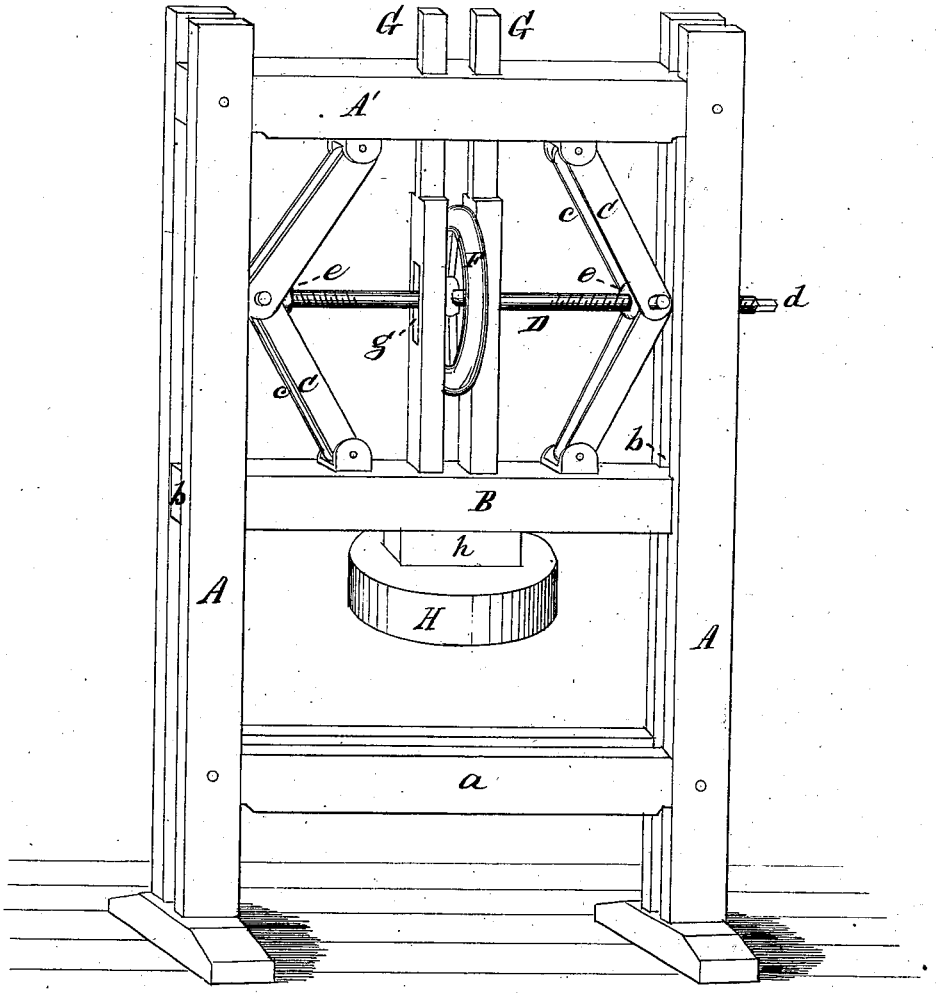
G. B. Boomer, T. G. Morse, & R. E. Boschert,

108753 Impd in Cheese Press.

PATENTED NOV 1 1870



Witnesses.

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Atty.

United States Patent Office.

GEORGE B. BOOMER, THOMAS G. MORSE, AND RUFUS E. BOSCHERT, OF PHŒNIX, NEW YORK.

Letters Patent No. 108,753, dated November 1, 1870.

IMPROVEMENT IN CHEESE-PRESSES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, GEORGE B. BOOMER, THOMAS G. MORSE, and RUFUS E. BOSCHERT, of Phœnix, in the county of Oswego and State of New York, have invented a new and useful Improvement in Cheese-Presses; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others to make and use the same, reference being had to the accompanying drawing forming a part of this specification.

The drawing shows a perspective view of our improvement, in which—

A *a* is the frame-work.

B is the press-beam.

C *c* are the links or knee-joint levers, that are actuated by a right-and-left hand-screw, D, to throw the press beam.

The frame-work A is made double, so that slots are formed between the main uprights, and the press beam B is made with tenons *b b*, at its ends, that occupy and travel vertically in said slots.

The knee-links C *c* are also made deuble, and the nuts *e e*, that connect the links with the screw, are placed between them.

The beam B has two upright projections G G, fixed rigidly to it, and these pieces pass up through mortises in the cross-frame A', and act as guides to steady the thrust of the press-beam B and its follower H.

The upper ends of the links C *c* are stationary, or have a fixed fulcrum on the frame-piece A', and the entire throw of the links is given to the beam B, and this causes the screw D to have a vertical movement equal to half that of the press-beam.

To accommodate this differential movement of the screw D, vertically, the guide-standards G G are made with vertical slots *g*.

The press can be run down at first with a crank placed on the screw at *d*, but it cannot be used toward the latter end of the operation, as from the vertical movement of the screw, and the inward movement of the nut, the end of the screw is necessarily unsupported, and the screw is liable to be broken by the crank; and the press is driven down by a hand-wheel, F, fixed to it at the center.

This wheel is fixed on the screw, between the guide-standards G G, and fitted snugly in between them, to prevent endwise play of the screw, that would tend to depress one end of the beam B and make the guides bind.

By this construction, all the parts are held firmly in the proper position, and the press works freely and powerfully.

The follower H is fastened rigidly to the press-beam, and the thrust of the press is regulated by removing the follower from the press-beam and substituting a thicker or thinner piece of blocking for the block *h*.

The ends of the links C *c* can be pivoted to the sides of the beams B and A', instead of resting in the metallic shoes, and the press, by this means, be shortened up nearly a foot, if desired.

By these means we obtain a press that works free and evenly, and that is powerful, and made at a light cost.

We do not claim the use of knee-levers operated by means of a right-and-left hand-screw, as herein described, as this is not new; but

Having thus described our invention,

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

A cheese-press, composed of the double frame A *a* A', the press-beam B *h* H, sliding standards G G, double levers C C, nuts *e*, and the screw D, with a hand-wheel, F, and square end *d*, all constructed, arranged, and operating substantially as described.

The above specification of our invention signed by us this 8th day of September, 1870.

GEORGE B. BOOMER.
THOS. G. MORSE.
RUFUS E. BOSCHERT.

Witnesses:
HENRY A. BRAINARD,
WM. H. RICE.