

No. 698,728.

Patented Apr. 29, 1902.

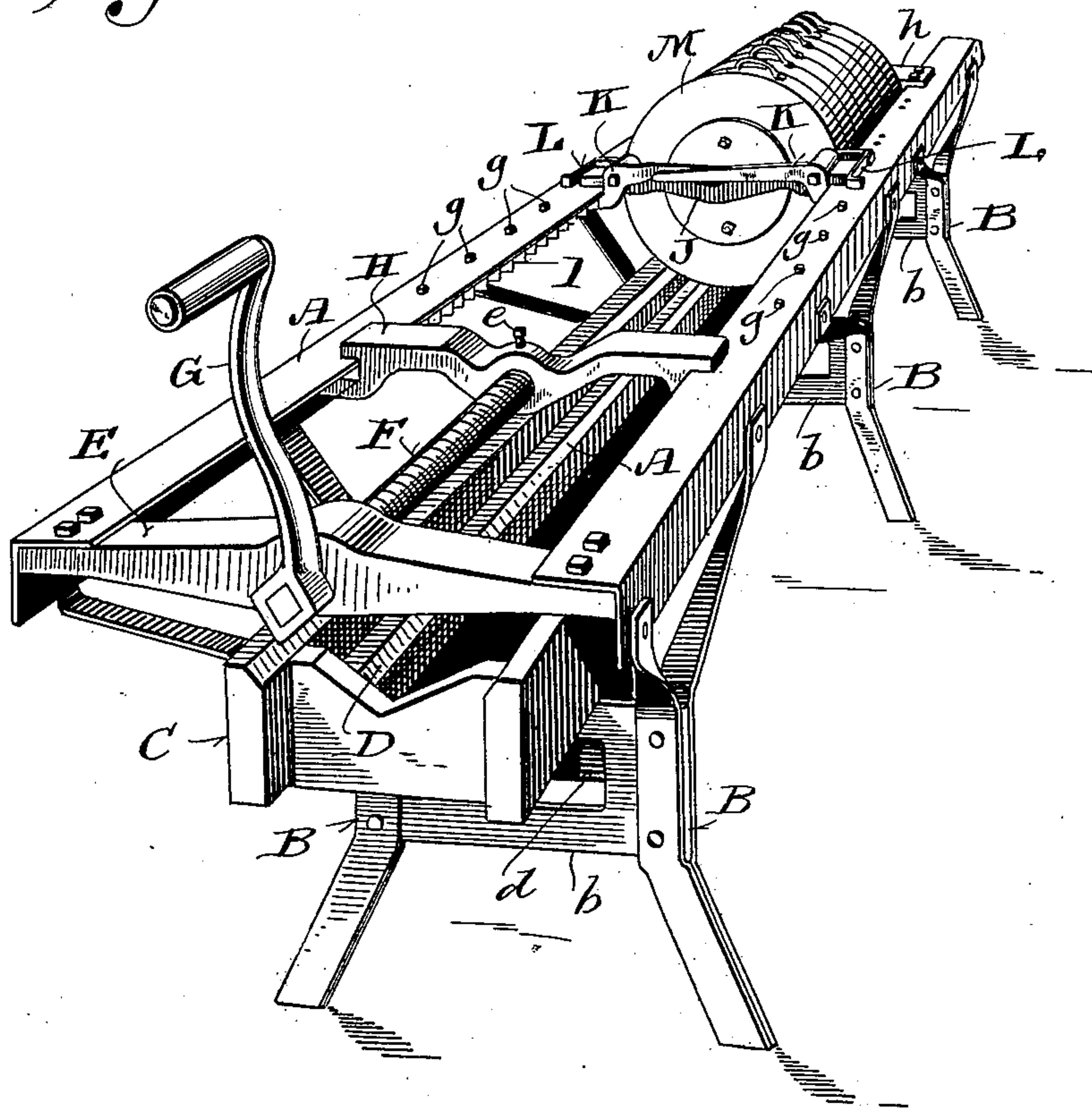
M. McKINNON.
CHEESE PRESS.

(Application filed Dec. 20, 1901.)

2 Sheets—Sheet 1.

(No Model.)

Fig. 1.



Witnesses
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2 Sheets—Sheet 2.

(No Model.)

Fig. 2.

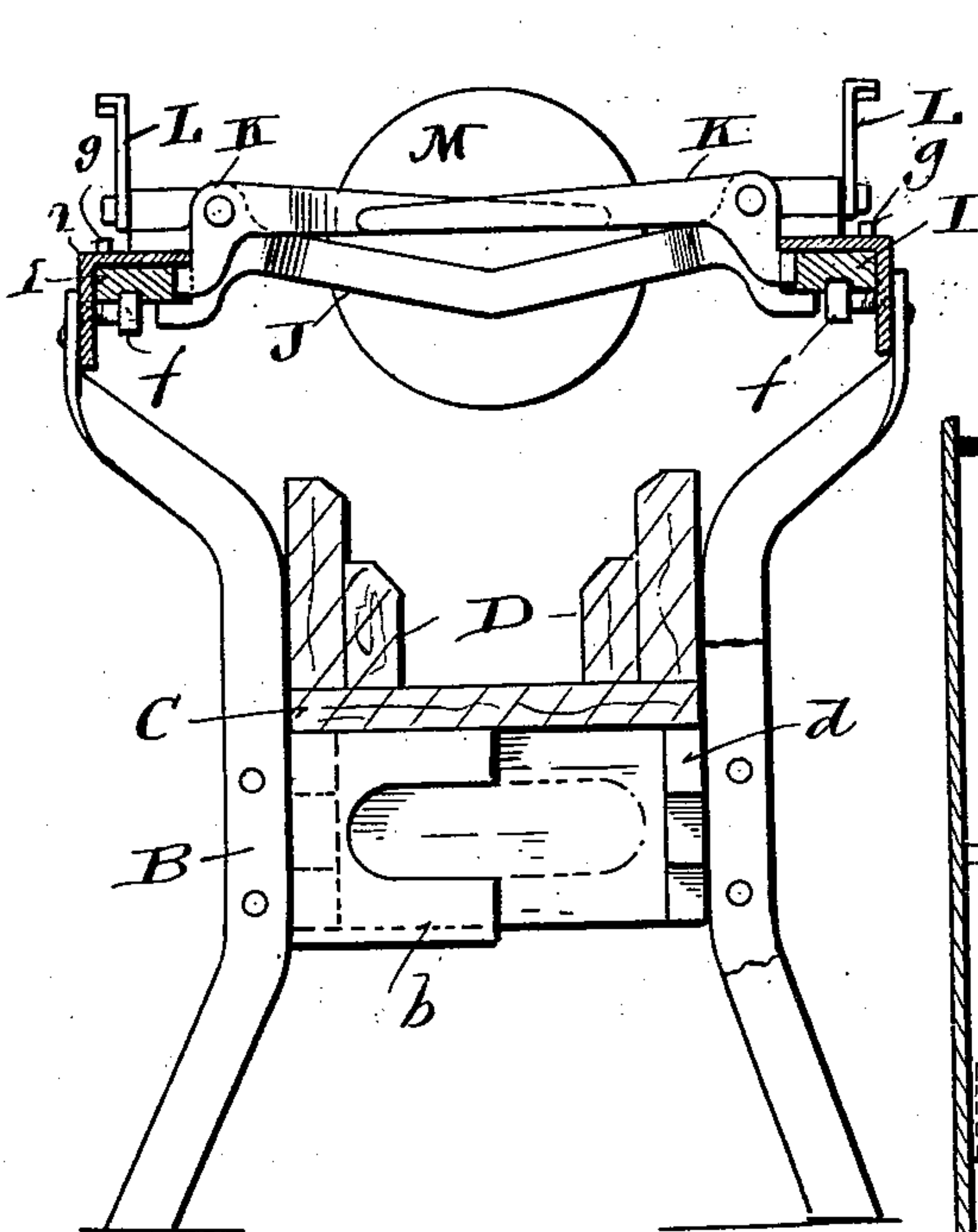


Fig. 3.

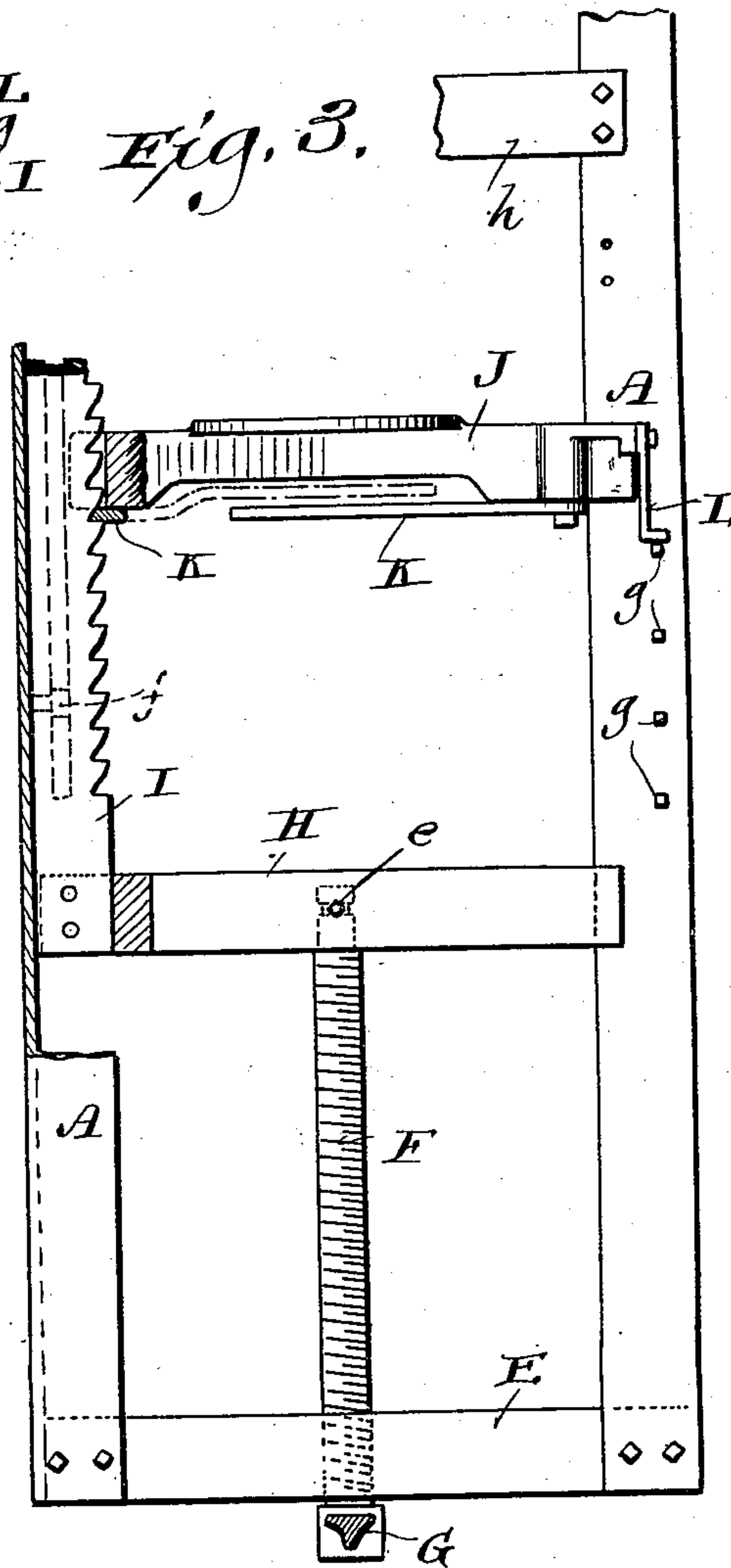
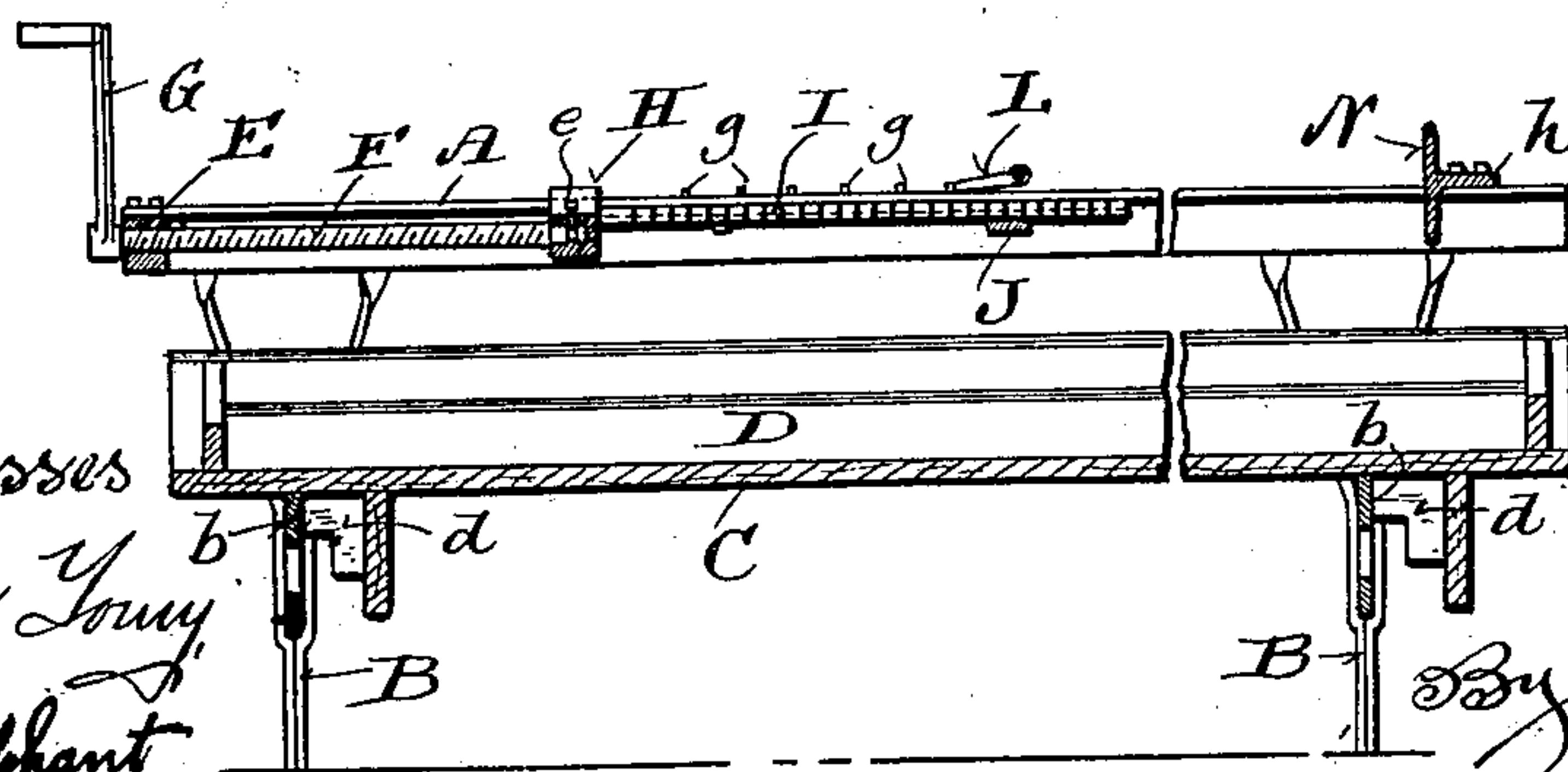


Fig. 4.



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UNITED STATES PATENT OFFICE.

MANNING MCKINNON, OF SHEBOYGAN FALLS, WISCONSIN.

CHEESE-PRESS.

SPECIFICATION forming part of Letters Patent No. 698,728, dated April 29, 1902.

Application filed December 20, 1901. Serial No. 86,667. (No model.)

To all whom it may concern:

Be it known that I, MANNING MCKINNON, a citizen of the United States, and a resident of Sheboygan Falls, in the county of Sheboygan and State of Wisconsin, have invented certain new and useful Improvements in Cheese-Presses; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention has for its object to provide for increased range of pressure and to otherwise improve that type of presses especially designed for squeezing rows of hooped cheeses, said invention consisting in certain peculiarities of construction and combination of parts hereinafter particularly set forth with reference to the accompanying drawings and subsequently claimed.

Figure 1 of the drawings represents a perspective view of a cheese-press made to incorporate my improvements; Fig. 2, an end elevation of the same, partly broken and in transverse section; Fig. 3, a plan view of a portion of the press, partly broken and in horizontal section; and Fig. 4 a vertical longitudinal section of said press.

Referring by letter to the drawings, A indicates each of a pair of parallel upper frame-beams supported and braced by standards B, having transverse webs *b*, that serve as rests for a trough C or brace-connected steps *d*, depending therefrom, these steps being provided so that the elevation of the trough may be varied to accommodate the press to cheeses of different sizes. The bottom of the trough being at rest on the standard-webs *b*, as herein shown, the press is organized for squeezing large cheeses, organization of said press for squeezing medium or small-size cheeses being determined by elevating said trough one or two steps. The trough contains parallel supporting-guides D for a row of hooped medium or small cheeses and has its upper edges beveled to serve as guides for a row of hooped large cheeses, whey squeezed out of said cheeses being caught in said trough. Frame-beams A are herein shown as being angle-irons connected at their rear ends by a bar E, bolted thereto. The bar is provided with a tapped central aperture, whereby it is made to serve as a stationary nut for a screw F, and the rear end of said bar is shown as

having angular fit in a crank G, although other means for application of power to the screw may be substituted for the crank. The forward end of the screw is turned down to form a journal that engages a central recess in a slide H, guided on frame-beams A, an annular groove in the journal end of said screw being engaged by a machine-screw *e*, carried by the slide. Rigidly secured to extremities of slide H under the horizontal upper inwardly-projecting portions of the frame-beams A are racks I, having under-side grooves engaged by support and guide projections *f* of said beams, these projections being shown as headed bolts.

Engaged by the frame-beams A and racks I are recessed ends of a sliding carrier J for pivotal latches K, detents L, and follower-block M, the latches being engageable with said racks and the detents arranged to be swung down ahead of upwardly-projecting stop-lugs *g* in series on said frame-beams. The follower-block M sits in trough C, and a head-block backing N is herein shown provided with lateral arms *h*, bolted to the aforesaid frame-beams. By having bolt-holes at intervals longitudinally of the frame-beams, as herein shown, the head-block backing may be adjusted to vary normal distance between it and the end bar E in proportion to the length of a row of cheeses and the range of pressure desired.

Hooped cheeses are laid in the trough C between follower and head blocks, the latches K in pivotal connection with their carrier J being then engaged with racks I and the screw E turned in the proper direction to advance said racks, carrier, and follower-block. The detents L are lifted from time to time to clear stop-lugs on frame-beams A as the advance movement of the racks, carrier, and follower-block takes place, or they may be made to automatically clear said lugs, the latter and said detents being a form of rack-and-pawl mechanism that may be varied in practice without departure from what I seek to cover. The screw having been run forward the full length of its thread in bar E and more pressure necessary or desirable, detents L are set to hold their carrier J and follower-block M in adjusted position, and thus maintain the acquired pressure on the cheeses, after which

latches K are swung out of engagement with racks I, and the latter, with said screw, run back to be again latched to said carrier and moved forward in order to further squeeze said cheeses.

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

1. In a cheese-press of the type specified, a stationary nut, a screw engaging the nut, a slide in connection with the screw, racks coupled together by the slide, guide-supports for the racks, a follower-block carrier provided with latches engageable with said racks, and means for holding the carrier in adjusted position on disengagement of the latches from the aforesaid racks.

2. In a cheese-press of the type specified, an adjustable head-block, a stationary nut, a screw engaging the nut, a slide in connection with the screw, racks coupled together by the slide, guide-supports for the racks, a follower-block carrier provided with latches engageable with said racks, and means for holding the carrier in adjusted position on disengagement of the latches from the aforesaid racks.

3. In a cheese-press of the type specified, a vertically-adjustable trough, a follower-block carrier, screw-controlled slide-racks, carrier-latches engageable with racks, and means for holding the carrier in adjusted position on disengagement of said latches from the racks.

4. In a cheese-press of the type specified, upper frame-beams, a trough and supporting-standards for the beams and trough, a head-block backing connected to said beams, a rear bar coupling the aforesaid beams, a bar-engaging screw, a slide in connection with the screw, racks coupled together by the slide,

guide-supports for the racks, a follower-block carrier provided with latches engageable with said racks, and means for holding the carrier in adjusted position on disengagement of the latches from the aforesaid racks.

5. In a cheese-press of the type specified, upper frame-beams, standards in connection with the beams, a trough having depending steps for which or the trough itself transverse webs of the standards serve as rests, a head-block backing connected to said beams, a rear bar coupling the aforesaid beams, a bar-engaging screw, a slide in connection with the screw, racks coupled together by the slide, guide-supports for the racks, a follower-block carrier provided with latches engageable with said racks, and means for holding the carrier in adjusted position on disengagement of the latches from the aforesaid racks.

6. In a cheese-press of the type specified, a stationary nut, a screw engaging the nut, a slide in connection with the screw, racks coupled together by the slide, guide-supports for the racks, a follower-block carrier provided with latches engageable with said racks, detents in connection with the carrier, and stops arranged to cooperate with the detents as means for holding said carrier in adjusted position on disengagement of the latches from the aforesaid racks.

In testimony that I claim the foregoing I have hereunto set my hand, at Sheboygan Falls, in the county of Sheboygan and State of Wisconsin, in the presence of two witnesses.

MANNING MCKINNON.

Witnesses:

A. O. HEALD,
O. D. BALLSCHNEIDER.