

W. C. MARSHALL.  
Lard-Presses.

No. 146,927.

Patented Jan. 27, 1874.

Fig. 1.

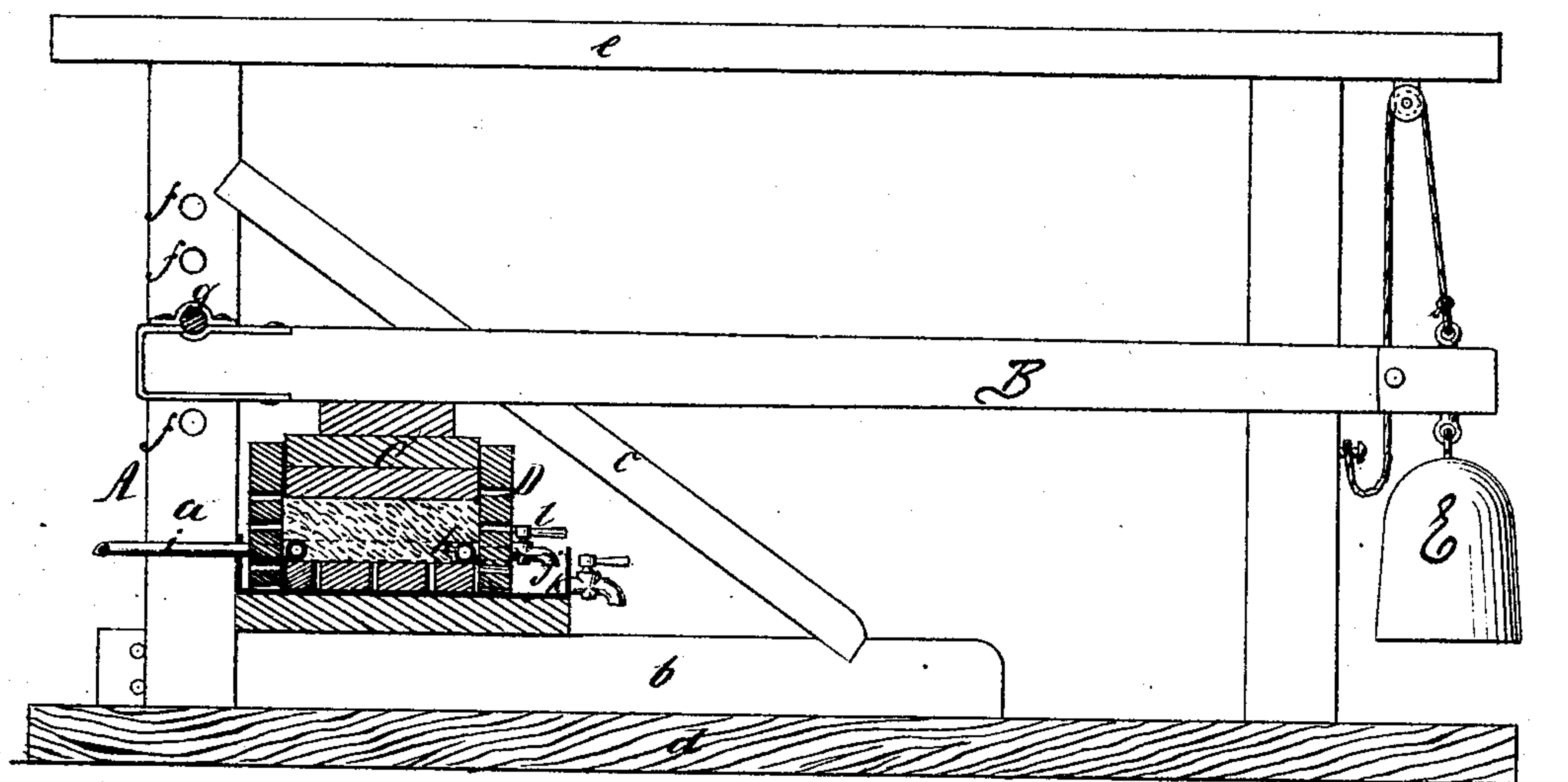
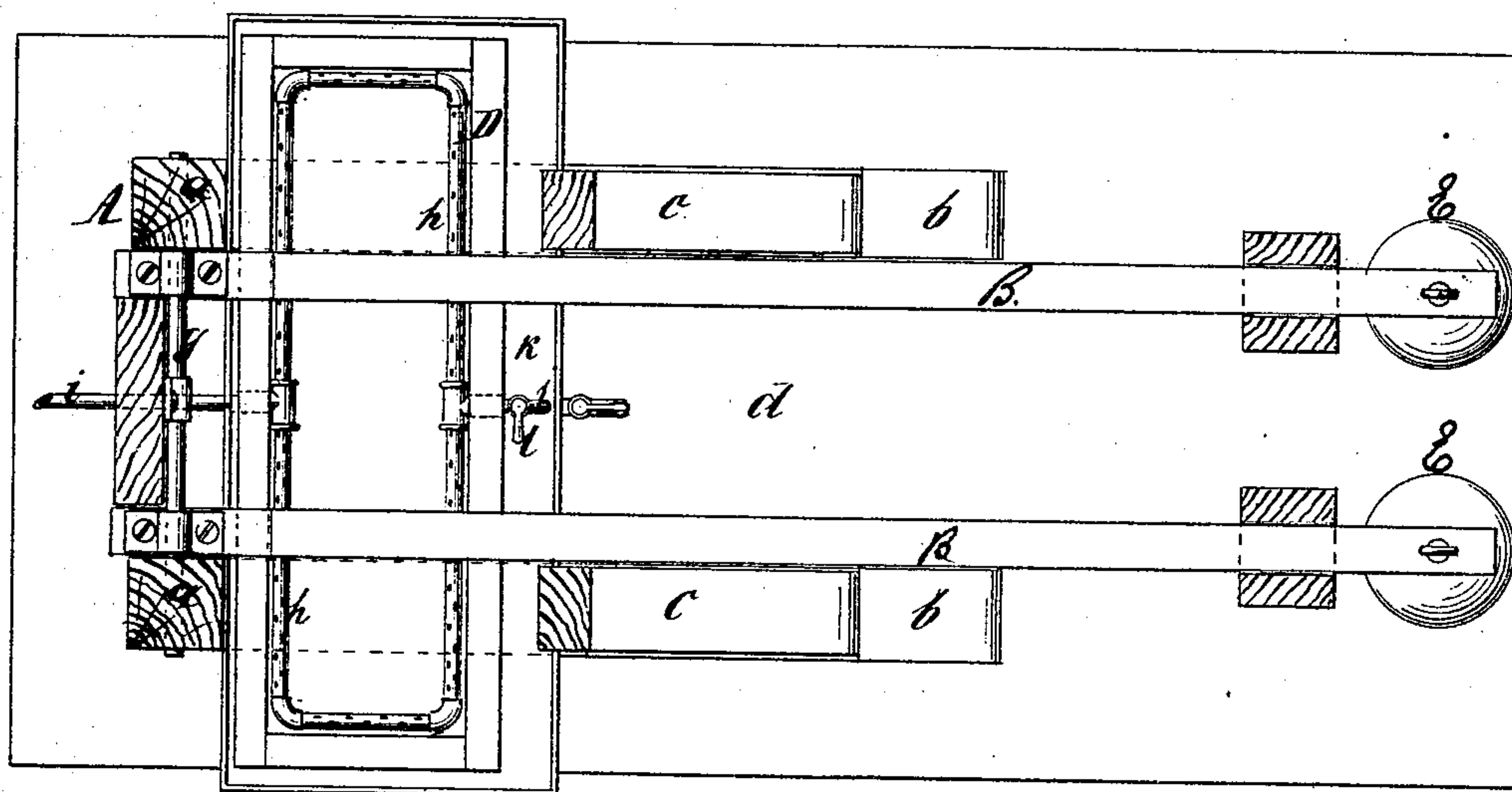


Fig. 2.



Witnesses:  
Ernst Bilhuber  
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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN LARD-PRESSES.

Specification forming part of Letters Patent No. **146,927**, dated January 27, 1874; application filed August 18, 1873.

*To all whom it may concern:*

Be it known that I, WILLIAM C. MARSHALL, of the city, county and State of New York, have invented a new and useful Improvement in Presses for Lard and other materials; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 represents a longitudinal vertical section of this invention. Fig. 2 is a horizontal section of the same.

Similar letters indicate corresponding parts.

This invention consists in arranging within the press-box a perforated pipe, which connects with a steam supply-pipe, and which is provided with a spout leading out of the press-box, and furnished with a valve or stopper that can be opened or closed at will, in such a manner that by admitting steam into said perforated pipe during the operation of pressing, while the spout of said pipe is closed, the lard or other material in the press-box is kept warm, and thereby the operation of pressing is materially facilitated, and when the pressing operation has been completed the spout can be readily opened, and the lard or other material which has found its way into the perforated pipe, can be readily discharged; also, in combining with the lever which acts on the material in the press-box, and with the uprights which form the bearings for the fulcrum-pin of said lever, two braces which are stepped into horizontal beams extending from the feet of the uprights in such a manner that the tendency of upsetting the frame of the press produced by the action of the weights on the levers is materially reduced, and the strain exerted by the press in the building containing the same is decreased. The lever bears against the fulcrum-pin with its upper edge, so that no hole is required which would weaken said lever.

In the drawing, the letter A designates the frame of my press, which consists of two uprights, *a a*, two horizontal beams, *b b*, and two oblique braces, *c c*. The uprights *a a* extend

from the floor *d* up to the ceiling *e*, and the horizontal beams *b b* are mortised into the uprights close down to the floor, and they rest upon the floor, as shown in Fig. 1. The braces *c c* run in an oblique direction from the upper parts of the uprights to the extreme ends of the horizontal beams. In the uprights are a series of holes, *f*, intended to receive a rod, *g*, which forms the fulcrum for the lever B, said holes serving to adjust the fulcrum-pin up or down, according to the desired position of the lever. The lever bears with its upper edge against the fulcrum-pin, and it is not perforated, so that its full strength is preserved. The lever B bears upon the follower C, which fits into the press-box D. In the bottom of this press-box is placed a coil, *h*, of perforated metal pipe, and this coil connects at one part with a steam supply-pipe, *i*, and at another part with a discharge-spout, *j*, that leads into a trough, *k*, surrounding the press-box, and is provided with a stop-cock, *l*, so that it can be closed or opened. A weight, E, which is suspended from the extreme end of the lever B, serves to produce the required pressure.

This press is intended particularly for pressing lard, and the material from which the lard is to be expressed is piled in the press-box on the coil *h*, then the follower is put on, and the lever B is brought to bear upon it. During the operation of pressing steam is admitted to the coil *h*, while the spout of said coil remains closed. The steam which escapes through the perforations in the coil serves to keep the lard warm, and thereby the operation of pressing is materially facilitated. After the operation of pressing is finished, the spout of the coil *h* is opened, and the lard which may have found its way into said coil is blown out. By the action of the weight suspended from the extreme end of the lever B, a strain is exerted on the frame A, which has a tendency to turn the same over, and in lever-presses as now constructed, the strain upon the building in which such presses are put up is very great, and sometimes dangerous. This disadvantage I have obviated, or at least materially reduced, by combining with the uprights *a a*, which form the bearings for the ful-

crum-pin of the lever B, the oblique braces *c*, and the horizontal beams *b*.

What I claim as new, and desire to secure by Letters Patent, is—

The frame A, having the uprights *a a*, horizontal beam *b*, and oblique braces *c c*, in combination with the lever B, fulcrum-pin *g*, press-

box D, and perforated heating-coil *h*, all constructed and arranged substantially as herein shown and described.

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Witnesses:

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