

C. MOORE.  
PRESS FOR EXTRACTING OIL, &c.

No. 19,708.

Patented Mar. 23, 1858.

Fig: I

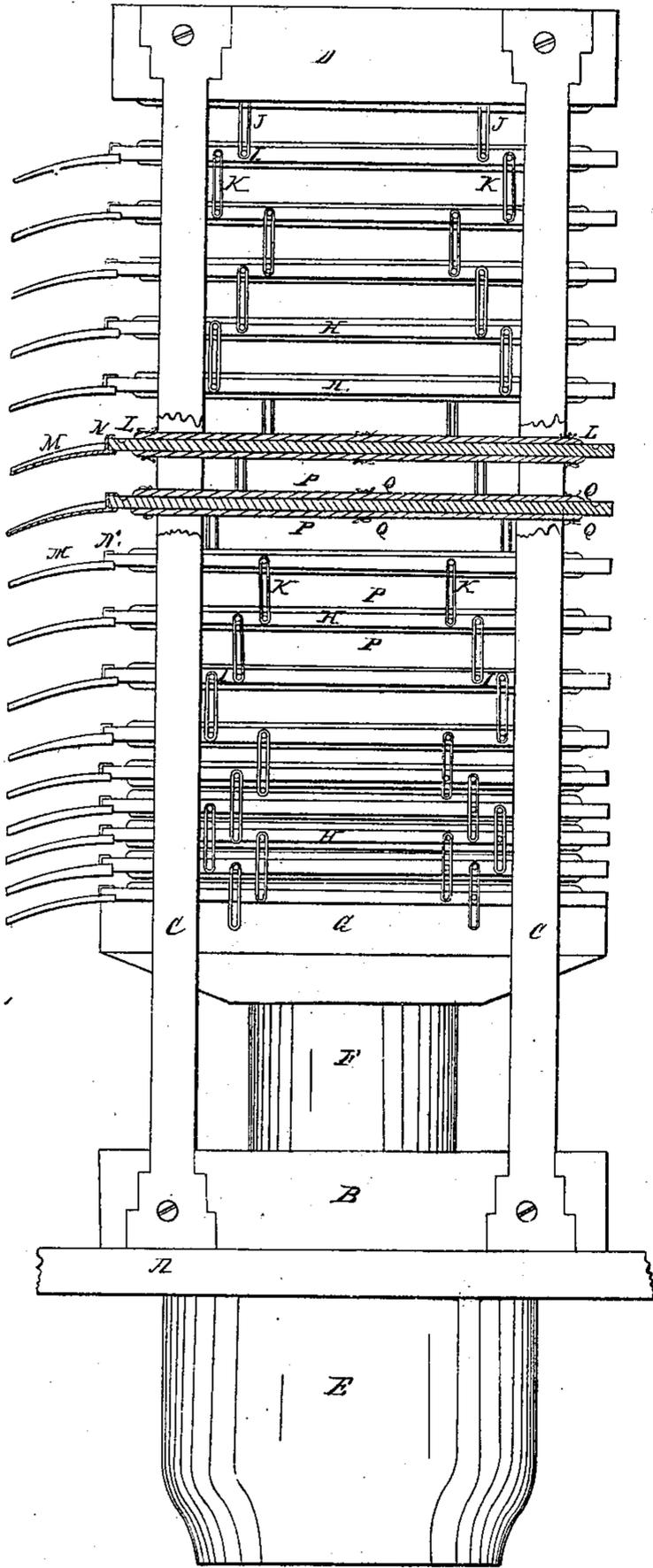
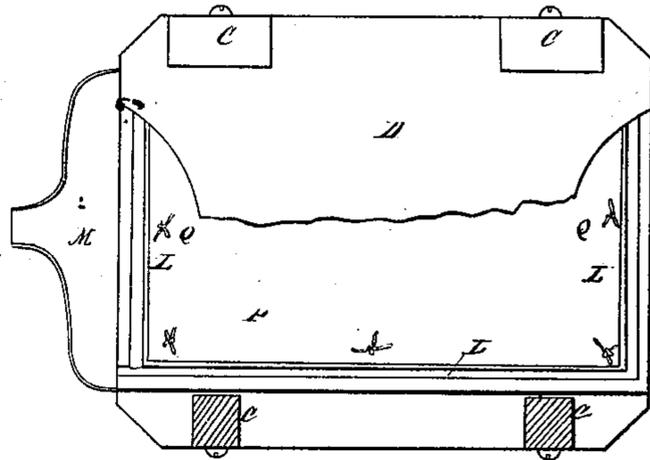


Fig: 2.



# UNITED STATES PATENT OFFICE.

CHAS. MOORE, OF TRENTON, NEW JERSEY.

PRESS FOR EXTRACTING OIL FROM LINSEED.

Specification of Letters Patent No. 19,708, dated March 23, 1858.

*To all whom it may concern:*

Be it known that I, CHARLES MOORE, of Trenton, in the county of Mercer and State of New Jersey, have invented certain new and useful Improvements in Presses for Extracting Oil from Prepared Linseed and Oil and other Fluids from other Substances and for other Purposes; and I do hereby declare that the same are described and represented in the following specifications and drawings.

To enable others skilled in the art to make and use my improvements I will proceed to describe their construction, use and operation referring to the drawings in which the same letters indicate like parts in each of the figures.

Figure 1 is an elevation of a press with my improvements. Fig. 2 is a plan. In each of these figures some parts are represented as broken away to show others in section.

The nature of my invention and improvements in presses consists in making grooves in the plates placed between the layers of substances to be pressed, so arranged as to conduct the oil or other fluid pressed from the substances on each plate to its proper destination without its running onto the plate below and further in fastening the hair cloth or padding to the plates of the press, so as to dispense with the leather entirely, to which the hair cloth or padding has usually been fastened heretofore, and in making a thick edge about two and a half inches wide around the hair cloth or padding by doubling it over or weaving it thicker, so as to press the oil out of the edges of the cloths, which cover the cakes or substances pressed. Also in connecting the upper plate to the top of the press by links or staples and pins and the plates to one another by links and pins, so arranged that the plates may be pressed together without cramping the links by which they are connected.

In the accompanying drawings A, is the floor or foundation on which the bottom B, of the press rests, to which bottom the standards C, C, are fastened which connect it to the top D, to which they are also fastened to form the frame of the press as represented.

The bottom B, is provided with a hollow cylinder E, and piston F, similar to those in common use in hydrostatic presses, and in-

tended to be operated by a similar or such an apparatus as will answer the purpose.

The bed G, of the press is fitted to traverse between the standards C, C, and is fastened to, and operated by the piston F, which is forced up, by forcing water into the cylinder under it, in the usual manner or otherwise.

There is a series of plates H, H, H, which are made the same size of the bed G, and provided with pins or studs I, I, arranged as represented in the drawing, so that the upper plate may be suspended to the top D, by the staples J, J, and the next below it to the top one by the links K, K, which links and staples embrace the pins I, I, in the plates so as to hang the plates in succession to the top of the press as represented in the drawing; the pins I, I, being so arranged in the plates as to permit them to come together in the operation of pressing, and allow the links to traverse freely on the pins, without interfering with each other. The plates H, H, may be made of such materials as will answer the purpose, but I prefer them when made of boiler iron five eighths of an inch thick with grooves L, L, along each side and across each end, so constructed as to conduct the oil or fluid pressed from the substance on each plate off at one end, onto the spouts M, M, which conduct it into a perpendicular trough which may be constructed with an opening in one side for the ends of the spouts to traverse in, which trough conveys it to the vessel or reservoir prepared to receive it. The spouts M, M, are made of sheet iron in the form represented with their edges turned up so as to conduct the fluid off as required, and there is a cleat N, of the same material fastened to them so that when the edges of the spouts M, M, are put under the plates H, H, the cleats N, N, will project so far over the tops of the plates, as to hold the spouts in their proper places without other fastening. The hair padding P, P, which permits the oil to escape from the substances pressed, is made of very thick hair cloth, and the edges of the padding are made thicker or twice as thick as the other part, about two and one half inches wide along each side and across the ends, so as to press the edges of the cloth clean, on the cakes of substances pressed. The edges of the padding may be made thicker by weaving the hair cloth from which it is made,

thicker at the edges and where it comes across the ends of the plates; or if the hair cloth is wove of uniform thickness the edges of the cloth may be doubled over and folded, so as to form the additional thickness required on the edges of the padding, which padding may be fastened to the plates with leather thongs put through holes in the plates for that purpose as represented at 5  
10 Q, Q, or fastened in some other convenient manner.

The press having been constructed and completed as above described the pulp, or prepared linseed, or other substance, is covered with cloth and made into cakes or spread in a mold with an open end so that the mold with the pulp or other substance in it, can be put in between the plates of the press and the mold withdrawn so as to leave the pulp; and when all the spaces between the plates have been filled the pump is set to work to raise the piston and press out the oil which is conducted off by the grooves and spouts described. After the pulp is properly pressed, the water may be let out and the piston allowed to descend when the cakes between the shelves may be removed and more pulp supplied as above described. I contemplate that the plates of the above described press may be hung with chains instead of the pins and links described. 15  
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The advantage of hanging the plates to the top of the press is a saving of one half of the labor of filling or clearing the press 35

as the plates are not removed; and by fastening the padding to the plates the entire expense of the leather heretofore used is saved. Also by grooving the plates and conducting off the oil, the expense of the press box heretofore used is saved; and by making the padding thicker at the edges I dispense with the expensive knit woolen bags, and substitute common sail duck, at one fourth of the cost of the bags; besides the edges of the cakes are pressed as dry and clean as any other portions, so that there is no occasion to press them over again. 40  
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I believe I have described the construction, operation and use of my improvements, so as to enable any person skilled in the art to make and use them. 50

I will now specify what I desire to secure by Letters Patent, viz:

1. The combination of the grooved plates with the hair padding or such other padding as may be used, fastened to the plates of the press with its edges made thicker than the body of the padding. 55

2. I also claim connecting the upper plate to the top of the press by links or staples and pins, and the plates to one another by links and pins, so arranged that the plates may be pressed together without cramping the links by which they are connected substantially as described. 60  
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CHARLES MOORE.

Witnesses:

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WM. C. HOWELL.