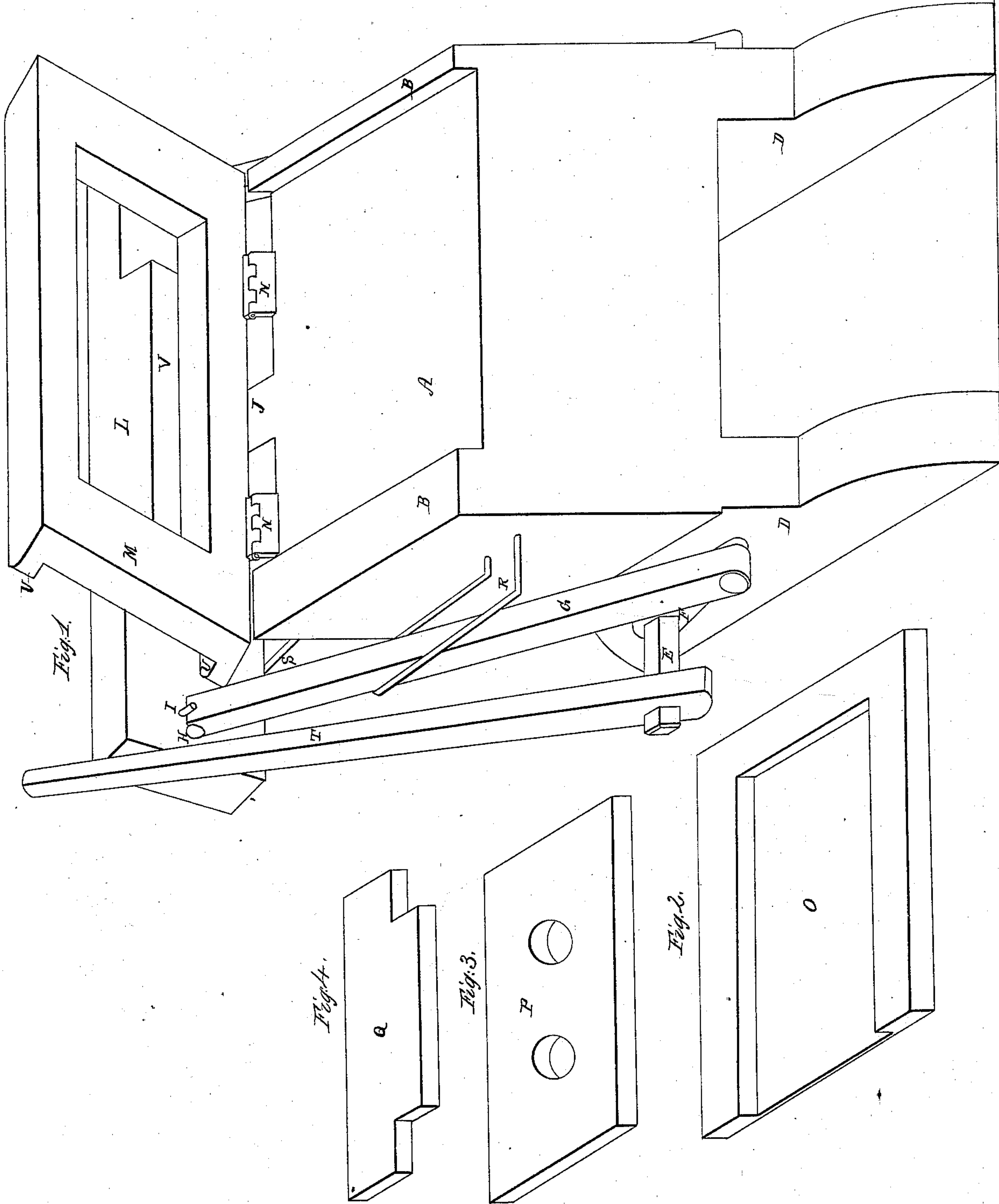


C. Moore,
Oil Press.

N^o 15,594.

Patented Aug. 19, 1856.



UNITED STATES PATENT OFFICE.

CHAS. MOORE, OF TRENTON, NEW JERSEY.

PROCESS OF PREPARING LINSEED, &c., FOR PRESSING IN EXTRACTING OILS.

Specification of Letters Patent No. 15,594, dated August 19, 1856.

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 the Process of Extracting Oil or other Liquids from the Pulp or Prepared Linseed or other Seeds and other Substances; and I do hereby declare that the same are described and represented in the following specifications and drawing.

To enable others skilled in the art to use my improvements I will proceed to describe the construction and operation of a machine for performing the process referring to the drawings in which the same letters indicate like parts in each of the figures.

Figure 1, is an isometrical view of a press. Fig. 2 is an isometrical view of the mold. Fig. 3 is an isometrical view of the former. Fig. 4 is an isometrical view of the strick.

The nature of my improvement consists in pressing or packing the pulp of prepared linseed, or other seeds or other substances, into cakes by pressing the pulp or other substance into a mold prepared for the purpose, taking care not to press it so hard as to force out the oil; but merely pack it into a cake and make it occupy a smaller space, so as to put more or double the quantity into a press of a given size, and press it at a single operation, without materially increasing the power required to operate the press, or prolonging the time required to perform the pressing.

By molding and packing the pulp as above mentioned, I can substitute cotton sail duck for the knit woolen bags so as to save seventy-five per cent. of the cost of bags; and dispense with the leather usually placed between the bags entirely so as to save the entire cost of it.

In the accompanying drawings A, is the bottom of a press with cleats B B at each end between which cleats the mold O, Fig. 2, is placed when it is to be filled with the material to be packed. The bottom A, is supported upon two standards D, D, which standards are perforated for the journals of the shaft E, which turns freely in them. There is a crank fastened to each end of the shaft E, just outside of the journals: one of these cranks is seen at F, embraced by the link G, which connects it to the head or follower L, of the press by means of the staple H, which allows it to vibrate, so as

to adapt itself in pressing, the vibration being limited when it is not pressing by the pins fastened in the head for that purpose one of which is represented at I. The bracket J, is fastened to the bottom A, to support the head L, in the position represented in the drawing. The hopper M, is made in the form represented and fastened to the bottom A by the hinges N, N, so that it may be raised to put in or take out the mold O, Fig. 2. The interior of this mold is made to correspond in size with the interior of the hopper M. One end of the mold O, is made a little wider than the other and left open, so that the cake pressed in it will slip out of the mold readily when the mold is put in the press, which is to press the oil, or other fluid out of the cake formed in the mold. The forming board P, Fig. 3, is made a little smaller than the interior of the mold O to form the cloth, when a cloth is used on the cake packed in the press. The strick Q, is made to fit the top of the hopper M, and is used to level the pulp and to strike off the surplus. The frame R, is fastened to the bottom A to guide the link and head as it is brought over the hopper. The stop S, is fastened to the head L, to aid in guiding it into the hopper M, as it is brought down by vibrating the lever T, fastened to the end of the shaft E. When the mold O, is put on the bottom A, the open end of the mold is closed while it remains in the press, by one of the cleats B, so as to form the cake packed.

The press having been constructed as above described, the mold O is put on the bottom A and one end of a piece of sail duck (or other suitable cloth which is a little wider than the mold and twice as long) is spread over the mold O, so that one end of the cloth will be even with the right hand or closed end of the mold, and the hopper M shut down upon it, and the cloth pressed into the mold by the former P, which is removed from the mold and the hopper and mold filled with pulp, which is spread and leveled by the strick Q, and the surplus pulp struck off at one end into a trough or other receptacle by the strick, which is made to fit between the cleats, U, U, on the hopper. The head M, is now brought over the hopper and the lever T is vibrated so as to force the projection V on the under side of the head down into the hopper, so as to press the pulp into the mold and make a

compact cake, but it should not be pressed so hard as to express, or force out any oil or other fluid that may be in the pulp, or other material that may be worked into cakes preparatory to being pressed. The head should now be raised and pushed back, and the hopper turned up, and the loose end of the cloth spread over the cake, so as to cover it entirely, when the cake formed may be carried upon the mold, and laid in a press, when the mold may be drawn out leaving the cake to be operated upon by the press which is to express the oil from the cake.

The advantages of the above mentioned process may be enumerated as follows: 1st, the subsequent pressing of a given quantity of material is performed in half the time—saving one half the labor and expense of presses, to perform the subsequent pressing: 2nd, one man can make the cakes, or prepare double the quantity of pulp for the press which is to extract the oil in the same time, thereby saving one-half the labor; 3rd, there is more oil obtained from the pulp or material pressed, as the cakes are uniform in thickness and compactness therefore they are pressed cleaner than when prepared in the old way, in which the material was unevenly spread, and the thick parts prevented the thin from being pressed clean; 4th, the cotton canvas used by the

new process costs only one fourth as much as the knit woolen bags heretofore used; 5th, as there is no leather required to be placed between the hair pads and plates therefore the entire cost of the leather is saved.

In performing the above described process, I do not intend to limit myself to the press or packing machine described, but to use such other kinds as will answer the purpose; and there may be substances which can be packed without a cloth.

I believe that I have described the process which I have invented and an apparatus by which it may be performed so as to enable any person skilled in the art to use the same. I will now specify what I desire to secure by Letters Patent, viz.

What I claim as my invention and improvement in the process of extracting oil or other liquids, from the pulp of ground or prepared linseed or other seeds, or other substances, is—

Forming it or them into cakes by molding and partially pressing or packing it or them substantially as described for the purposes set forth.

CHARLES MOORE.

Witnesses:

T. TEMPLE,
WM. C. HOWELL.