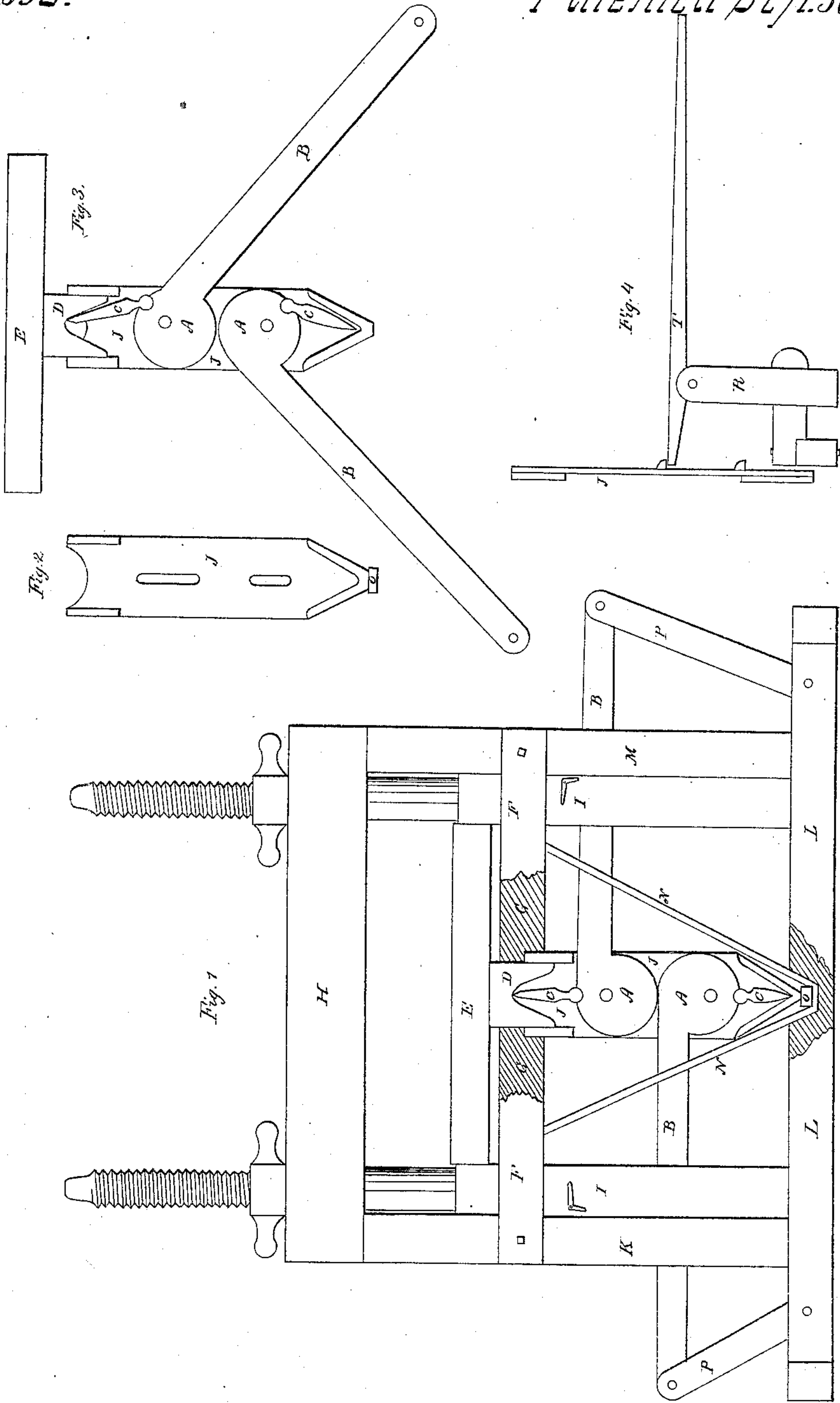


*W. Moore,
Hay Press.*

N^o 8,392.

Patented Sep. 30, 1851.



UNITED STATES PATENT OFFICE.

WILLIAM MOORE, OF BELLVILLE, OHIO.

IMPROVEMENT IN SELF-ACTING PRESSES.

Specification forming part of Letters Patent No. 8,392, dated September 30, 1851.

To all whom it may concern:

Be it known that I, WILLIAM MOORE, of Bellville, in the county of Richland and State of Ohio, have invented a new and useful Improvement in the press which I call the "Geometrical Press;" and I hereby declare that the following is full and clear description of the same, reference to the drawings being had, and the said drawings herewith presented constitute a part of said description, viz:

Figure 1 represents a front view of the press having a part of the front timbers and one of the plates removed in order to show the cams and levers in their places.

A A are two eccentric cams of metal formed on the ends of two levers, B B.

C C are two braces, also of metal.

The principle of this press may be perceived by observing that the purchase is got by the rolling of two cams one upon the other, and at the same time straightening up the two braces C C, forming a sort of temple-joint.

In Fig. 1 may be observed first the plate J. (Seen more distinctly at Fig. 2.) At the bottom of this plate is cast a flange, forming a seat in the form of the letter V. In this flange stands the lower brace, c. On this rests a cam, A. On this rests the other cam A, each having a suitable bosh (or bearing) for the head of each brace C. On this rests the upper brace, and on that is seen a plate of metal, D, which slides freely in the two cheek-like flanges cast at the upper part of the plate J. This sliding plate is secured by bolts and flange to the under side of the bed or table E of the press. (Seen at Figs. 1 and 3.)

By referring to Fig. 3, we see that when the cams are rolled down so that the levers are at an angular position then the braces stand obliquely, but when the levers are brought to a horizontal position or parallel to each other, then the braces are straightened up, as in Fig. 1, so that the purchase is in the compound ratio composed of the rise of the cams and the temple-joint.

In order to enable others to build and use this press, it may be proper to describe more fully the frame, and it should be observed that the power of this press is given by the weight of the goods added to that of the press, therefore the press moves up and down freely within a stationary frame.

K L M are the sills and posts of the stationary frame, and the two pillars I and I, passing up through the beam H, terminating in long screws at top, by which the beam may be either elevated or depressed, so as to suit any load or quantity of goods that is desirable to press at once. The girt F F, constituting part of the stationary frame, is represented as being broken off in the middle, and also a part of the frame G is removed and one of the plates J. Now, the pillars I I and beam H and beam G with plates J constitute a movable frame and press, sliding freely up and down. The ends of the levers B are connected to the stationary sills by the rods P. The plates J J are attached to the beam G at their upper ends; and also by two rods of metal, N N, which, being bolted to the beam G, reach down, forming a stirrup, in which is a step of metal, O, in which stands the foot of the plate J, so that when the plates rise or fall the whole movable frame rises or falls with it. The table E is not only movable with the frame, but is also movable between the pillars, and resting directly on the braces C, so the relative distances between it and the beam H are reduced by the action of braces and cams.

When I use this press, I raise up the whole by the lever T. (Seen at Fig. 4.)

T is the lever resting on the stand R, which is bolted to the front sill. The plate is seen edgewise, showing two knobs projecting from the face of it for the lever to catch under, in order to elevate the press, which, when raised, is kept up by two clicks secured on the pillars, and seen in Fig. 1. These rest in racks or notches on the stationary posts K M.

One advantage which this press possesses over others is the facility with which it may be adapted to the different kinds of use—for pressing goods, hay, cotton, paper, cider, and cheese-press, and for many other purposes. The power of the temple-joint being increased as the press descends gives a convenient way of using either a slight pressure when working it high, or by bringing it lower for a very hard pressure; and I propose to make them of various sizes for the different purposes, and of any suitable material.

I do not confine myself to using a single pair of levers, but purpose to use two or more pairs when occasion requires.

Having thus described the construction of my press, I desire it to be understood that I do not claim either the cams or the temple-joint when used singly; but

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

The combination of the eccentric cams rolling on each other so as to avoid friction, in connection with the braces or temple-joint, as

above described, for the purpose and substantially in the manner aforesaid.

In testimony whereof I have to subscribe my name in presence of two witnesses.

WM. MOORE.

Witnesses:

W. THOMPSON,
AZA ARNOLD.