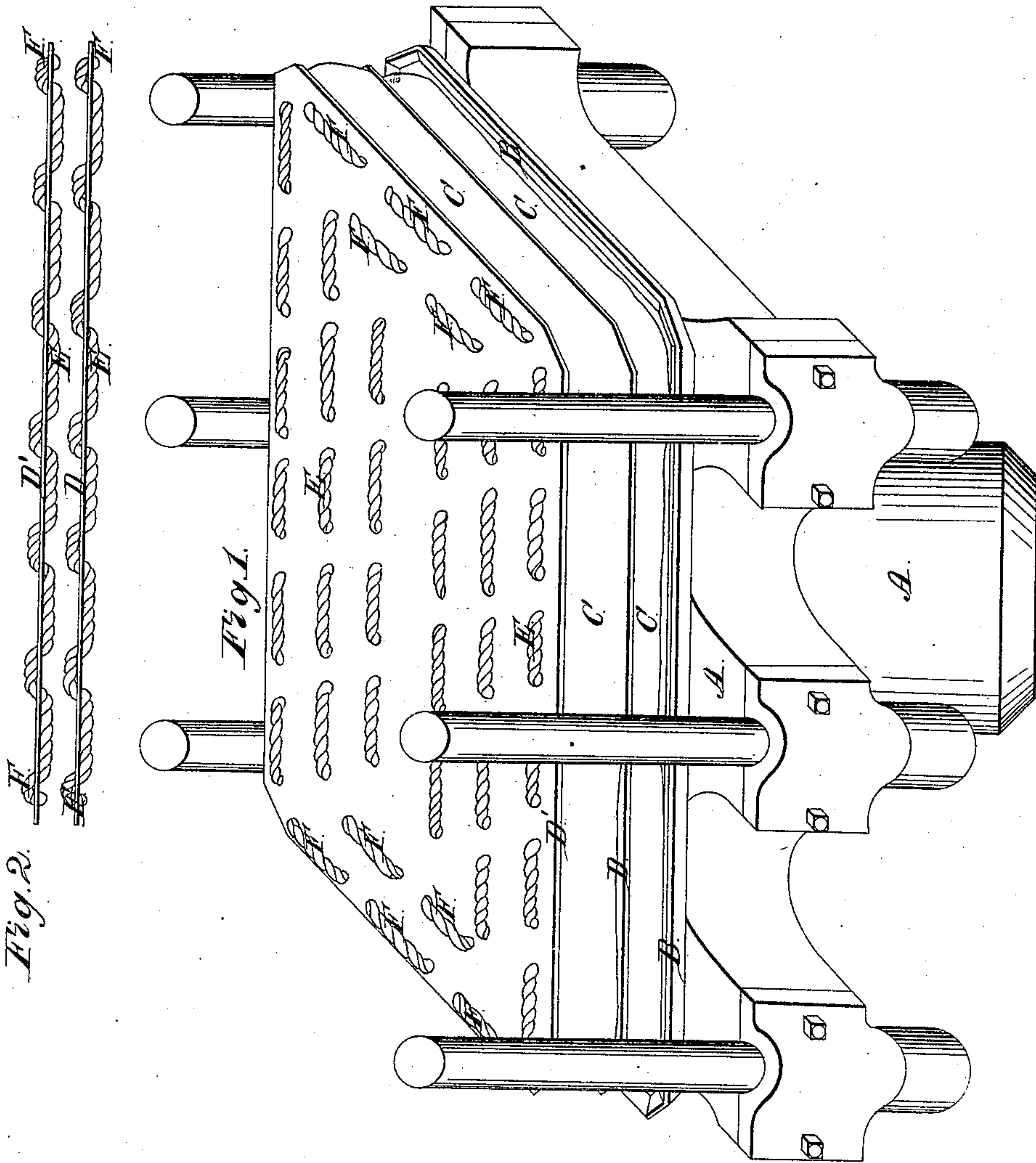


*A. Smith,*

*Oil Press.*

*N<sup>o</sup> 52,899.*

*Patented Feb. 27, 1866.*



*Witnesses.*

*W. C. Berry*  
*G. C. Berry*

*Inventor.*

*Amos Smith*

# UNITED STATES PATENT OFFICE.

AMOR SMITH, OF CINCINNATI, OHIO.

## IMPROVEMENT IN PRESS-PLATES.

Specification forming part of Letters Patent No. 52,899, dated February 27, 1866.

*To all whom it may concern:*

Be it known that I, AMOR SMITH, of the city of Cincinnati, in the county of Hamilton and State Ohio, have invented a new and useful Improvement on Press-Plates used for pressing fatty substances or other matter from which it is desired to express the oils, juices, or other fluid or semi-fluid substance; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation or use of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is an angular projection of a portion of an ordinary hydraulic press with two of my improved plates, together with two of the sacks or bags containing the material to be pressed, the cap and portions of the bars being omitted for greater plainness; and Fig. 2 is an edge or side elevation of two of my improved plates with nothing between them, and shown with the lower side in Fig. 1 upward.

The same letters refer to the same things in both the figures.

A A is the cylinder and head of the press; B B, the follower or head of the piston or ram; C C, the sacks or bags in which the material to be pressed is placed; D and D', two of my improved plates. E E, &c., are ropes or cords of hemp, cotton, or other textile substance, and usually about three-fourths of an inch in diameter; F F, &c., portions of the same rope or cord running transversely to the plate in this case; but these cords may run in any direction that the particular matter to be pressed may require, or as the fancy of the manufacturer may dictate. There should, however, always be one or more courses or lines of cords round

the border or edge of the plate parallel to its sides and ends, as shown. The plates D and D', as well as all the plates for the same press, should have the holes through which the cords E F pass to match, and the cords so put in that when in position in the press the cords shall match, as shown in Fig. 2. These plates are usually of iron, but may be of any suitable material.

My invention consists in perforating the plate as herein described and inserting the cords or lines as set forth and described, and may be applied to any ordinary press-plate and used in any kind of press.

The advantages are, first, the preventing the spreading of the material while it is being pressed and the tearing or bursting of the sacks or wrappers containing it; second, affording greater facilities for the escape of the oil or other substance from the mass along and around the cords; and, finally, owing to the serrated or roughened surfaces of the plates (by means of the cords projecting) and the projection of one cord falling into the recess between the other, the mass is more thoroughly pressed, while it is prevented from spreading by the same means.

I claim—

The press-plate D, when constructed with perforations and having ropes E and F woven through the holes and along the faces of the plates, substantially in the manner and for the purpose set forth.

AMOR SMITH.

Witnesses:

T. C. BERRY,  
W. CHIDSEY.