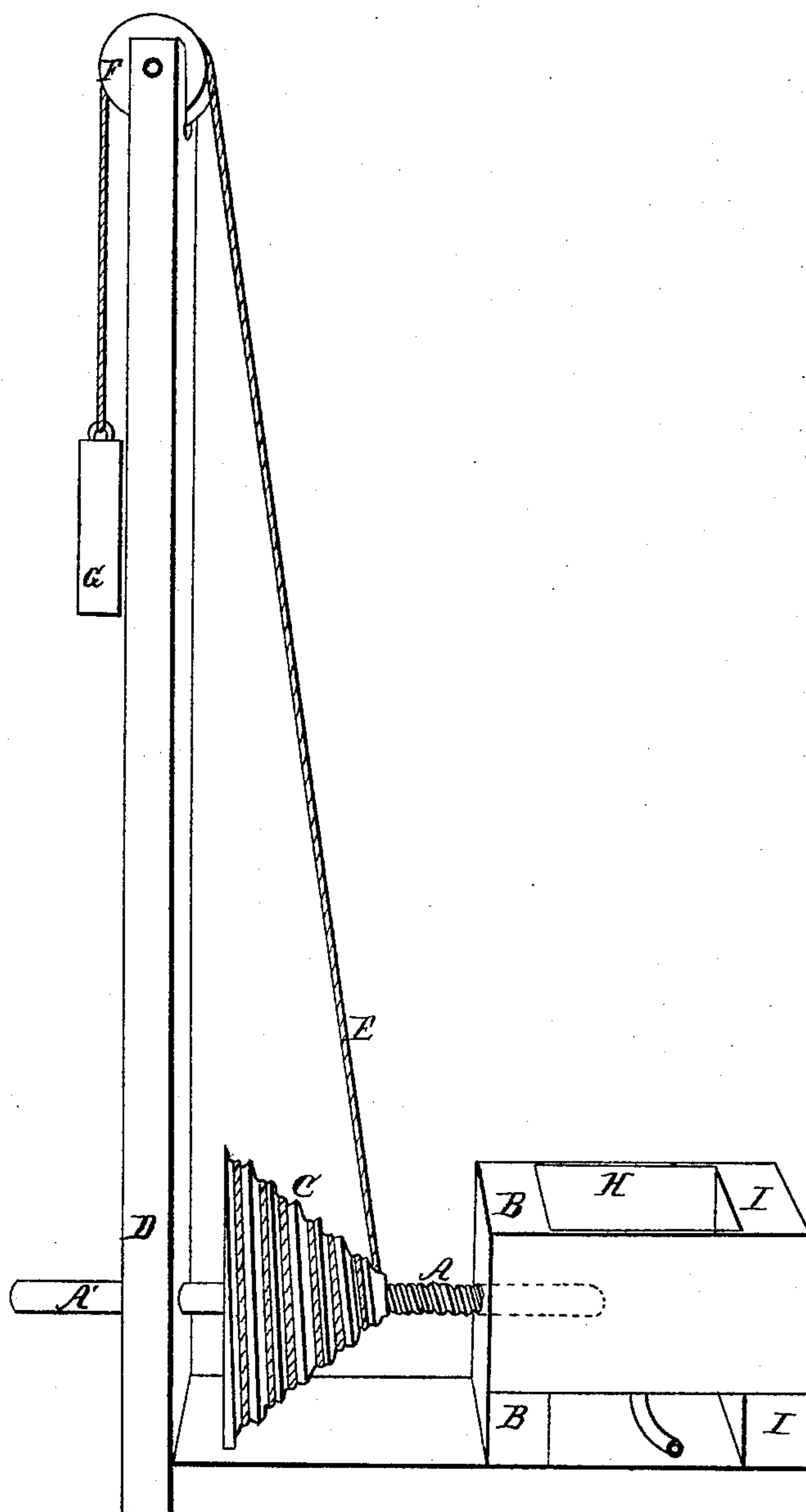


*R. Jones,*

*Lard Press.*

*N<sup>o</sup> 2280.*

*Patented Oct. 9, 1841.*



# UNITED STATES PATENT OFFICE.

RICHARD JONES, OF CIRCLEVILLE, OHIO.

## CONSTRUCTION OF SCREW-PRESSES AND THEIR APPLICATION TO THE PRESSURE OF ELAIN FROM TALLOW.

Specification of Letters Patent No. 2,280, dated October 9, 1841.

*To all whom it may concern:*

Be it known that I, RICHARD JONES, of Circleville, in the county of Pickaway and State of Ohio, have made certain improvements in screw-presses, and in the manner of applying the same to the pressing of lard, tallow, and other animal fats containing elain and stearin, so as to separate them from each other; and I do hereby declare that the following is a full and exact description thereof.

My improvement in the screw press consists in attaching to the shaft of the screw, a scroll, or fusee, wheel, to the larger end of which scroll, or fusee, wheel one end of a rope, or chain, is to be attached; and after being wound around said scroll wheel, or fusee, the other end of said rope, or chain, may be attached to a windlass, or to a second scroll wheel made to operate as a windlass, or the rope may be passed over a pulley, and be drawn upon by a weight affixed to its end. It is in this latter manner that I employ it in the pressing of lard, tallow, &c., for the separating of the elain and stearin; as by this means I obtain a continued, and gradually increasing pressure, which is the kind best adapted to the producing of the effect intended.

The accompanying drawing is a side view of my improved press, the screw being placed to work horizontally.

The shaft A, A, upon which the screw is cut may be divided into three equal parts, one third of which is to constitute the screw, that is to work through a nut in the standard B. The middle portion of the shaft may be made square, to receive the scroll, or fusee wheel C, which may be six feet in diameter at its larger, and six inches at its smaller end, or of any other size that will adapt it to the particular purpose to which it is to be applied. The part A', of the shaft is to be cylindrical, and is to revolve and slide freely in a hole, or box, in the standard D.

E, is the rope which after being wound upon the fusee wheel, from the larger to the smaller end thereof, is passed over a pulley F, on the upper end of the standard D; or said pulley may be affixed to a beam in the building containing the press, or in any other convenient manner. A weight G, being attached to this rope will cause it to draw upon the fusee wheel, and the form of

the latter will cause this force to increase progressively as the screw advances.

In adapting this press to the pressing of lard, tallow, &c., the screw A, is made to operate against a follower in a trough H. This trough is to be strongly put together, and extends from the standard B, to the standard I. It should be about ten inches square on the inside, and be lined with sheet metal. In preparing to press the lard, or tallow, I take about two pounds of the former, or three pounds of the latter, and inclose it in pieces of bed ticking, so as to form a package of about 8 inches square, there being several thicknesses of the cloth on each side of the contained material. The packages so formed are then put into the trough in the following manner. Against the follower is placed a solid plate of iron ten inches square, and a fourth of an inch thick, and against this is placed a plate of sheet iron, ten inches square, and one sixteenth of an inch, or less, in thickness, said plate having numerous holes punched through it so as to raise burs, in the manner of a grater, on one side of it, which side is to be placed against the solid plate of iron. Against this a package of the lard, or tallow, is to be placed; then a sheet of the perforated iron with the burs outward; against this a plate of the solid metal; and proceeding in this order the trough is to be filled, when the weight is to be made to draw upon the rope and the pressure commenced. The elain which is separated is to be allowed to run out through a spout in the bottom of the trough. The manner of arranging the solid and the perforated plates of metal admits of the free escape of the elain through the latter and between the two.

Having thus fully described the manner in which I construct my improved screw press, and in which I have adapted it to the separating the elain and stearin, in lard, tallow, &c., what I claim therein as new, and desire to secure by Letters Patent, is—

1. The combining of the scroll, or fusee wheel with the screw, by placing the former on the shaft of the latter, and employing it in the manner, and for the purpose, set forth.

2. I do not claim the use of a scroll, or fusee wheel, as applied to a press for the purpose of obtaining a progressive increase

of power, this having been before done; but I do claim the direct application thereof to the shaft of a screw, as set forth.

3. I likewise claim the manner in which I  
5 use alternate plates of solid and of perforated metal, between the packages of lard, tallow, &c., in the trough, so as to provide

spaces between each pair of plates for the ready escape of the elain, as described.

RICHARD JONES.

Witnesses:

THOS. P. JONES,  
M. E. JONES.