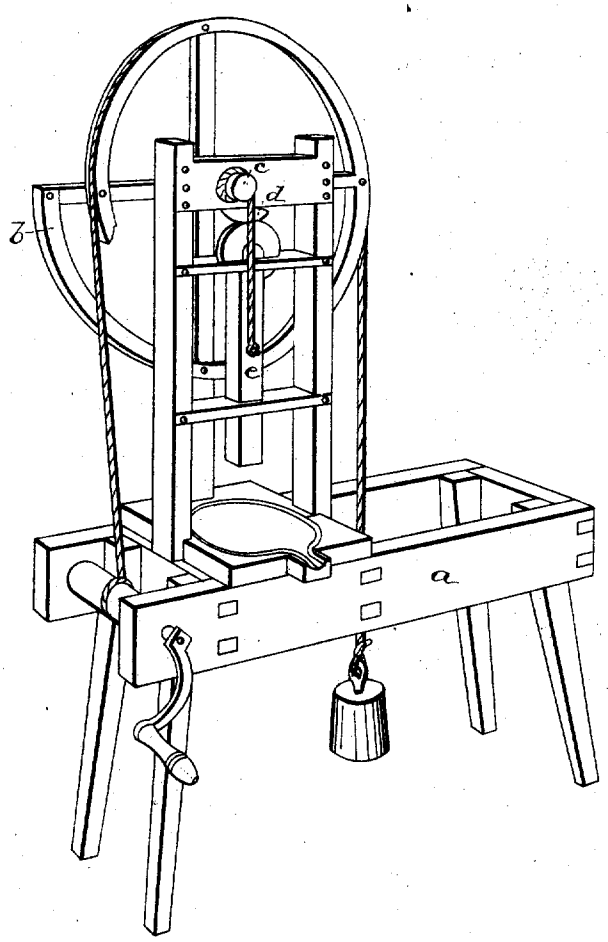
874X

R. P. Cunningham,

Cheese Press.

Patented May 21, 1808.



AM. PHOTO-LITHO. CO. N.Y. (OSBORNE'S PROCESS)

8747 May 21 1708

Robert Dalrymple Cunninghame

Letters Patent

The schedule referred to in these Letters Patent and making part of the same, containing a description in the words of the said Robert Dalrymple Cunninghame himself of his machine for feeding.

This Screw consists of the frame, the wheel, cranes, and axis the circumference whereof with the axis and the screw or screws. The frame of this screw may be made of metal or wood, as the use to which it is applied shall require it to be: and may be formed with any convenient; so as to render convenient any particular specification thereof. The wheel or any by which motion may be communicated will also be various, it may be either a wheel on the axis of which screw a rope or a chain for the purpose of sustaining a weight adequate to give the pressure; or a cog wheel which is turned by a crank or pinion on the screw jack, or Capstan axis, or a lever. The axis or spokes of the wheel may pass through perforations of the axis if the axis should be of metal or they may be fixed in mortices in the axis; or the wheel and axis may be of one substance cast or framed together. These things depending on the discretion of the constructor, or the purpose for which the screw is intended. The axis of these wheels, axis &c bear the circumference, screw or specified: as also on one end thereof a cylindrical barrel round which winds a rope or chain that drags back the burden or pressure, after the pressure is performed, or if necessary two ropes, or chains; one on each side the circumference, this barrel is of any diameter which the constructor chooses, smaller or less than that of the axis; as the power to be applied; or other circumstances shall determine — The thread

to

on which the cord of the working [illegible] and which of them such
thing or any machine, is a fork or any thing else to the axis above
mentioned, and of a spiral figure which shall draw the greater
and least upon it with an equal force in every situation, so as
either make which revolution, or a part only of a revolution accor-
ding to the distance the pressure has to be moved, the form and
that of drawing the power in a direct line with a continual &
uniform force; and may be thus described or delineated

First draw a circle of the diameter of the barrel round
which the rope or chain will. That being back the beaver of
the press after the pressure is effected. Then draw the line of a
diameter of that circle to intersect the periphery of a concentric
circle whose diameter is equal to the axis of the wheel a tan-
gent drawn from this point to intersect another tangent drawn from
the end of one of the radii of the barrel which shall be perpen-
dicular to the diameter first drawn, will give a point at which
the spiral commences, the part within the line of the tangent first
mentioned forming part of the tooth. Then draw as many tangents
to the barrel as may be thought necessary, and upon them lay
off a distance equal to the radius of the axis of the wheel, added
to that part of the periphery of the barrel which is between the
end of the perpendicular radius above mentioned and the point in
the periphery from which the tangent is drawn. The points then
found will be those through which will pass the spiral curve of the
thruster. Allowance must be made in describing the curve of the
thruster, for the thickness of the rope or chain which winds round
the barrel; this allowance cannot be particularly specified as
it will depend on circumstances. The thruster may be made of
any proper substance as hard wood, or metal. The pressure, or
beaver, or tongue of the press is a straight beam against one end
of which the thruster acts and propels it forward. A friction
wheel may be placed at the end of the beam, which is acted
upon by the thruster the point of contact of the thruster and

friction wheel being in the line of the motion of the bearer or frame and the axis of the friction wheel, the edge or circumference of this friction wheel which is acted upon by the thruster will be left rounded so as to approach the form of the middle portion of a spheroid, or cylindrick together with the cam or thruster, in this case the moving power may be applied to the friction wheel and produce an increasing pressure

I contemplate applying this press to all cases where a great force and constant pressure is required and where the distance through which the pressure or longue passes is not large as in the pressures for sheers scraps &c. for Block Benches &c. Slitting, Open Boiling &c. and the pressure upon drills and in Mechanical operations, so it may be used for moving heavy bodies a small distance either by the thruster or as a wheel and axis or both in the same

Robert Pierpont Cunningham

Witnesses
Nicholas King
William Thornton
(Drawing made.)

(Patented May 21. 1808.)