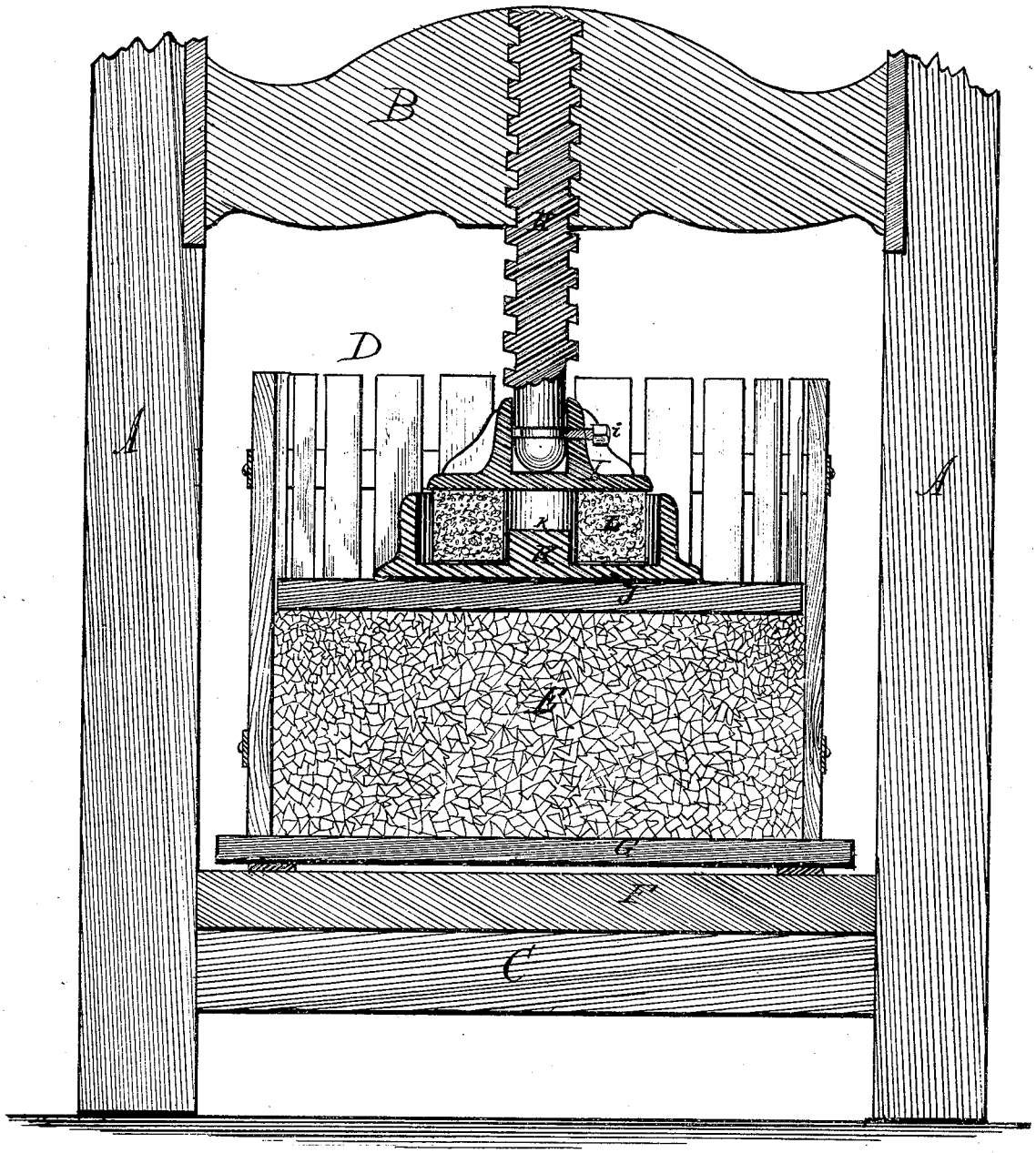
T. W. Grinter,

Wine Press.

No. 111,640. Patented Feb. 7, 1871.



F. Van Kamel } Attest
John Cannon }

Inventor.

Thomas W. Grinter

United States Patent Office.

THOMAS W. GRINTER, OF RUSSELLVILLE, KENTUCKY, ASSIGNOR TO JAMES L. HAVEN, OF CINCINNATI, OHIO.

Letters Patent No. 111,640, dated February 7, 1871.

IMPROVEMENT IN WINE AND CIDER-PRESSES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, THOMAS W. GRINTER, of Russelville, county of Logan and State of Kentucky, have invented a new and useful Improvement in Wine and Cider-Press; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawing making a part of this specification.

The nature of my invention relates to that class of wine and cider-presses in which the grapes or apples are placed in a perforated vessel and the juice pressed therefrom by means of a screw or other mechanical power.

My improvement has for its object the saving of time and an increased yield of wine or cider, and consists in placing a spring of any suitable nature and capacity under the foot of the screw.

In construction my invention is substantially as follows:

A A are two upright posts supporting the cast-iron beam B and the wooden cross-timber C.

The drawing represents a vertical cross-section taken through the center of the screw.

D is the curb.

E, the pomace.

At F is seen the bed of the press, and

G, an elevated bed, on which the curb D rests.

H is the screw, and

I, the ordinary cast-iron foot, held in place by the set-screw *i*.

My improvement consists in placing on the disk J the cap K, with a projection, *k*, on the bottom, and placed in the center therein.

A rubber spring, L, fits over the projection *k*, but does not entirely fill the cap K.

In operation my improvement is as follows:

When the curb is first filled with pomace and moved under the press the cap is not used, as but little pressure is required to bring the pomace down a considerable distance; and after this the screw is turned back so as to give room for the introduction of the cap K, with the rubber spring L, under the foot I.

The screw is then again brought down as far as the operator has strength, with a lever which compresses the rubber almost to its greatest capacity.

The operator may then proceed to grind apples, and the spring L will continue the pressure, giving the pomace time to settle until the force of the spring has been expended.

It is found in practice that to overcome the capillary attraction existing between the fluid and pomace is such as to require a certain amount of time to separate them, or, in other words, the operation must be slow.

Now, in order to accumulate the force exerted by the operator on the screw, and to have this force continued after the screw has been left, I place a spring of any suitable construction or material, such as rubber, steel, brass, &c., between the end of the screw and the pomace, or may be attached between the nut on a screw-press and the cross-beam, or under the bed of the press, as may seem best to serve the purpose here intended; or a scroll-spring, such as used in clocks, may be wound around the screw or other parts communicating with it, so as to cause a continuous downward pressure of the screw by the reaction of the spring.

Having thus described my invention,

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

The combination, in a wine and cider-press, of the springs L with screw H and screw-plate I, substantially as shown, for the purpose set forth.

THOMAS W. GRINTER.

Witnesses:

T. VAN KANNEL,

JOHN CANNON.