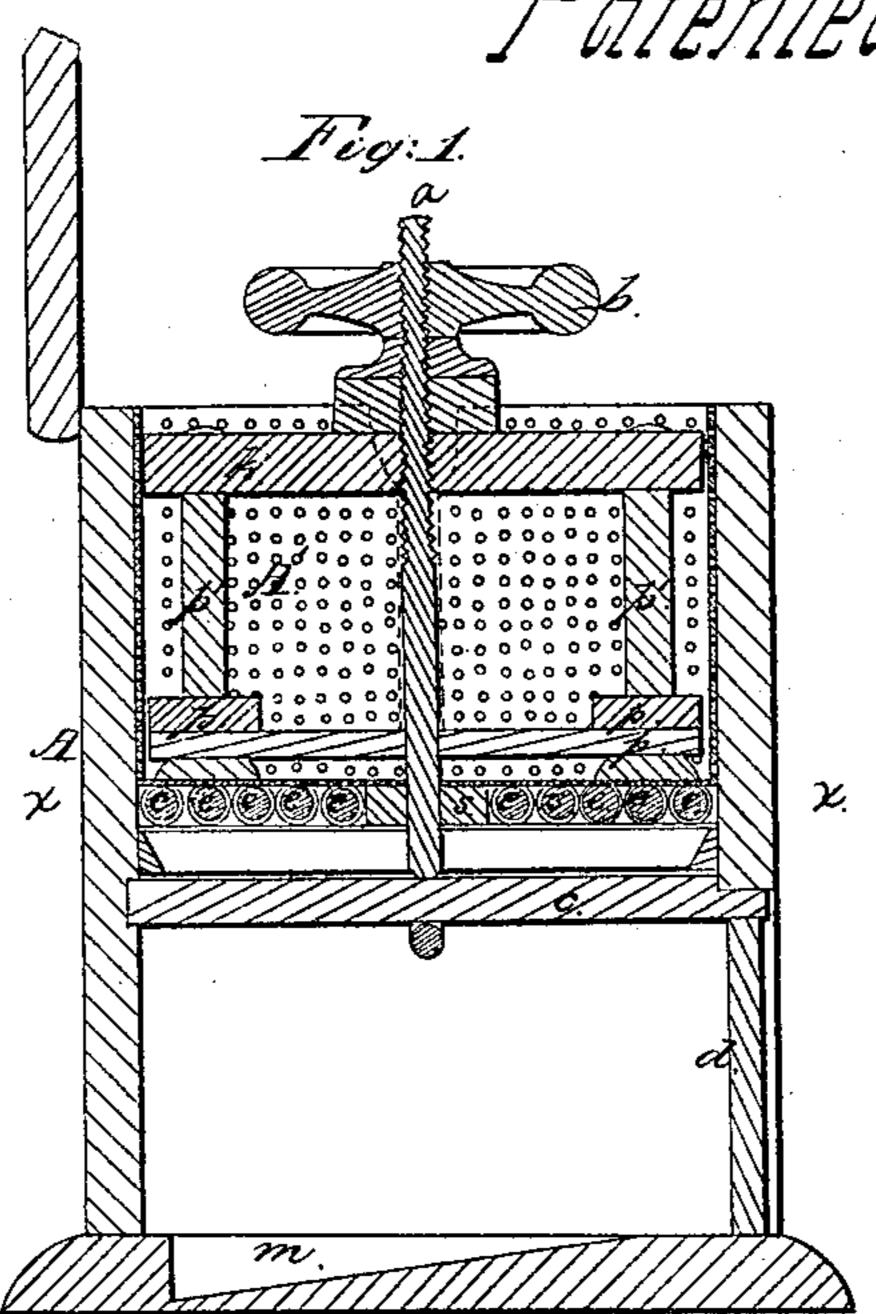


Mine Press.

N = 52,202.

Patented Jan.23, 1866.



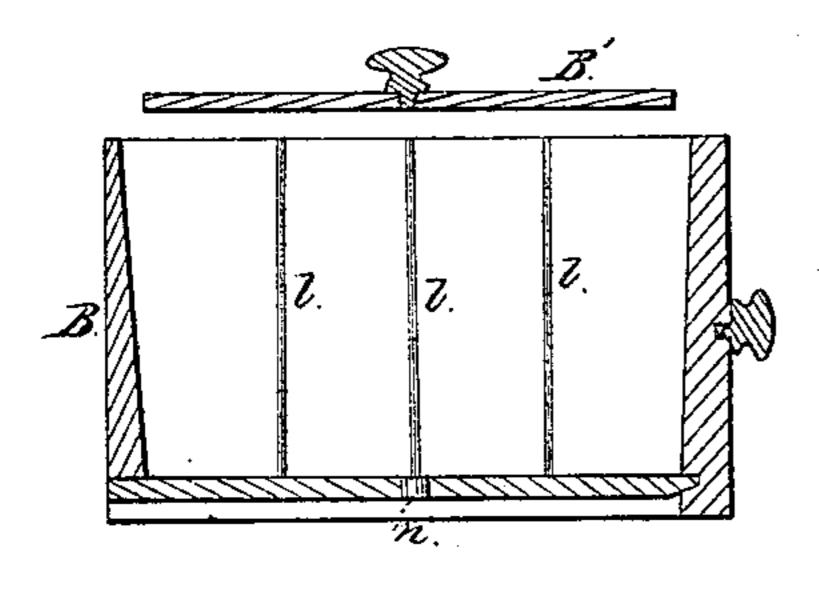
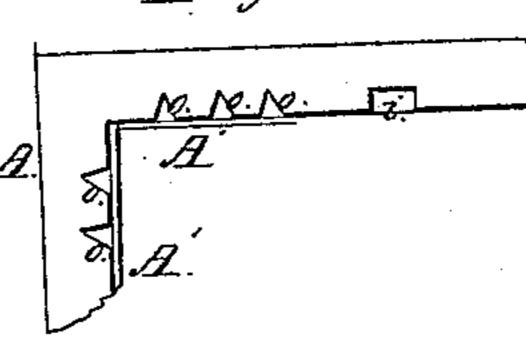
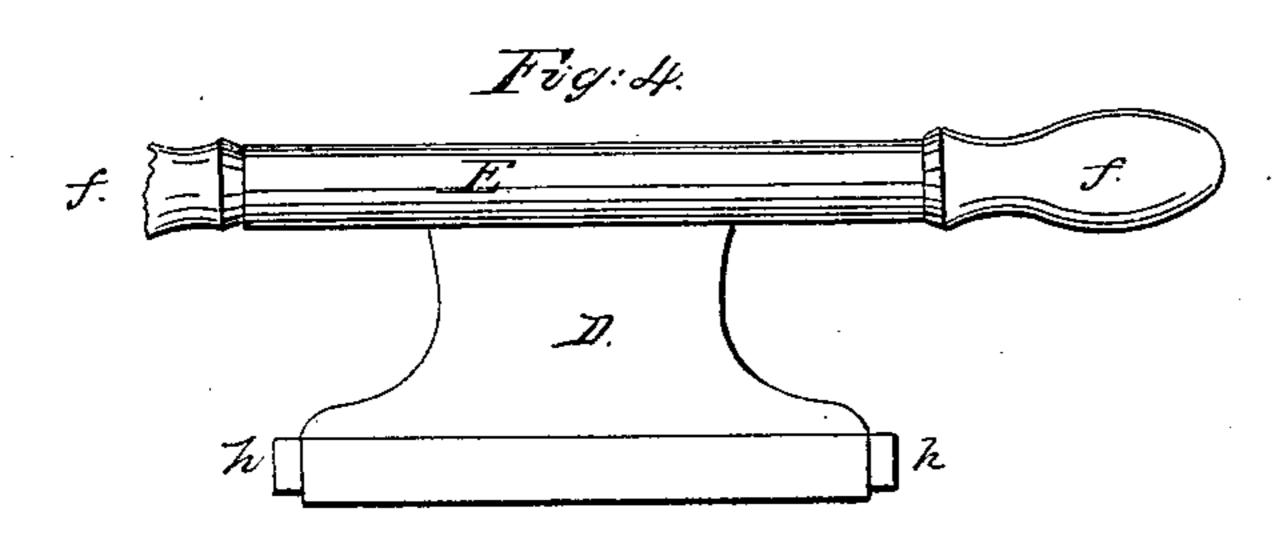


Fig: 2.





Witnesses;

Fig:5.

Inventor, A. L. Rand, By M. C. Dodge, Storney.

United States Patent Office.

A. L. RAND, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN WINE-PRESSES.

Specification forming part of Letters Patent No. 52,202, dated January 23, 1866.

To all whom it may concern:

Be it known that I, A. L. RAND, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in a Press for Household Use; and I hereby declare the following to be a clear, full, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon.

Figure 1 is a transverse vertical section of the same; and Figs. 2, 3, 4, and 5, are views of detailed portions of the same.

Like letters refer to like parts wherever they occur.

A represents a square box of any required size, made preferably of wood. This box has vertical V-shaped grooves o cut in its inner face, as shown in Fig. 2, which is a top-plan view of a portion of the box A. These grooves o extend about half-way, more or less, from the top toward the bottom of the box A. Midway of the two opposing sides of the box a vertical square groove, i, is cut, as shown in Fig. 2. These grooves i, like the grooves o, extend down to the line x x, where they intersect a similar square groove cut transversely in the same sides of the box A.

A series of strong rollers, e, are provided, of proper length to reach across the box, with their ends resting in the transverse grooves at each side. These rollers e are dropped, one at a time, in the vertical grooves i, and are shoved down therein until they reach the transverse grooves described, when they are moved laterally to the right and left until the transverse grooves are thus filled and form a flooring extending across the box at or near its center, as shown in section in Fig. 1.

A'represents perforated metallic plates, with which the upper portion of the box is lined, the plates resting against the sides thereof, as shown in Figs. 1 and 2.

D, Figs. 4 and 5, represents a presser, consisting of a piece of wood or metal of a size to fit loosely in the box A, its under side being grooved, as shown in the end view, Fig. 5, the grooves corresponding in size with the rollers e. This presser D has a metallic tube attached to it, as shown in Figs. 4 and 5, into which wooden handles f are fitted loosely, so that

they can be withdrawn, when desired, for packing.

A drawer, B, is made of proper size to fit in the lower portion of box A, Fig. 3 being a transverse vertical section of the same with its follower B', which is made of a suitable size to fit easily therein. A hole, n, is made in the bottom of this drawer for a purpose to be hereinafter stated. This drawer has grooves l cut on the inside of either two of its opposing sides, these grooves being so located as to divide the drawer into four equal parts.

With these parts the press may be used for pressing grapes, currants, and berries of any kind, by simply placing them in the upper portion of the box A and pressing on them with the follower D, the projections h of which fit into the vertical grooves i, and thus guide it and keep it from jamming against the metal plates A', the juice flowing not only between the rollers e, but also through the perforated plates A' into and down the grooves o into the drawer B below, which, of course, must be inserted in the lower part of the box and have the hole n in the bottom thereof stopped by a cork or other suitable means. In this condition the press may also be used for working butter and pressing lard and similar substances, to separate therefrom the buttermilk or water contained therein, in which case the hole n in the bottom of the drawer should be left open, so that the fluid may drain through into the recess m in the bottom of the box A, as shown in Fig. 1. It is obvious that the butter and similar substances, when forced through between the rollers e, will fall into the drawer in the form of thin sheets, when it may be compressed by the follower B'. When the drawer has been thus packed full it may be divided into two or four equal parts by simply pressing a thin metallic plate of proper length and width down through it, the grooves l serving as guides for said plate. By making the drawer of the requisite size to hold a given quantity—as, for instance, a pound—it can thus be readily divided into quantities of a half or a quarter pound, without the use of scales or any weighing implement, with sufficient accuracy for ordinary family or cooking purposes. For the purpose, however, of applying greater pressure, when needed, I provide the screw a, having an eye at its lower end, through which a strong rod, c, is passed, the rear end of said rod resting in a hole or recess in the back side of the box A, as shown in Fig. 1, its opposite end being supported by the piece d, set upright thereunder, as shown. When desired to pack the press for transportation the rod c is inserted within the tubular handle E, the wooden handles f being removed for that purpose. Upon the upper end of this screw a is fitted a hand-wheel, b, having a corresponding screw cut in it. A follower, k, is provided, of proper size to fit within the box, having a hole in its center for the passage of the screw a. A frame consisting of the cross-pieces p p, secured at the corners by the upright pieces p', is placed inside of the box for the twofold purpose of keeping the plates A' in position and guiding the follower k, holes for the uprights p' being bored in k, so as to permit k to be pressed down by the screw.

If preferred, the frame may be dispensed with and the screw used without it.

It should be remarked that when the screw a is used three of the rollers e are removed and a bar, s, having a hole in its center, is used instead, as shown in Fig. 1.

Having thus described my invention, what

I claim is—

1. The box A, provided with the perforated plates A' and rollers e, in combination with the drawer B, all arranged and operating as and for the purpose set forth.

2. The follower D, having its under face grooved, as shown, and provided with the

tubular handle E, as herein set forth.

3. The screw a, bar s, and rod c, all arranged as shown, and made detachable, for the purpose of converting the press from a hand to a power press, and vice versa, at will, substantially as herein described.

A. L. RAND.

Witnesses:

CHAS. STAFFORD, T. B. BROWN.