A. V. M. SPRAGUE.

HAND FRUIT-PRESS.

No. 188,073. Patented March 6, 1877.

Fig. 1.

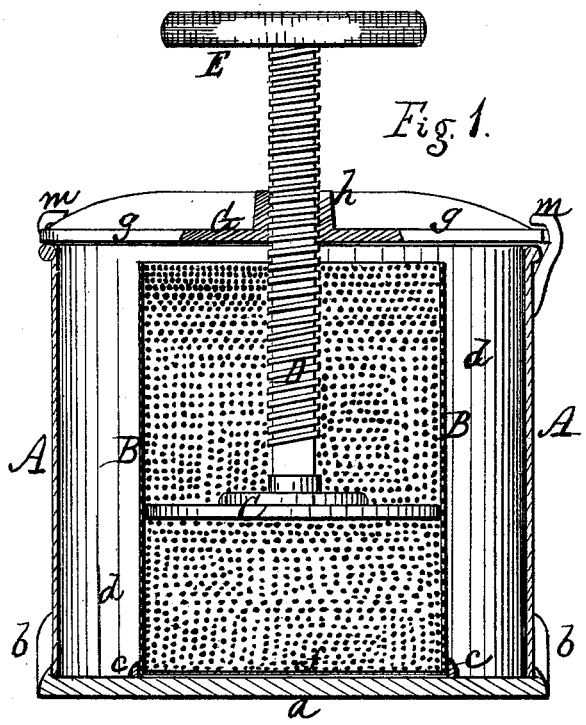


Fig. 2.

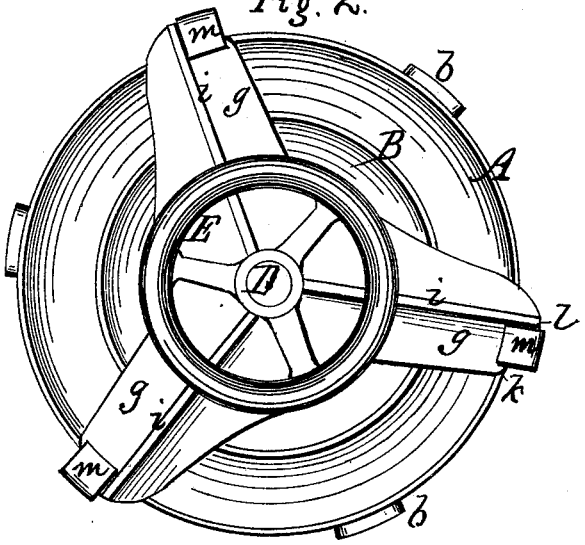
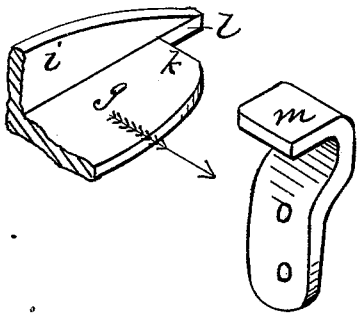


Fig. 3.



Witnesses.
Edwin. Scott.
John C. Burns.

Inventor.
Austin V. M. Sprague.
per R. H. Osgood,
Atty.

UNITED STATES PATENT OFFICE.

AUSTIN V. M. SPRAGUE, OF ROCHESTER, NEW YORK, ASSIGNOR OF ONE-HALF HIS RIGHT TO J. EMORY JONES, OF SAME PLACE.

IMPROVEMENT IN HAND FRUIT-PRESSES.

Specification forming part of Letters Patent No. **188,073**, dated March 6, 1877; application filed June 6, 1876.

To all whom it may concern:

Be it known that I, AUSTIN V. M. SPRAGUE, of the city of Rochester, in the county of Monroe and State of New York, have invented a certain new and useful Improvement in Hand Fruit-Presses; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a central vertical section. Fig. 2 is a plan. Fig. 3 is a detail view.

My improvement relates to small presses for household use operated by hand. Heretofore such presses have been made with the parts so connected that they cannot be readily separated for easy insertion or removal of the material, or for cleaning.

My invention consists of a hand fruit-press constructed and arranged as hereinafter more fully described, whereby the above-named objections are obviated.

A represents the exterior closed receptacle. It is usually made of tin, with a cast-iron bottom, *a*, shouldered to receive the end of the cylinder, and provided with lugs *b b*, which are riveted to the tin.

B is the interior, perforated receptacle. It rests loosely in a groove, *c*, in the bottom of the exterior receptacle, leaving a jacket-space, *d*, all around between the two. It has a closed bottom, *f*, and it is perforated over its whole surface to allow ready escape of the juice outward. It rests loosely in the outer receptacle, and can be inserted or removed at pleasure.

C is the follower. D is a screw, and E a hand-wheel by which the screw is turned. The follower is simply a flat disk of iron, and it is swiveled or jointed on the lower end of the screw, so as to turn freely thereon. The thread of the screw extends from top to bottom.

G is a bearing or spider resting on top of the open end of the outer receptacle. It is a horizontal plate, having three or more arms, *g g g*, radiating from the hub *h*, and provided with stiffening-flanges *i i i*. The center hub forms the nut for the screw to work in. The outer ends of the arms are notched, so as to form two right-angled edges, *k l*, as shown in Fig. 3. The top of the exterior receptacle is provided with as many open hooks *m m m* as there are arms. These hooks are riveted or otherwise attached to the top of the receptacle. When the bearing G is turned in the direction of the motion of the screw in forcing the follower down, the edges *k* of the arms strike under the projecting open hooks *m*, while the edges *l* strike against the edges of the hooks, thus serving as stops. In this condition the bearing G is prevented from turning farther around, and is also prevented from rising, and it therefore serves as the fulcrum to the screw. The bearing can be detached at any time by simply turning it back free of the hooks. The follower, screw, and bearing form one fixture, all connected together, capable of being inserted in or taken out of the inner cylinder.

The inner perforated cylinder B is first filled to the desired extent with the fruit to be pressed, and is set loosely into the outer closed receptacle, being centered by the groove *c*. The bearing G, with the screw and follower attached, is then placed over the outer cylinder, and within the interior cylinder. The ends of the bearing G are carried under the hooks, as before described, and the screw is then turned, forcing the follower down upon the fruit.

The expressed juice passes through the perforated cylinder into the space between it and the outer cylinder, and can be turned off.

When the fruit is fully pressed, the bearing and follower are removed, the inner cylinder is taken from the outer one, and the contents can then be easily discharged. The heavy iron bottom of the outer cylinder is essential to resist the pressure thereon.

The essential novelty in this case is the construction of the cylinders A B and the bearing G, with the screw and fulcrum attached, forming one fixture, whereby said parts can all be separated and removed from each other for inserting or removing the fruit, or for cleaning.

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

The exterior receptacle A, constructed with

the stiff iron bottom *a*, provided with the groove *c*, in combination with the interior perforated cylinder B, fitted removably in the said groove, and the screw D, follower C, and bearing G, forming one attachment, resting upon the outer and within the interior cylinder, the whole arranged to operate in the manner and for the purpose specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

AUSTIN V. M. SPRAGUE.

Witnesses:
EDWIN SCOTT,
JACOB SPAHN.