No. 649,600. Patented May 15, 1900.

A. J. DUCKWORTH.

PRESS.

(Application filed Feb. 16, 1900.)

(No Model.)

Fig. 1.

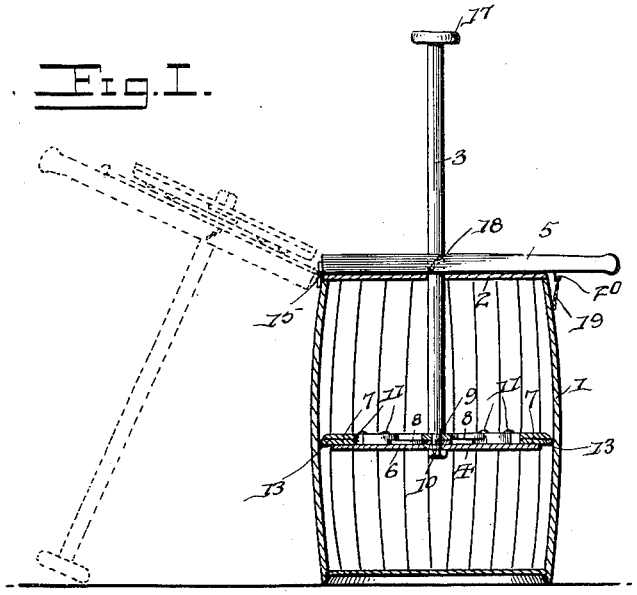


Fig. 2.

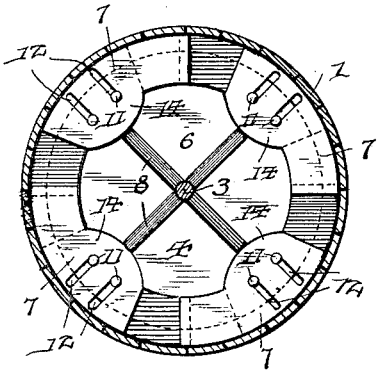


Fig. 3.

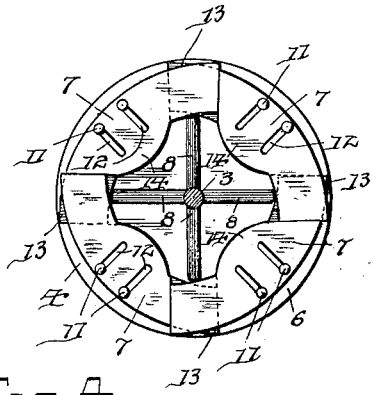


Fig. 5.

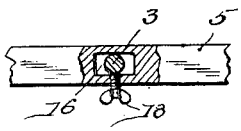
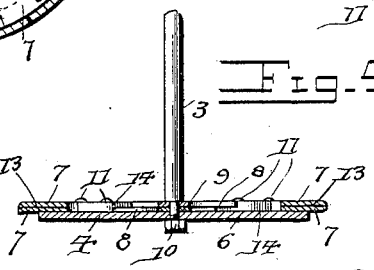


Fig. 4.



Witnesses
F. E. Alden.
J. A. Riley

A. J. Duckworth Inventor
By his Attorneys,
C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

ANDREW JACKSON DUCKWORTH, OF ROGERS, ARKANSAS.

PRESS.

SPECIFICATION forming part of Letters Patent No. 649,600, dated May 15, 1900.

Application filed February 16, 1900. Serial No. 5,526. (No model.)

To all whom it may concern:

Be it known that I, ANDREW JACKSON DUCKWORTH, a citizen of the United States, residing at Rogers, in the county of Benton and State of Arkansas, have invented a new and useful Press, of which the following is a specification.

The invention relates to improvements in presses.

The object of the present invention is to improve the construction of presses and to provide a simple, inexpensive, and efficient one designed for use on a sauer-kraut barrel and capable of being readily introduced in the barrel and of being expanded to fit the bulge of the same at any point between the top and bottom thereof.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a vertical sectional view of a press constructed in accordance with this invention and shown applied to a barrel, the press being swung backward in dotted lines to illustrate the arrangement thereof when the barrel is open. Fig. 2 is a horizontal sectional view. Fig. 3 is a detail view of the head of the plunger, showing the same contracted to enable it to be placed in and removed from a barrel. Fig. 4 is an enlarged sectional view of the plunger-head. Fig. 5 is a detail sectional view illustrating the manner of securing the plunger-rod to the lever.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a barrel designed to contain sauer-kraut and provided with an ordinary cover 2, having a central aperture through which passes a plunger-rod 3, carrying a plunger-head 4 and adjustably connected with a lever 5. The plunger-head 4 consists of a disk 6, a series of expansible radially-moving sections 7, and arms 8, adapted to force the sections outward from the position illustrated in Fig. 3 of the drawings to that shown in Fig. 4. The disk, which is of less diameter than the mouth of the barrel, is provided with a central opening through which passes the reduced lower end 9 of the plunger, and this reduced lower end, which forms a journal or gudgeon, is threaded for the reception of a nut 10, which retains the disk on the plunger. The expansible sections, which are provided with curved outer edges, are slidingly connected with the disk at the upper face of the same by means of pins 11 or other suitable fastening devices, which pass through radial slots 12 of the sections, and the ends 13 of the latter are reduced and overlapped, as illustrated in Fig. 3, to bring the upper faces of the sections in the same horizontal plane. The overlapped ends of the sections may be constructed in any suitable manner to effect this result. The radial arms which expand the sections 7 are located within the same and are suitably fixed to the lower end of the plunger-rod, whereby when the latter is rotated the outer ends of the arms will be engaged with projecting cam portions 14 at the inner edges of the sections. The arms by engaging the projecting cam portions of the sections force the latter outward into contact with the sides of the barrel, as illustrated in Fig. 1 of the accompanying drawings. When it is desired to remove the plunger, the rod 3 is rotated to disengage the radial arms from the projecting cam portions, and the sides of the barrel will force the sections inward as the plunger is withdrawn.

The lever 5, which projects beyond the front of the barrel, has its rear end connected to the same by a hinge 15, and it is provided with an intermediate slot 16, through which passes the plunger-rod. The plunger-rod is provided at its upper end with a suitable grip or handle 17, by means of which it is rotated to carry the radial arms from the inwardly-projecting central portions of the sections to the ends of the latter, and vice versa, to expand the sections. After the sections have been expanded to the position shown in Fig. 1 the lever is elevated slightly above the cover and is secured to the plunger by means of a clamping-screw 18 or other suitable device, and it is adapted to be forced downward to exert the desired pressure on the contents of the barrel. The lever is maintained in this position by a suitable fastening device for connecting it to the barrel, and this fastening device may consist of a chain 19 and a hook

20, the hook being mounted on the lever and being adapted to engage the links of the chain which is secured to the barrel. The clamping-screw is mounted in a suitable threaded opening of the lever, at one side thereof, and is arranged to engage the plunger-rod. The plunger, the lever, and the cover of the barrel may be swung backward to the position illustrated in dotted lines in Fig. 1 of the drawings to afford access to the contents of the barrel.

It will be seen that the press is exceedingly simple and inexpensive in construction, that it is adapted to be readily applied to a barrel, and that it is capable of being readily manipulated to expand and contract the head of the plunger to cause the same to fit tightly against the sides of the barrel and to enable it to be readily withdrawn therefrom.

What is claimed is—

1. A device of the class described comprising a plate or support, a rod journaled thereon, a series of expansible sections mounted upon the plate or support and provided with curved outer edges and having cams or projections at their inner edges, and the rigid horizontal radial arms fixed to the rod and arranged to engage the cams or projections to expand the sections, substantially as described.

2. A device of the class described comprising a disk or support, a series of expansible sections mounted on the disk or support and provided at their inner edges with cam portions having curved edges, a rod journaled on the disk or support, and the rigid horizontal radial arms carried by the rod and arranged to engage the cam portions of the sections, substantially as described.

3. A device of the class described comprising a plunger-head having a series of expansible sections adapted to engage the sides of a barrel, a vertical rod journaled on the plunger-head and adapted to be rotated, connections between the rod and the sections, whereby the latter will be expanded when the rod is rotated, a lever designed to be hinged to a barrel at one side thereof and provided with means for engaging the plunger-rod, and a fastening device for securing the lever to the other side of the barrel, substantially as described.

4. A device of the class described comprising a barrel having a cover with a central opening, a plunger-head having expansible sections, a plunger-rod journaled on the plunger-head and adapted to be rotated, connections between the sections and the rod, whereby the former will be expanded when the latter is rotated, a lever hinged at one end to the back of the barrel and detachably connected with the front of the same, and means for securing the lever to the rod, substantially as and for the purpose described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ANDREW JACKSON DUCKWORTH.

Witnesses:

DAN C. COWLING,

W. J. CURRY.