(No Model.)

J. S. LASH.

DEVICE FOR LOOSENING SUGAR, &c

No. 298,099. Patented May 6, 1884.

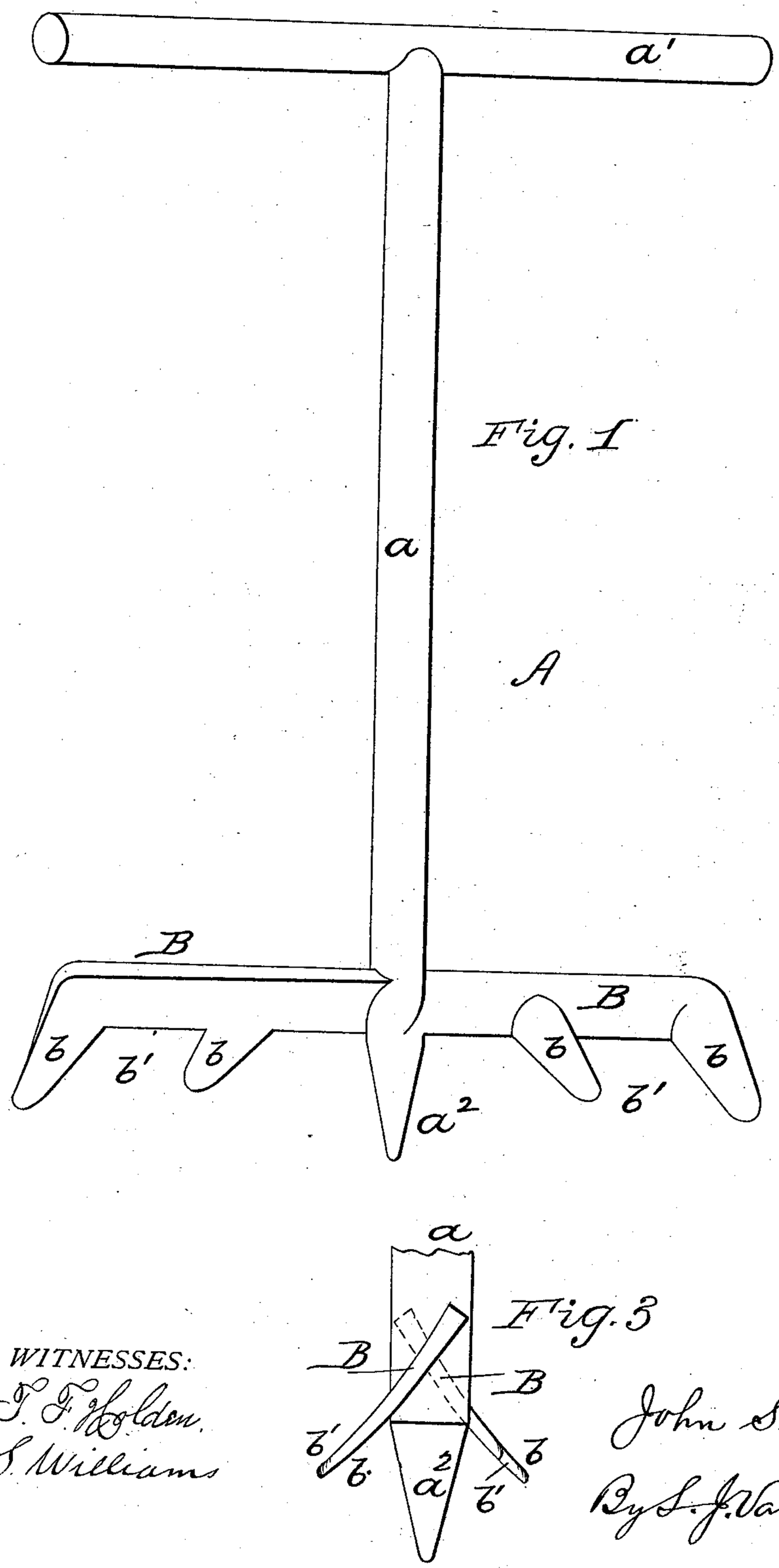

Fig. 1

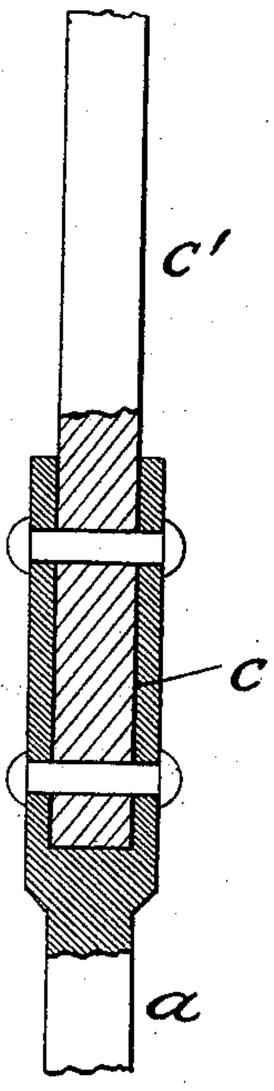

Fig. 2

Fig. 3

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DEVICE FOR LOOSENING SUGAR, &c.

SPECIFICATION forming part of Letters Patent No. 298,099, dated May 6, 1884.

Application filed March 29, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN S. LASH, a citizen of United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Devices for Loosening Sugar, &c., of which the following is a specification, reference being had therein to the accompanying drawings, wherein—

Figure 1 is a perspective of my invention. Fig. 2 is a broken section of same, showing a slight modification in the construction of the handle for the same; and Fig. 3 is a broken detail elevation of the lower or boring and crushing end of same.

My invention has for its object to provide a boring and crushing tool or device for grocers' use for loosening and breaking up sugar, dried fruit, or other material packed in boxes, barrels, &c.; and it consists of the construction and arrangement of parts comprising the boring and crushing tool, as hereinafter described and claimed.

In the drawings, A represents my improved loosening and breaking tool, composed of a stem or rod, *a*, having at its upper end a cross-bar or handle, *a'*, and at its lower end a tapering or conical point, a^2. Adjoining the latter a slight distance above, and projecting laterally from the stem *a*, are radial or diametrical plates B B, which are preferably located in the same plane; but are transversely arranged obliquely or inclining to one another, as shown. These plates may be of any suitable configuration; but I prefer the long oblong flat outline, as illustrated, to serve for crushing purposes, as hereinafter set forth. The plates B B, having projecting fingers or studs *b*, located on opposite sides of said plates to provide serrated edges *b' b'* therefor, as illustrated. These fingers *b* may be straight, as indicated in Fig. 1, or slightly curved or bowed, as represented in Fig. 3. All of said described parts may be cast or formed integral, as shown in Fig. 1, or the stem *a* may have a socket, *c*, in which is riveted or separably secured a handle-stem, *c'*.

The operation of the foregoing-described device is obvious. When it is inserted into a barrel of sugar or package of dried fruit or other material and rotated, the opposite inclination of its plates B and fingers *b* or serrated edges *b'* causes it to descend spirally or bore its way into such material to loosen and bring it to a more or less finely-divided condition, so that it may readily be scooped from or otherwise removed from the barrel or package after said tool is withdrawn therefrom. If the loosened material is anywise lumpy after the tool A is withdrawn, it may be further broken up or granulated by pounding it with said tool, the lower wide or flat surfaces of the plates B B forming the crushing surfaces for effecting such granulation when the material is so pounded or crushed.

While I have described my invention being particularly applicable for grocers' uses, yet I do not limit myself thereto, as it may be employed by gardeners or others for loosening and crushing earth or ground, or for other purposes.

What I claim is—

1. The loosening and crushing tool A, comprising a stem, *a*, having tapering end a^2, and oppositely-inclining radial plates B B, provided with serrated edges *b' b'*, substantially as shown and described.

2. The tool A, having stem *a*, handle *a'*, tapering point a^2, and oppositely-inclining radial plates B B, having studs or fingers *b b*, substantially as shown, and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN S. LASH.

Witnesses:

S. J. VAN STAVOREN,

CHAS. F. VAN HORN.