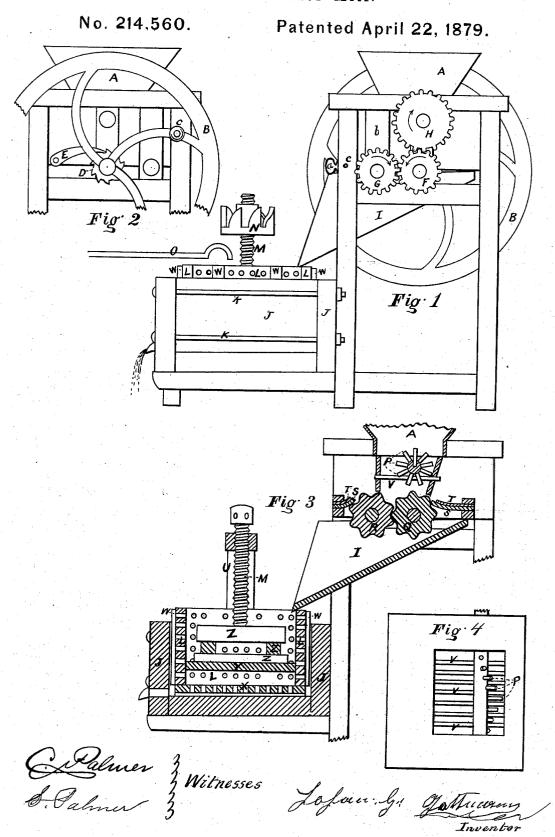
J. H. GETTMANN. Wine or Cider Mill.



## UNITED STATES PATENT OFFICE.

JOHAN H. GETTMANN, OF OSHKOSH, WISCONSIN.

## IMPROVEMENT IN WINE OR CIDER MILLS.

Specification forming part of Letters Patent No. 214,560, dated April 22, 1879; application filed February 1, 1879.

To all whom it may concern:

Be it known that I, JOHAN H. GETTMANN, of Oshkosh, Winnebago county, Wisconsin, have invented certain Improvements in Wine or Cider Mills, of which the following is a

specification.

My invention relates to that class of wine or cider mills which successively break, crush, and press the fruit; and it consists in the combination of a revolving fingered shaft, the fingers alternating with and passing between a set of transverse bars fixed to the machine immediately below the shaft, with a pair of adjustable corrugated crushers, and a corresponding pair of flexible cleansers, and a chute for conducting the pulp to the press, and a detachable press-box constructed of perforated sides and bottom, and having furring-strips or their equivalent to maintain a recess between it and a surrounding tank.

Figure 1 is a side elevation of the machine. Fig. 2 is an elevation of the opposite side of the upper part of the machine. Fig. 3 is a section. Fig. 4 is a plan of the top, showing the revolving fingers and transverse bars.

B is the drive-wheel, having crank C. It is attached here to the shaft of the crusher Q. Of course it may be attached as well to either the shaft of the crusher R or the fingered shaft. The fruit is thrown into the hopper A, is carried by the revolving fingers P through the transverse bars V, and broken to pieces. It is then carried between the corrugated crushers QR. The crushers and fingered shaft are geared together with gears—H on the fingered shaft being larger than gears F and G on the shafts of the crushers, so that the crushers will revolve faster than the fingered shaft, to prevent clogging of the fruit between them.

Elastic cleansers S, supplemented, if necessary, by metallic or wooden springs T, are attached to the frame of the machine, so that their edges rub off the adhering pulp from the crushers, and cause it to drop off into the chute I. One of the crushers, as R, is adjustable, and may be moved backward and forward in its journal-box b by a thumb-screw, a, passing freely through the post of the machine and screwing into b, the screw-shaft being girdled with a groove and kept in place by a pin or screw, c, reaching into the groove.

The crushed fruit or pulp drops from the chute I into the press-box L, having perforated sides and bottom X, and having furring-strips W, to maintain a recess between it and the surrounding tank J. Of course, instead of these furring-strips, the sides or bottom of the pressbox or the tank may be grooved, to allow the liquid to pass to the discharge or spout.

Y is the cover on top of the pulp, supplemented, if necessary, by blocking Z Z Z. M is the press-screw, which may be either, as shown in Fig. 1, attached to the bottom of the tank, and having a press-nut, N, and lever O, or arranged to work downward through a cross-

bar, U, as in Fig. 3.

K K are rods for fastening the tank together. D E, Fig. 2, is a ratchet and pawl to prevent turning the drive-wheel in the wrong

It is understood that I do not claim to be the inventor of a shaft with fingers P set spirally on it, but its use in a wine or eider mill, in combination with the transverse bars V, for the purpose of breaking the fruit. Neither do I claim to be the inventor of corrugated crushers as such, but their adjustability and use, in combination with the revolving fingers and transverse bars, for the purpose of first breaking and then crushing the fruit. Neither do I claim to be the inventor of a perforated press-box, but of its method of construction in detachable parts, in combination with a surrounding tank and furring-strips or their equivalent, for the purpose of pressing wine or cider from pulp and saving all the liquid.

The wine or cider mill constructed with revolving fingers P, bars V, adjustable corrugated crushers Q R, gears H F G, the flexible cleansers S T, the chute I, the perforated pressbox LX, having furring-strips W, or their equivalent, and inclosed in a tank, J, and the screw M, all combined and arranged substantially as shown and described.

JOHAN H. GETTMANN.

Witnesses: O. H. HARRIS, R. J. TAYLOR.