C. A. SANDS. Hop-Press.

No. 206,977. Patented Aug. 13, 1878.  $\alpha$  0

## United States Patent Office.

CHARLES A. SANDS, OF BURLINGTON, KANSAS.

## IMPROVEMENT IN HOP-PRESSES.

Specification forming part of Letters Patent No. 206,977, dated August 13, 1878; application filed July 2, 1878.

To all whom it may concern:

Be it known that I, CHARLES A. SANDS, of Burlington, in the county of Coffee and State of Kansas, have invented a new and Improved Hop-Press, of which the following is a specification:

In the accompanying drawings, Figure 1 represents a side elevation, partly in section, of my improved hop-press, and Fig. 2 a vertical transverse section of the same on line x x, Fig. 1.

Similar letters of reference indicate corre-

sponding parts.

This invention relates to an improved press for packing and baling hops, by which the hops are not broken up or mixed with dust and dirt, and by which more hops can be put in a bale, at a considerable saving in the expense for labor and bagging; and the invention consists of a press that is extended through two stories, and arranged with an upper packing-box having hinged side door with flexible sides, and of a lower press-box having hinged and locking side doors.

The sack is hung to curved hooks at the upper ends of the hinged side doors and to hooks of hinged sections or blocks of the intermediate side walls, the hops being packed and compressed in the sack by a heavy follower, and finally removed by opening the

side doors.

Referring to the drawings, A represents a hop-press of suitable size, that is so constructed as to extend through two stories of a building, the part of the press above the dividing-floor being the charging-chamber, the lower part below the floor the press-box proper. The upper part or charging-chamber is provided with hinged doors B, that are connected by leather or other flexible sides with the main frame of the press, so as to form a kind of hopper at one or more sides of the press for conveniently charging the press with hops. When the press-box and upper chamber are filled with hops the charging-doors B are closed and the hops compressed by a follower, C, that is lowered by suitable horse-power applied to a cross-piece, C', guided in slots of the upper part of the press.

The press-box has hinged doors D at opposite sides, which are hinged at their upper ends to the press, and locked when closed by one or more pivoted cross-pieces, a, that are secured to side bands or staples b. From the upper inside edge of the side doors project upwardly-curved hooks d, that fit into corresponding recesses of the walls of the charging-chamber, and serve for the purpose of attaching the upper part of the bag or sack into which the hops are to be compressed. The remaining walls of the press-box are provided with short hinged sections or blocks D', that have hooks d, similar to those on the side doors, so as to support the sack around its entire upper edge.

When the sack is hung to the hooks of the side doors and blocks the doors and blocks are closed and locked, and the press-box is then ready for receiving the hops. When the sack is entirely filled with hops by repeated charges and compressions, the sack is tied and hooped by opening the side doors. The walls of the press-box are grooved for conveniently passing the bands or wires around the bale, which is then removed for being marked and branded. Wooden heads are used in connection with the sack for more convenient baling. The hops are not brought in contact with the ground, and thereby not mixed with dirt or dust, and are compressed into small compass at a saving of expense for labor, bagging, and shipping. The heavy follower is first used for packing the hops into the press-box by lowering the same after each charge, and then for finally compressing them by applying the horsepower to the follower.

Having thus fully described my invention, I claim as new and desire to secure by Letters

Patent—

In a hop-press, the combination of the press-box with kinged side doors and hinged blocks or sections, said doors and blocks having at their upper edges hooks for suspending the sack, substantially as specified.

CHAS. A. SANDS.

Witnesses:

PAUL GOEPEL, C. SEDGWICK.