

W. W. STOLL.

Malt-Steeps.

No. 143,938.

Patented Oct. 21, 1873.

Fig. 1.

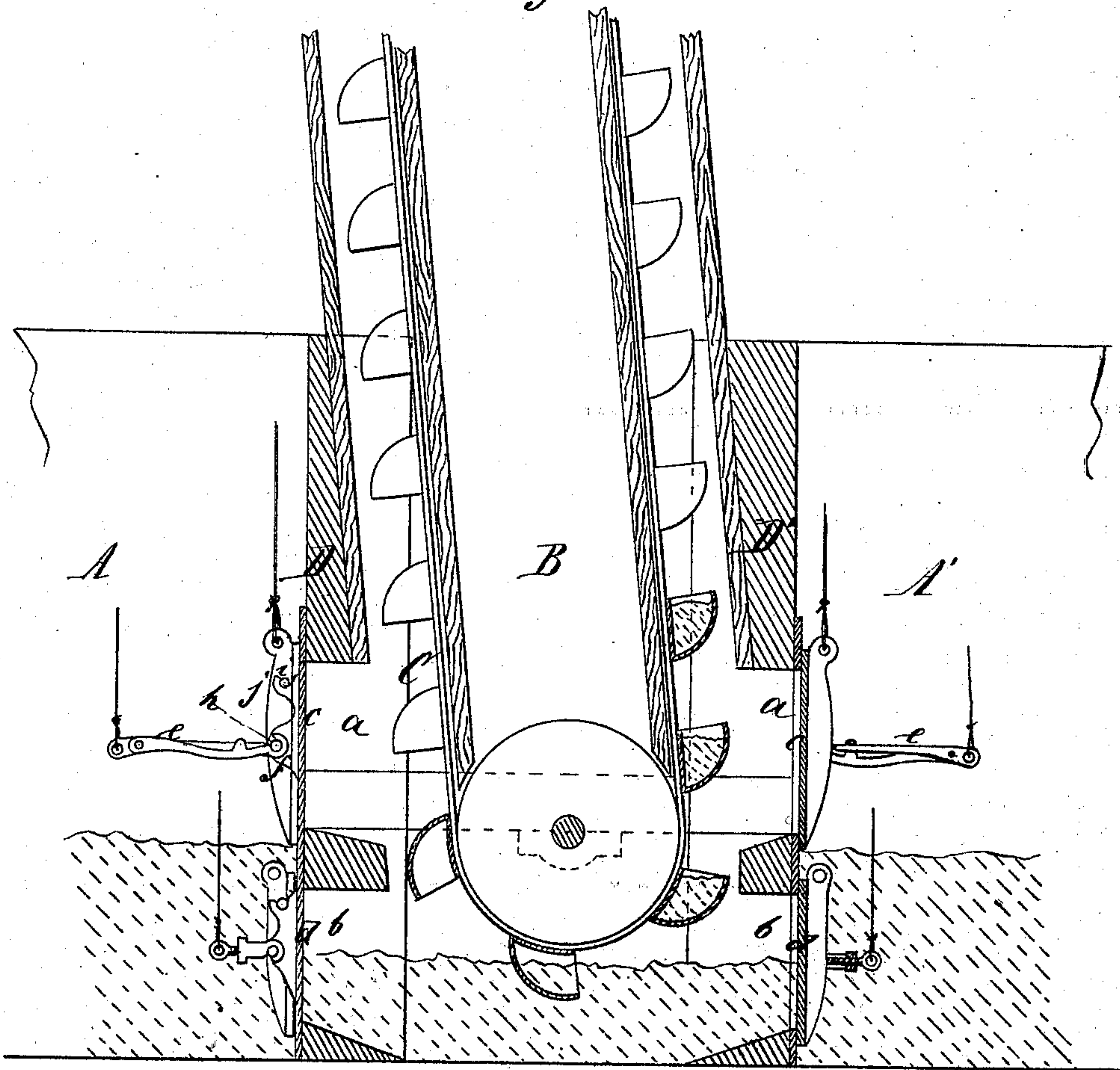
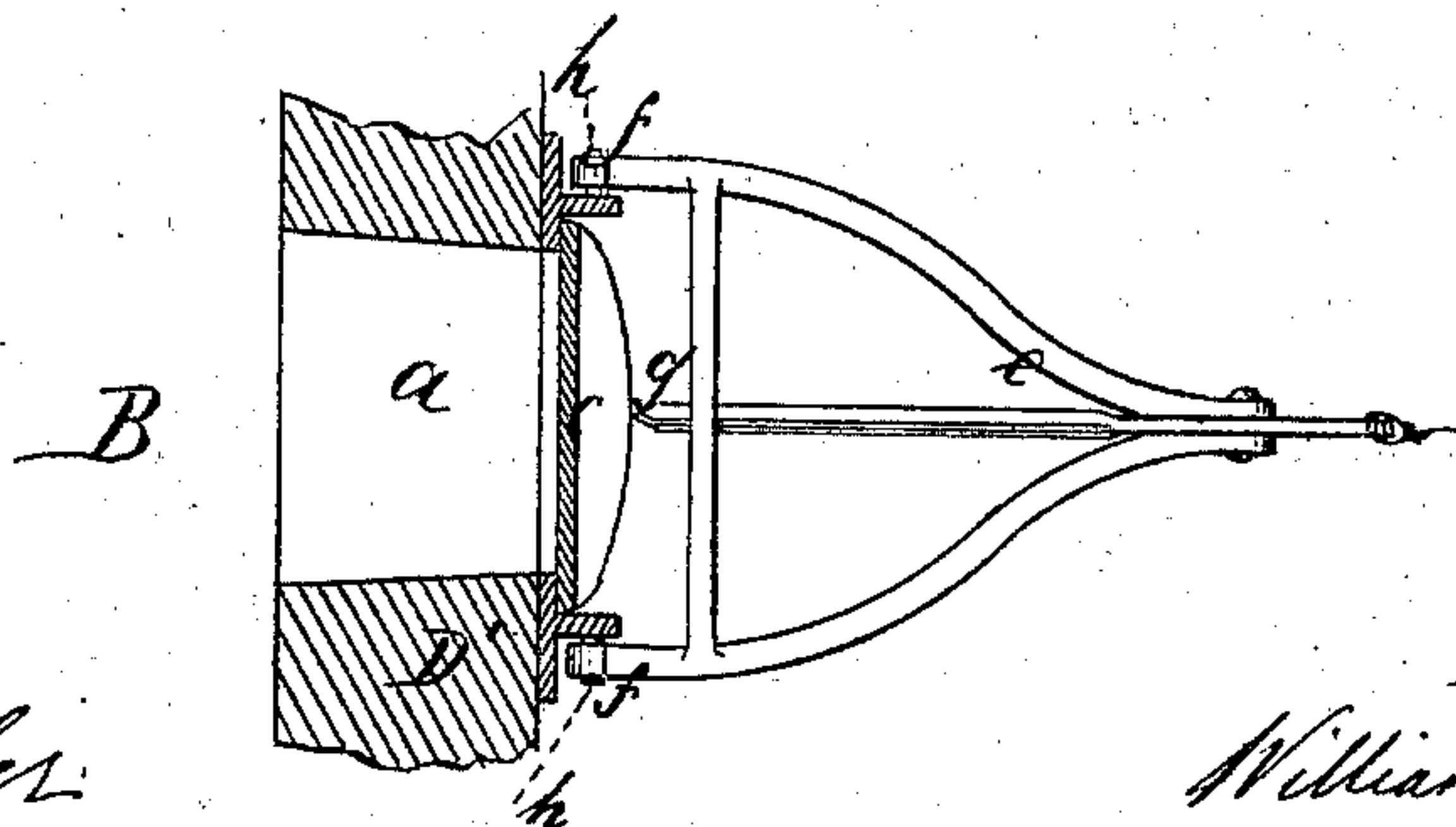


Fig. 2.



Witnesses:

Ernst Bilhuber

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IMPROVEMENT IN MALT-STEEPS.

Specification forming part of Letters Patent No. 143,938, dated October 21, 1873; application filed October 2, 1873.

To all whom it may concern:

Be it known that I, WILLIAM W. STOLL, of Brooklyn, E. D., in the county of Kings and State of New York, have invented a new and useful Improvement in Malt-Steeps; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming a part of this specification, in which drawing—

Figure 1 represents a transverse section of my invention. Fig. 2 is a sectional plan or top view of one of the doors.

Similar letters indicate corresponding parts.

This invention consists in the arrangement of an elevator in a well between two malt-steeps, and communicating with the same through apertures in the partition-walls, in such a manner that when said apertures are opened the contents of the malt-steeps are admitted to the elevator-well, and, by the action of the elevator, said contents are raised to the growing-floors, thereby saving considerable time and hand-labor. The apertures leading from the steeps to the elevator-well are closed by doors, which are held in position by lever-braces so arranged that they can be readily withdrawn without descending into the steeps, and the contents of the steeps can be made to pass into the elevator-well, and to the elevator, with the least possible hand-labor.

In the drawing, the letters A A' designate two steeps, which are situated in the lowest story or cellar of a malt-house, so that water and barley can be readily introduced therein, and that the weight of the steeps, and of their contents, will not interfere with the safety or stability of the building. Between these two steeps is situated a well, B, which contains the elevator C. This elevator is constructed of a belt, carrying a series of buckets, and running under a pulley, situated in the well B, and over one or more pulleys on the growing-floor or floors of the malt-house. The well B is separated from the steeps A A' by partition-walls D D', and in each of these walls are

two apertures, *a b*, each of which is closed by a separate door, *c d*. The doors *c* are retained by lever-braces *e*, or by any suitable fastening of such a construction that the same can be withdrawn without descending into the steeps. The lever-brace *e*, shown in the drawing, consists of two arms, having hooks *f f* at their ends, and a central pointed rod, *g*. The hooks *f f* are intended to catch under studs *h*, secured in lugs which project from the door-frame, Fig. 2; and, if the rod *g* is brought to bear upon the center of the door *c*, and the outer end of the brace *e* is slightly depressed, the door is firmly pressed up against its frame, and the aperture *a* is closed. In order to produce a tight joint between the door and its frame, the door-frame may be planed off, and a suitable packing may be introduced between them. The door is supported by pins *i* projecting from its sides, and resting in lugs *j* extending from the door-frame. Both the lever-brace and the door can be raised up by means of ropes or chains.

The doors *d* of the lower apertures may be closed by a similar fastening, or by a bridge and screw.

In the steep A the upper aperture *a* may be omitted. Each of the steeps communicate by a pipe with a hydrant, and by another pipe with the sewer or waste channel.

After the barley has been kept in the steeps a sufficient length of time, the water is drawn off through the waste-pipe, and then the door leading from the steep to the elevator-well is opened, and, if the elevator is set in motion, it carries the malt up and deposits the same on the growing-floor. By this arrangement a large portion of the contents of both steeps can be discharged without requiring any hand-labor, and only that portion of the contents of each steep which does not enter the elevator-well spontaneously has to be shoveled onto the elevator.

By means of the lowest apertures *b* the operation of cleaning the steeps and the elevator-well is facilitated. By this arrangement one elevator serves to raise the contents of two steeps; and, if desired, the well B can be

made to communicate with three or more steeps, and a considerable saving in machinery is effected.

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

The arrangement of an elevator, working in a well, which is situated between two or more malt-steeps, and communicates with each of these steeps by one or more apertures in

the partition-walls between the steeps and the elevator-well, substantially as shown and described.

This specification signed by me this 27th day of September, 1873.

WILLIAM W. STOLL.

Witnesses:

W. HAUFF,

CHAS. WAHLERS.