No. 684,510. Patented Oct. 15, 1901.

C. O. K. HALLGREN.

CARBOY PACKER.

(Application filed May 4, 1901.)

(No Model.)

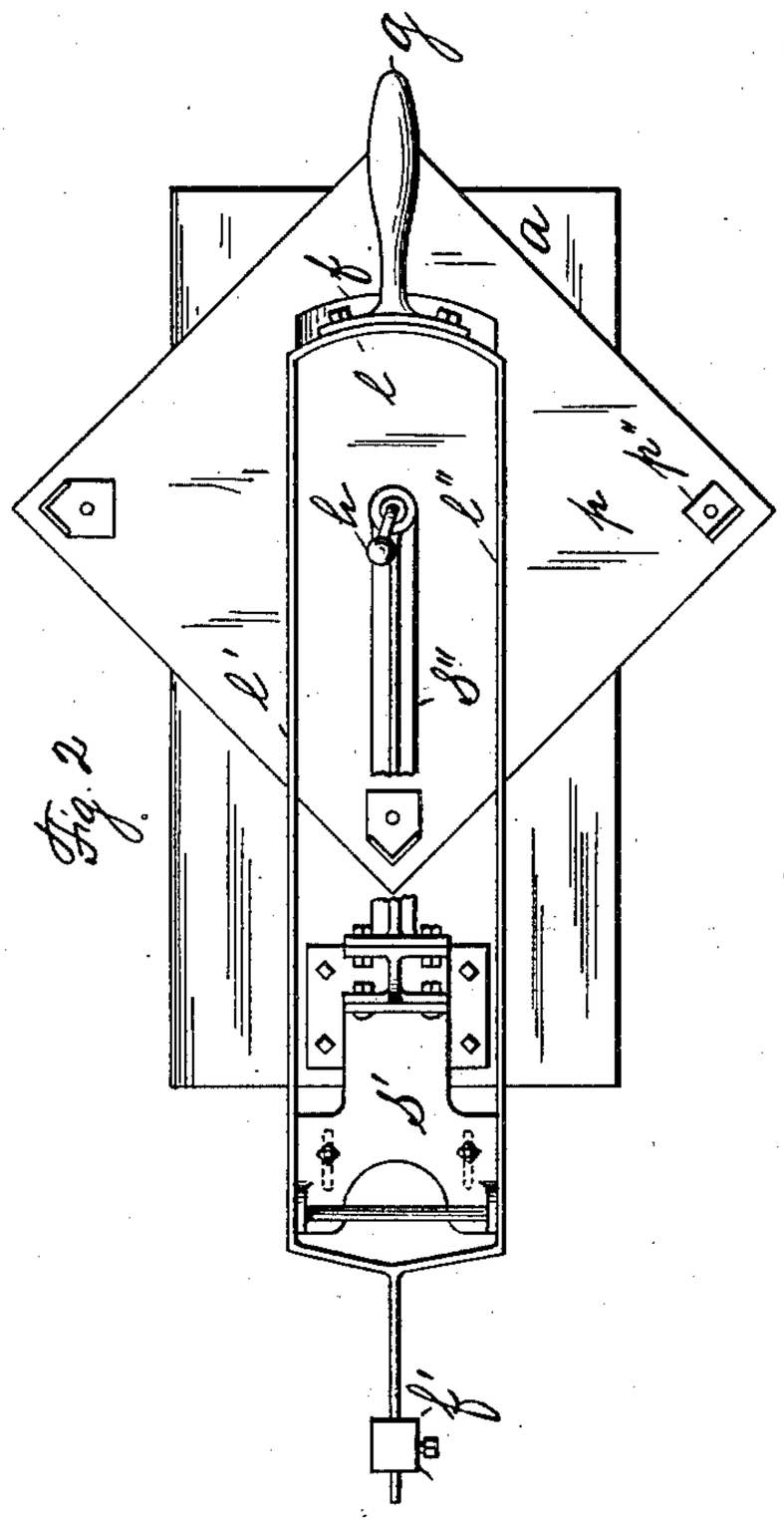

Fig. 2.

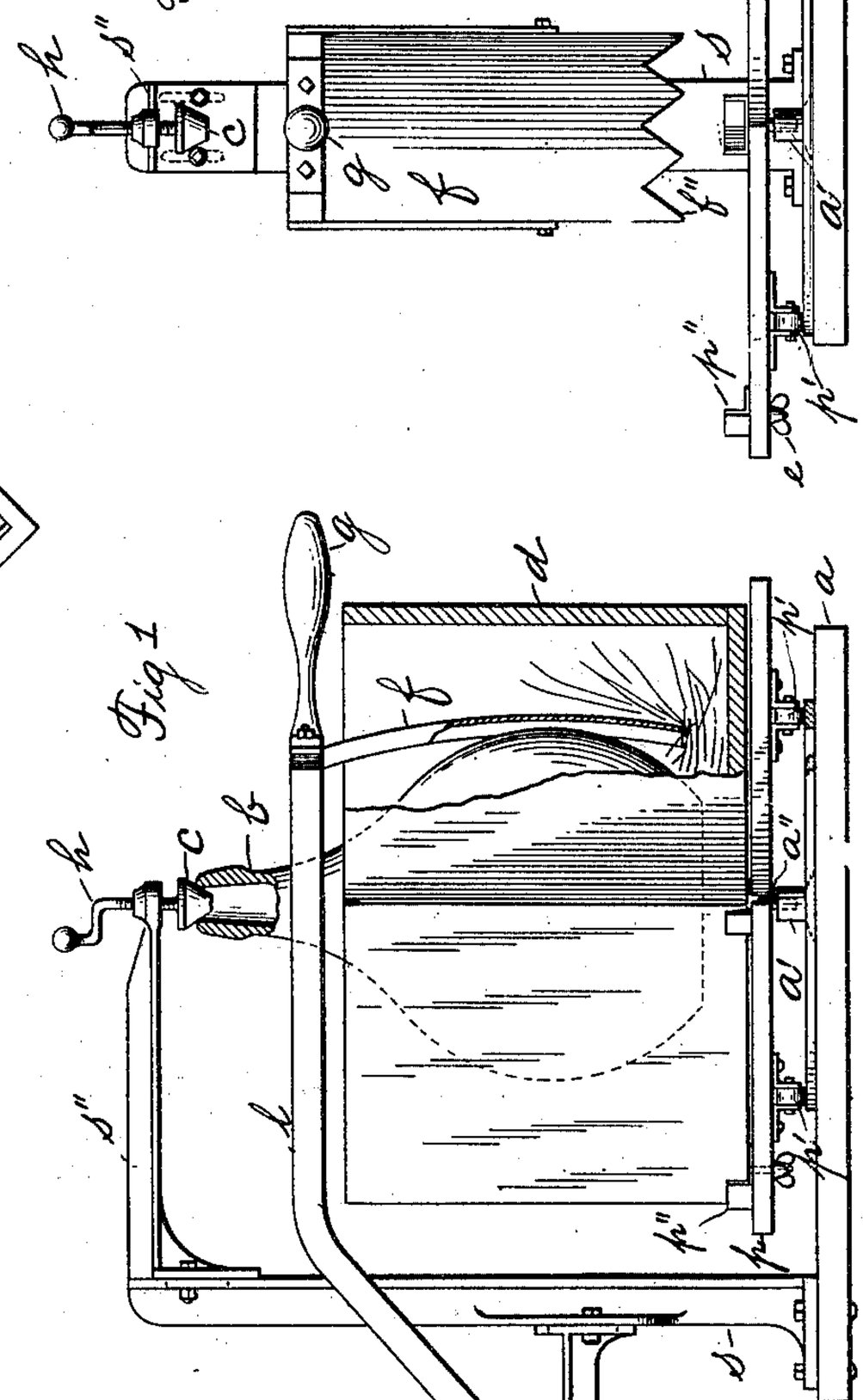

Fig. 3.

Fig. 1.

WITNESSES:

L. N. Legendre

Herndon Meyer

INVENTOR

Charles O.K. Hallgren

BY William R. Baird

His ATTORNEY

UNITED STATES PATENT OFFICE.

CHARLES O. K. HALLGREN, OF BAYONNE, NEW JERSEY.

CARBOY-PACKER.

SPECIFICATION forming part of Letters Patent No. 684,510, dated October 15, 1901.

Application filed May 4, 1901. Serial No. 58,800. (No model.)

To all whom it may concern:

Be it known that I, CHARLES O. K. HALLGREN, a citizen of Sweden, residing at Bayonne, in the county of Bergen and State of New Jersey, have invented a new and useful Improvement in Carboy-Packers, of which the following is a specification.

My invention relates to machines for packing carboys; and its novelty consists in the construction and adaptation of the parts, as will be more fully hereinafter pointed out.

As is well known, carboys, especially those containing acid, are packed for transportation usually in square boxes, each side of which is somewhat longer than the horizontal diameter of the carboy, the neck of the bottle projecting through an aperture in the lid of the box and the carboy being surrounded by straw or hay or some similar packing material in order to lessen the shock imparted to it in its transportation. There is no difficulty, of course, in packing the hay or straw around the carboy at those places which are readily within the reach of the packer, but there is difficulty in stuffing and packing between the lower corners of the box and the lower part of the body of the carboy, where its diameter gradually lessens. It is not unusual for packers to use a stick or a rod to reach down past the sides of the carboy for the purpose of stuffing the hay or straw underneath the same, but this is inefficient in practice and frequently results in breaking the carboy itself.

The object of my invention is to provide an efficient means for accomplishing this purpose.

In the drawings, Figure 1 is a side elevation and partial section of an apparatus embodying my invention. Fig. 2 is a top plan view of the same with the box and carboy removed; and Fig. 3 is an end view of the apparatus shown in Fig. 1 looking to the left, the packing-box and carboy also being removed.

In the drawings, *a* is a platform upon which is mounted my packing device. At one end of it is suitably erected a standard *s*, provided with a bracket *s'*, on the outer extremity of which is journaled the lever *l* of the packing-fork *f*. The standard is also provided with a second bracket *s''*, extending over the platform and provided at its outer extremity with a threaded aperture adapted to receive the threaded handle *h* of a centering device *c*, which consists of a conical block in the shape of a cork, secured at the lower end of the handle *h* and adapted to fit into the mouth of the carboy *b*. The platform *a* is provided with a recessed step *a'*, adapted to receive a pivot *a''*, secured to and depending from a platform *p*, upon which the box *d*, in which the carboy is to be packed, is mounted. This platform *p* is supplied underneath with wheels or casters *p'*, which permit its easy revolution, and also cleats *p''*, adjustably secured by means of the thumb-nuts *e* and adapted to receive and retain in place the box *d*. The lever *l* is made into two parts *l'* and *l''*, permitting it to pass on each side of the standard *s* and bracket *s''*, and at one extremity is provided with a counterweight *f'* and at the other with a handle *g*. Near the handle *g* there is swung from the lever *l* the fork *f*. This consists of a broad blade having a concave inner surface and provided at its lower extremity with indentations *f''* to increase its efficiency in manipulating the packing material.

The manner of using my device is as follows: The box *d* to be packed is placed upon the platform *p*, so that its corners fit into the corners of the cleats *p''*. This is easily accomplished, as the boxes designed to contain the carboys are of a practically uniform size. A layer of hay or straw is then placed at the bottom of the box, the carboy is inserted, and is so placed that its mouth is immediately under the centering device, when the handle is turned until the conical block is fixed tightly in the bottle and holds the carboy in place. The operator grasping the handle *g* places a quantity of straw or hay or other packing material in the corner of the box between the carboy and its side, lifts up the lever *l* to permit this to be done, and then brings down the lever, and with it the fork *f*, which forces the packing material past the bulge in the body of the carboy and into the lowermost corner of the box. A few quick strokes suffice to finish this operation. The operator remaining in the same position then rotates the platform *p* until another corner of the box is

brought in front of him, when the operation is repeated, and this same operation is repeated with the other corners. The packed carboys are then removed from the platform, and the box is ready to be filled and the lids to be placed on.

As will readily be seen from the foregoing description, the workman speedily becomes skilled in the handling of the boxes by means of this apparatus and loses no time in moving from place to place or in attempting to force the packing material around the carboy, the fork *f* readily passing the bulge of the body of the carboy and reaching into places which the operator could not reach otherwise.

Having described my invention, what I claim as new is—

1. In a mechanical packer for carboys and the like, a box for containing the carboy leaving a space around the carboy, a lever pivoted to a suitable support, and a curved fork hung from said lever to oscillate vertically in the space between the carboy and the box, substantially as described.

2. In a mechanical packer for carboys and the like, a support, a box mounted thereon, a device for centering the carboy in the box leaving a space surrounding the carboy, and a curved fork mounted to be oscillated vertically in the space between the carboy and the inner surface of the box, substantially as described.

3. In a device for the purpose described, the combination with the platform, of a standard provided with a centering device for the carboy, a fork adapted to be vibrated between the carboy and the inner surface of the box and means for rotating the box.

Witness my hand this 1st day of May, 1901, in the presence of two subscribing witnesses.

CHARLES O. K. HALLGREN.

Witnesses:

HERMAN MEYER,

MABEL K. WHITMAN.