

M. BRENNER.
Slaughtering Apparatus.

No. 143,401.

Patented Oct. 7, 1873.

Fig. 1

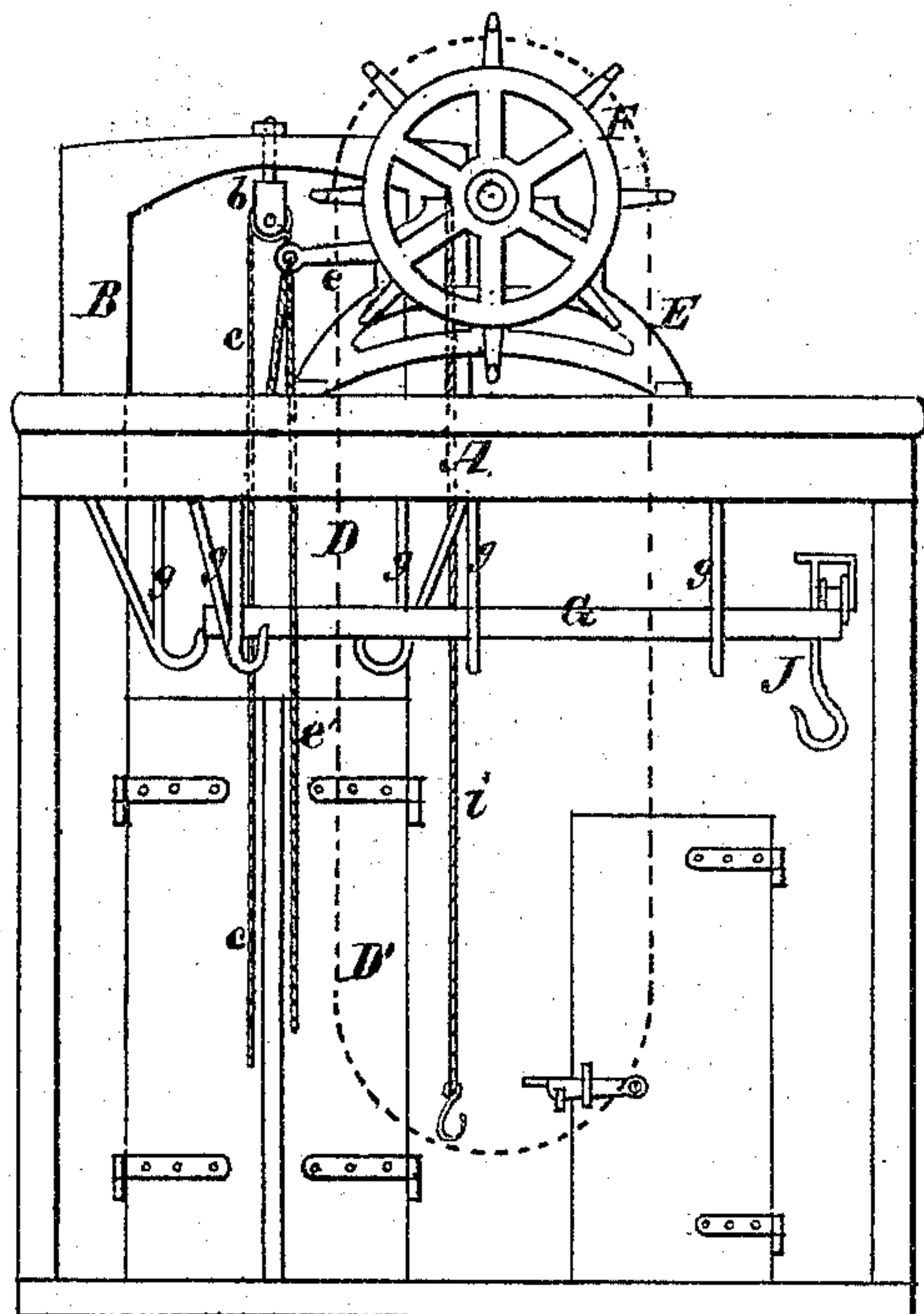


Fig. 2

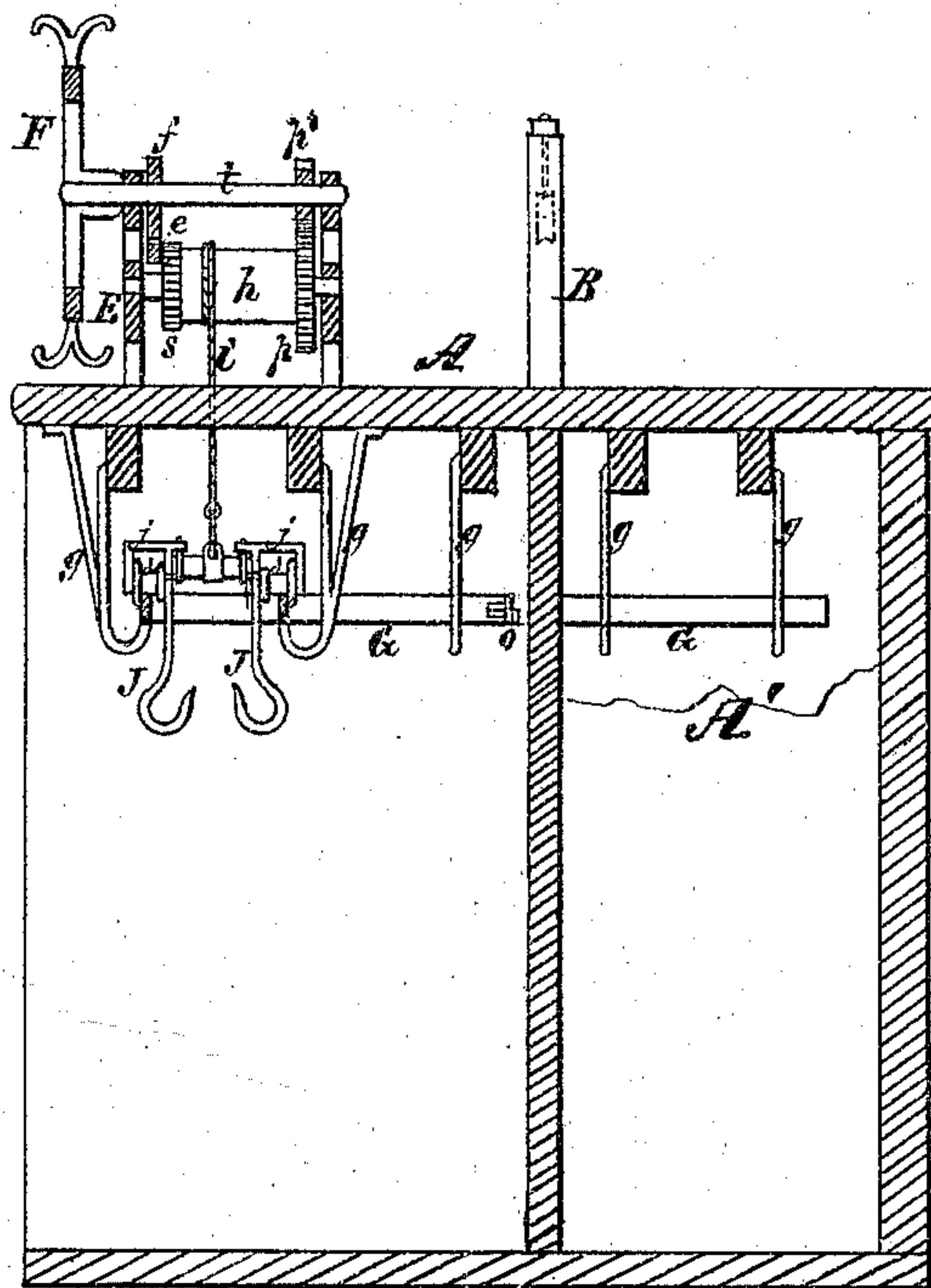


Fig. 4

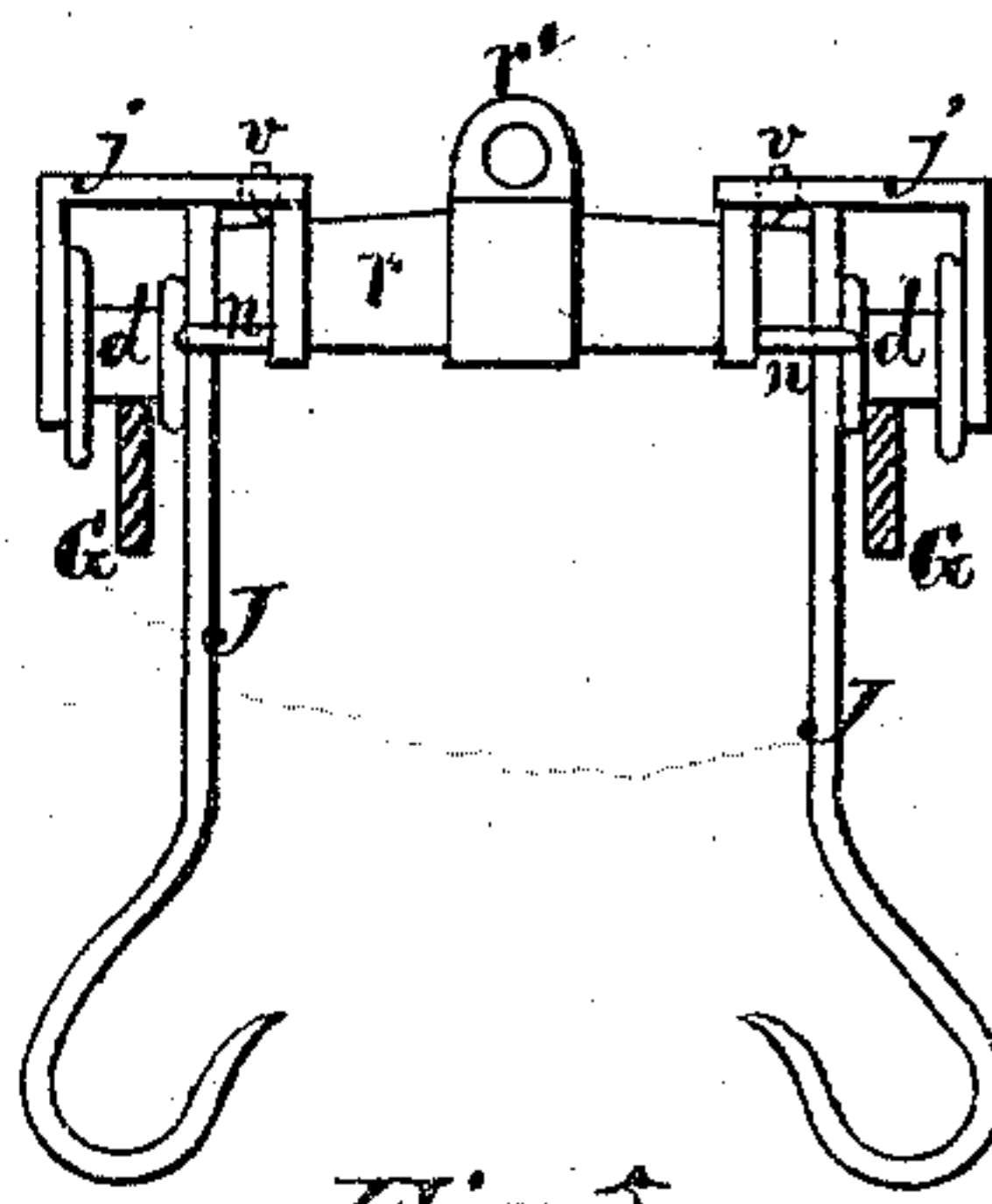


Fig. 5

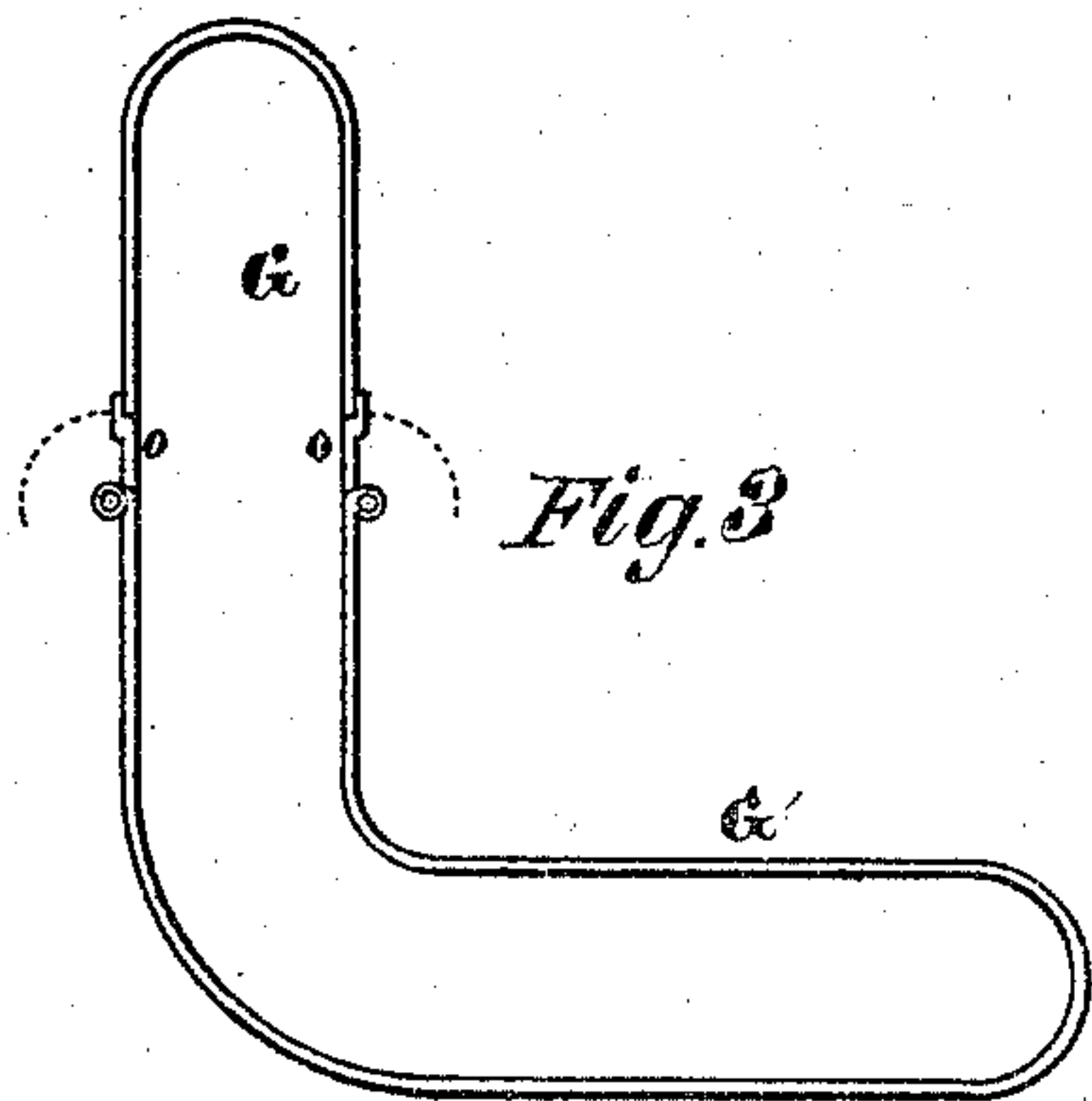
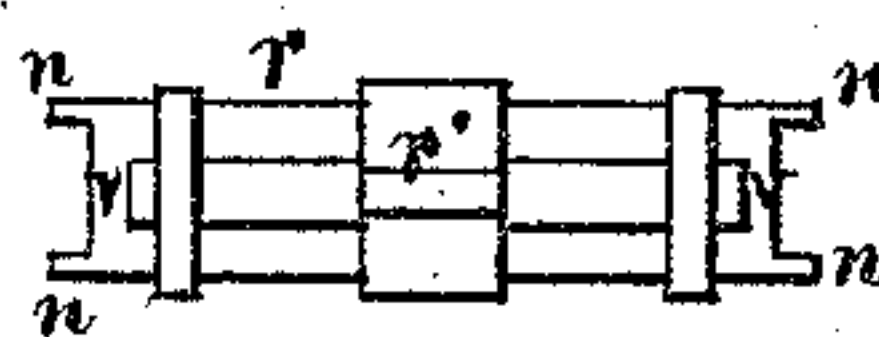


Fig. 3

Witnesses.
R. P. Campbell,
J. H. Campbell.

Inventor
Moses Brenner
by
Marvin Parvick & Son

UNITED STATES PATENT OFFICE.

MOSES BRENNER, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN SLAUGHTERING APPARATUS.

Specification forming part of Letters Patent No. **143,401**, dated October 7, 1873; application filed April 10, 1873.

To all whom it may concern:

Be it known that I, MOSES BRENNER, of the city and county of Baltimore, in the State of Maryland, have invented an Improved Slaughtering Apparatus, which I denominate "The Flora;" and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings making part of this specification, in which—

Figure 1 is an elevation of the first story of a slaughter-house having my improvements applied to it. Fig. 2 is a vertical section through the same. Fig. 3 is a top view of my continuous railway. Figs. 4 and 5 show the meat-hooks and beef-tree.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to an apparatus which is designed to facilitate and lessen the labor attending the slaughtering and handling of animals. My objects are, first, to employ an endless railway, which is suspended from the ceiling of the first story of a slaughter-house, and which extends from the slaughtering-room into the ice-house, so that the cleaned meat, suspended from the railway by hooks, can be readily moved into the ice-house on one side of the railway, and removed from the ice-house on the opposite side thereof, without lifting the meat from the hooks; second, in a novel mode of attaching the meat-hooks to the beef-tree, by which the animals are suspended while being cleaned and split.

The following description of my improvements will enable others skilled in the art to understand the same.

In the accompanying drawings, A represents the first story of a slaughter-house, and A' represents the ice-house or refrigerator connected therewith for cooling the meat and keeping it fresh. The ice-house is separated from the slaughtering-room by means of a partition, to which doors D' and a sliding gate, D, are applied. The gate D rests upon the door D' when shut, and this gate is vertically movable in a frame, B, by means of a rope, c, passing over a pulley, b, as shown in Fig. 1. G represents a continuous railway, (shown clearly by the plan view, Fig. 3,) one portion of which is arranged in the slaughtering-room

and suspended at proper height by means of hooked-shaped hangers g, which are suitably braced to the ceiling. The other portion of the railway is carried into the ice-house A', and suspended therein by hangers g, so as to be in the same plane as the portion in the slaughtering-room. In the vertical plane of the sliding gate D short hinged sections o o are applied to the railway, (shown in Fig. 3,) which, when they are opened, allow the gate D to descend to its proper closed position, and when the said gate is raised for moving the meat into or from the ice-house, the said hinged sections o o are adjusted in line with the main rails, thus leaving the railway continuous.

The railway thus constructed may be carried to any part of the slaughtering-room, and it may be curved so as to present a serpentine or other suitable form.

The meat is suspended from a windlass, h, by means of an elevating-rope, i, a beef-tree, r, and hooks J J. The windlass h has its bearings in a frame, E, which is erected on the floor of the second story of the slaughter-house. On one end of the windlass h is a large spur-wheel, p, and on the other end is a ratchet-wheel, s. The wheel p engages with a pinion, p', on the shaft t of a large winding-up pulley, F, over which an endless rope passes that extends down into the slaughtering-room, as indicated by the dotted line in Fig. 1. On the shaft t is keyed a friction-wheel, f, which is provided with a friction-brake, e, on which is a pawl that engages with the ratchet-wheel s, and prevents the windlass from turning backward while elevating a load. By means of a rope, e', the brake e is brought against the friction-wheel f, and at the same time the pawl on the brake is detached from the ratchet-wheel s. The brake e is pivoted to the frame E, so that its curved frictional arm, on which is the pawl for wheel s, preponderates over the arm to which the rope e is attached, making it a brake-and-ratchet combination. The suspension-rope i has a hook fastened to its lower end, which is received through an eye, r', on the beef-tree r. Each end of the beef-tree is provided with two side spurs, n n, and a top spur, v, for receiving and holding in place the head j of a meat-hook, J. Each hook

J has formed on its upper end an open frame, *i*, which has a perforated lip formed on it for receiving the top spur *n*, and in which is a flanged roller, *d*, for supporting the hook upon the railway, as shown in Figs. 1, 2, and 4. When the hooks are attached to the beef-tree their upper portions are received between the spurs *n n*, and thus prevented from lateral displacement. After an animal is drawn down to the ring by means of the hoisting apparatus and its rope *i*, and killed, the hooks J J are attached to the hind legs of the animal, and as the skinning and cleaning operation is proceeded with the animal is gradually raised by the hoisting apparatus. When the animal has been cleaned and split the two halves are raised together and suspended from the railway. The rope *i* is then slackened and the beef-tree detached from the hooks for repeating the operation. The meat is then rolled along, by the combination rollers and hooks on the railway, into the ice-house, where it is left ready for market.

It will be seen from the above description that a butcher can, with great facility, and with a moderate expenditure of labor, prepare his meat, and convey it into and out of his ice-house; and it will also be seen that, although one part of the railway is in the slaughtering-room and another is in the ice-house, the latter can be tightly closed when meat is not being moved into or out of it.

Before these improvements which I now seek to patent, I have employed for the purposes explained a hoisting apparatus and meat-hooks substantially as herein set forth, and I do not now claim these contrivances.

By the use of my above-described apparatus butchers have no occasion to stand in the ice-house in the summer to cut up their meat, as by the old plan. They can with ease draw out the animal whole or half into the slaughtering-house, and there cut it up as they desire,

and so avoid sickness, which might ensue from going in a heated condition into the cooler or ice-house. Besides this, they will have light in doing their work, and also avoid leaving the ice-house door open, and thereby prevent warm air going into the same; for, as soon as the meat is brought out, which requires but a moment, the doors can be closed, and they can then cut up their meat very close to the door, where the wagon is in waiting to receive the beef, thus avoiding much handling of the beef as well as economizing time.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of slaughtering-apartments and cooling-apartments provided with movable doors or shutters, and a continuous suspended railway provided with traveling hooks and having switches through which the doors open and close, substantially as described.

2. The hinged sections *o o*, applied to the railway G, for the purpose explained.

3. The sliding gate D, arranged over the door leading into the ice-house A', in combination with the railway G, substantially as described.

4. The beef-tree *r*, constructed with side spurs *n n* and top spurs *v*, adapted to receive and hold in place the meat-hooks J J, substantially as described.

5. The combination of a slaughtering and a refrigerating apartment, separated by movable partitions or doors, with an endless suspensory rail, provided with traveling hooks, and constructed with movable sections, which can be adjusted to form breaks, through which the upper door or movable part may be shut, substantially as described.

MOSES BRENNER.

Witnesses:

G. E. SANGSTON,
WM. D. ELDRIDGE.