J. B. HERRESHOFF.

Presses for Fish, Beets, &c.

No. 146,338. Patented Jan. 13, 1874.

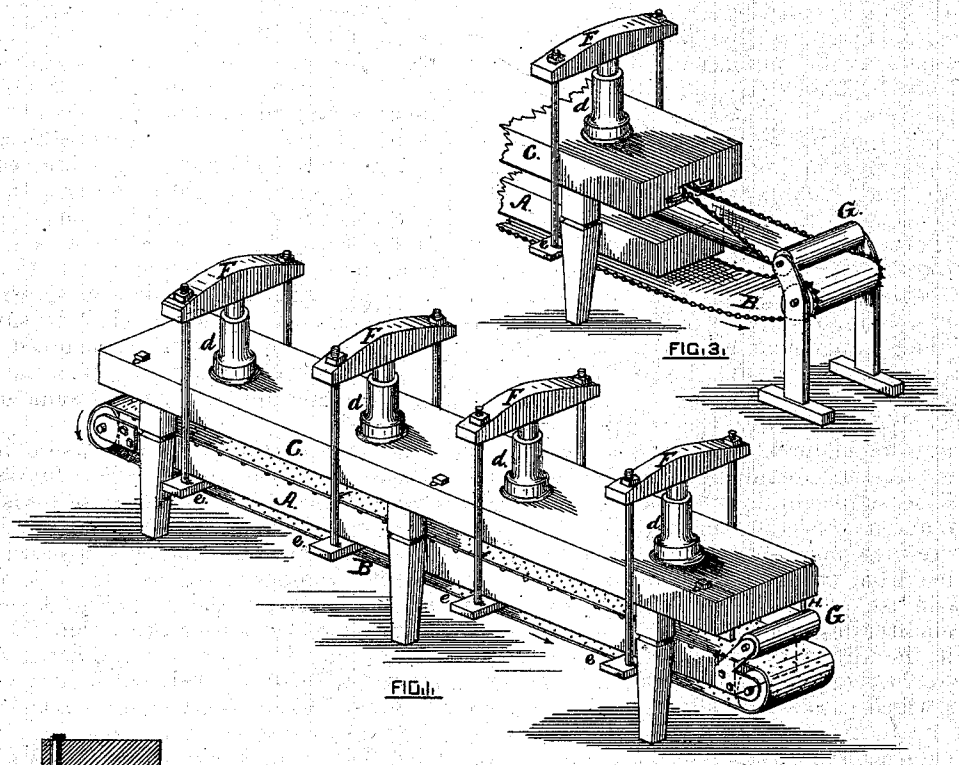

FIG. 3.

FIG. 1.

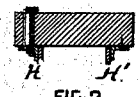

FIG. 2.

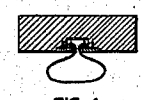

FIG. 4.

WITNESSES:

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JAMES B. HERRESHOFF, OF BRISTOL, RHODE ISLAND.

IMPROVEMENT IN PRESSES FOR FISH, BEETS, &c.

Specification forming part of Letters Patent No. **146,338**, dated January 13, 1874; application filed January 29, 1873.

To all whom it may concern:

Be it known that I, JAMES B. HERRESHOFF, of Bristol, in the county of Bristol and State of Rhode Island, have invented a new and useful Device for Pressing Beet-Pulp, Fish, &c.; and I do hereby declare that the following specification, taken in connection with the drawing making a part of the same, is a full, clear, and exact description thereof.

Figure 1 is a view of my improved device in perspective. Fig. 2 is a cross-section of upper beam, showing slot for bolt and side boards. Fig. 3 is a view in perspective, showing the arrangement of canvas belt. Fig. 4 is a cross-section of Fig. 3, showing guides for chain.

The object of my invention is to produce an apparatus for compressing beet-pulp, fish, or any other substance requiring compression, which shall be simple in its construction and operation, and at the same time capable of producing results more satisfactory than those obtained from other devices for such purposes now in use, and consists in the improvements hereinafter described.

In the drawing, A, Fig. 1, is a movable beam, having a suitable roller at each end, over which passes an endless perforated metal apron, B. C is a stationary beam, resting upon legs, and having upon its top any desired number of hydraulic cylinder-pistons, *d*. The beam A is made so as to slide up and down between the legs which support the beam C, and is supported in its horizontal position by the cross-bars *e*, being connected by suitable rods to the cross-beams F, the latter resting upon the piston-rods.

The operation of my invention is as follows: The pulp, fish, or other substance is discharged, by means of a chute, upon the apron B, which projects beyond the beam C for that purpose. The discharge from the chute continues as the apron moves along until the pulp thereon extends the entire length of the beam C, its thickness upon the apron being regulated by the roller G. The chute is then closed and the apron stopped, both being done by hand, or any desired mechanism, and water forced into the cylinders in the ordinary way, which raises the pistons, and consequently the beam A. In this manner the beam A is forced against the beam C, and the pulp between the beams upon the apron B is compressed in a greater or less degree, as may be required. In order to prevent the pulp upon the apron from being forced out at each side during compression, I provide and attach to the under side of the beam C two side boards, H and H′, Figs. 1 and 2, between which the apron B and beam A are received as the two beams are brought together. In order to somewhat relieve the strain upon the boards H and H′, I give to one of them a slight lateral movement by attaching it to the beam C by bolts which work in slots, as shown in Figs. 1 and 2. After the material is sufficiently compressed, the pressure is removed and the beams allowed to separate, when the apron is again started forward, and the same operation repeated.

In place of the perforated metal apron B, an apron of canvas or other fibrous material may be employed. In case I wish to fold the apron, I support it by ropes or chains attached to the edges thereof, as shown in Fig. 3. These ropes or chains pass over pulleys in the beam C, as shown in Fig. 3, so situated with reference to each other that the edges of the apron will be drawn together, and thus be better adapted to receive and carry its load.

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

1. The apron B and the beams A and C, the whole constructed, combined, and operating together in the manner substantially as described, for the purposes specified.

2. The roller G, in combination with the beam A and apron B, for the purposes specified.

3. The side boards H and H′, in combination with the beam C, the former having a lateral movement, the whole arranged and operating in the manner substantially as described.

4. An apron of canvas or other fibrous material, having a chain or rope attached to its edges, in combination with the beam C, and operating as and for the purposes specified.

5. The hydraulic piston *d*, in combination with the beam C, and connected with and operating the beam A, in the manner substantially as described.

JAMES B. HERRESHOFF.

Witnesses:

WALTER B. VINCENT,

NATHANIEL L. MORGAN.