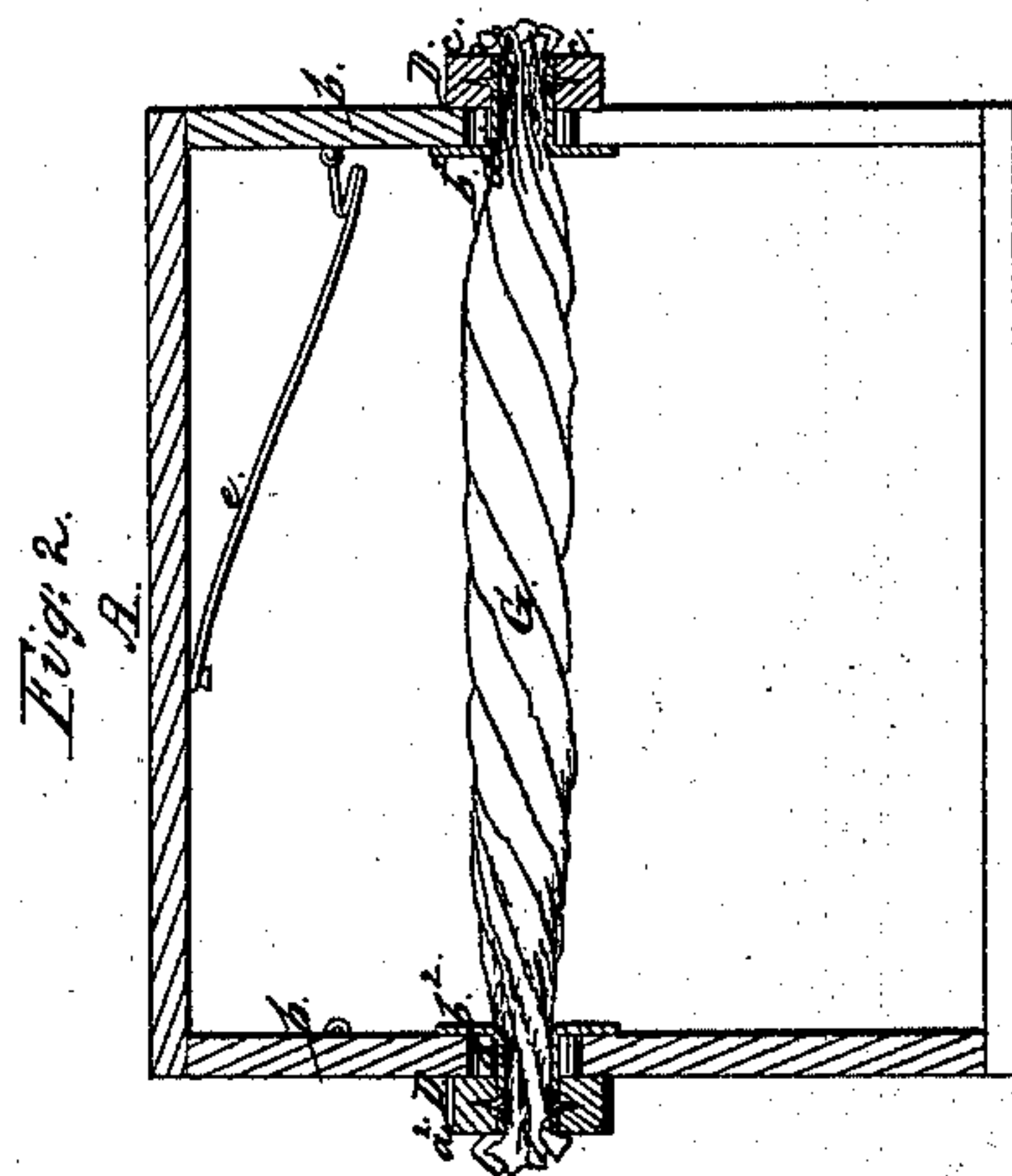
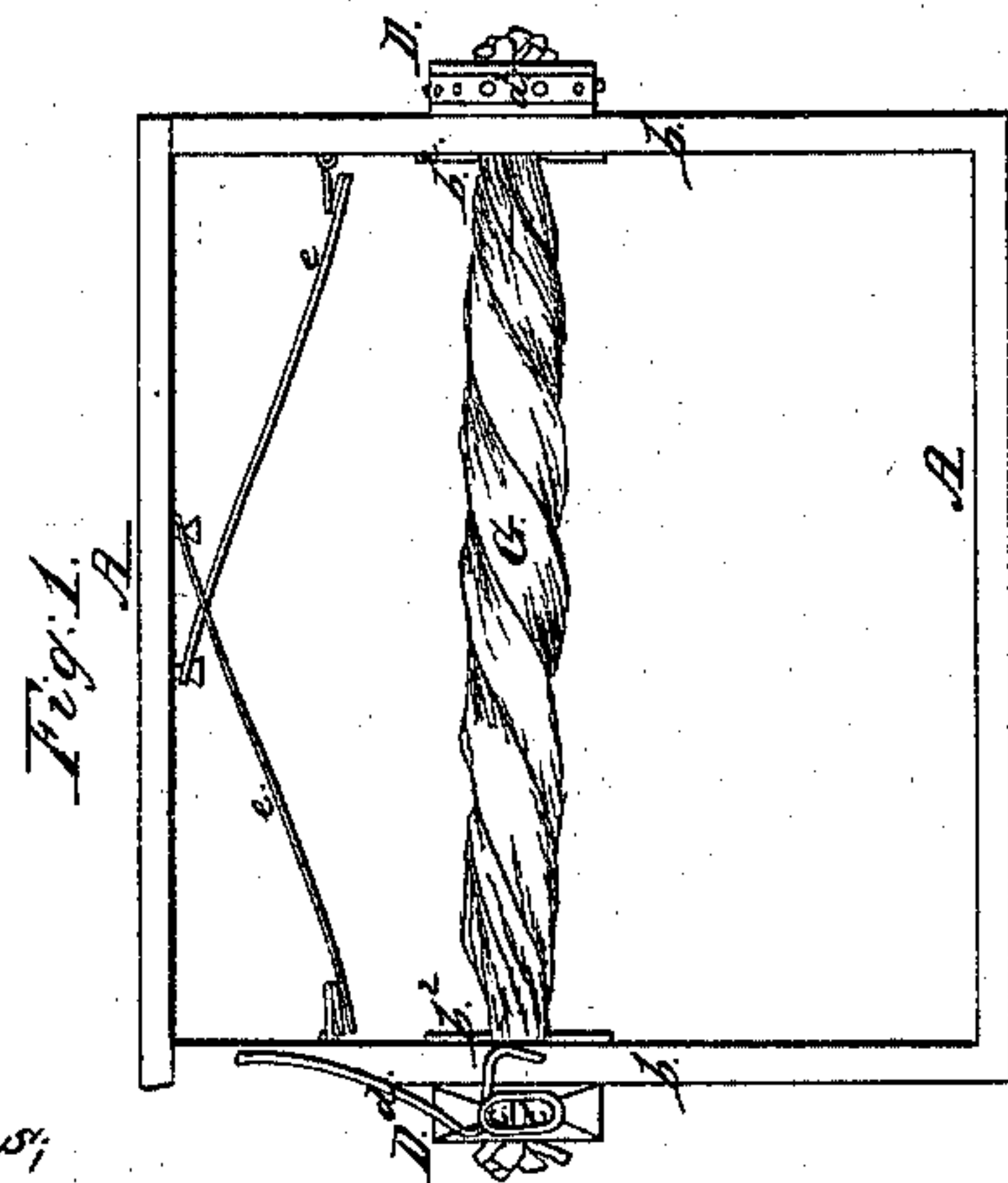
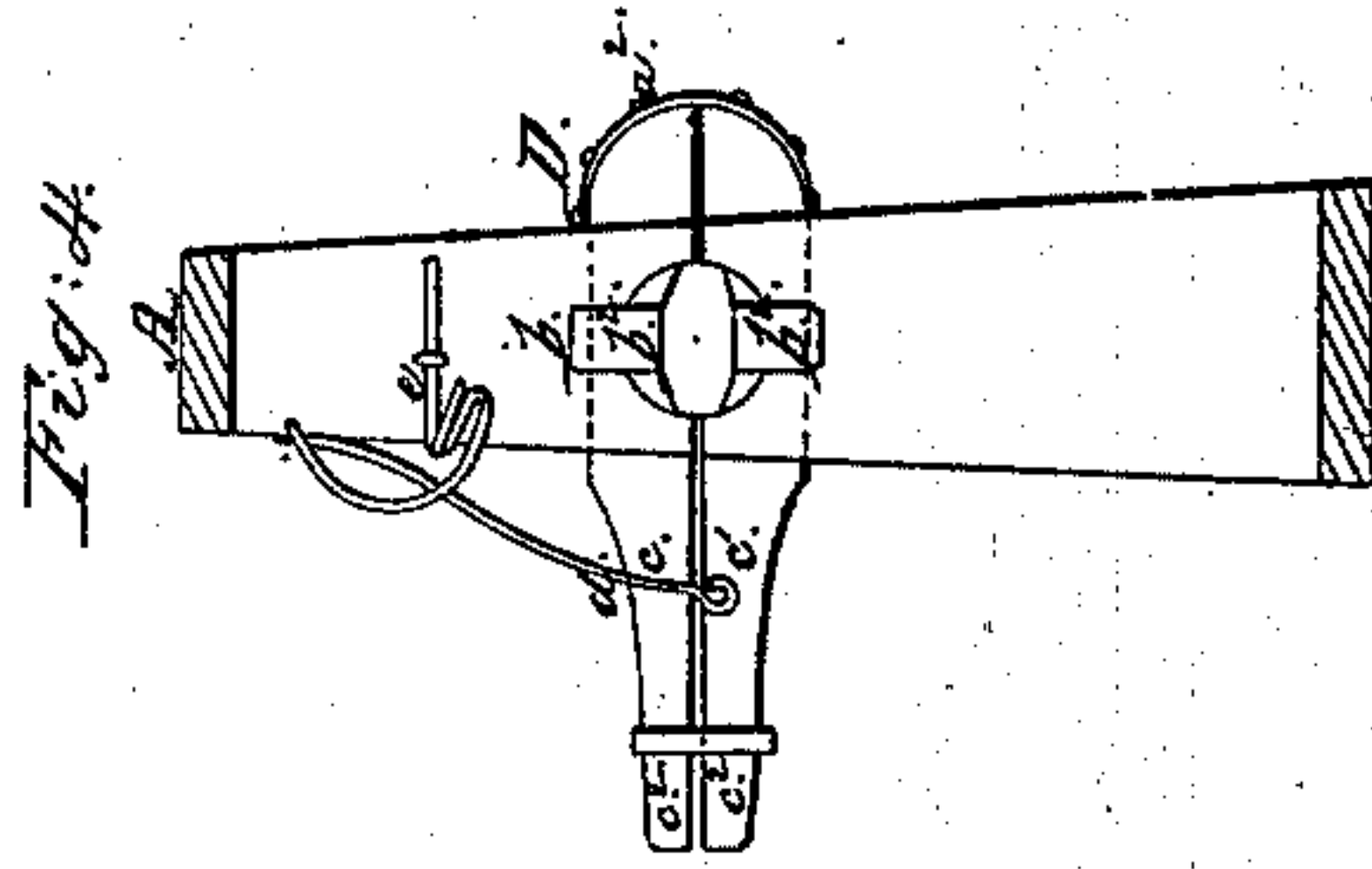
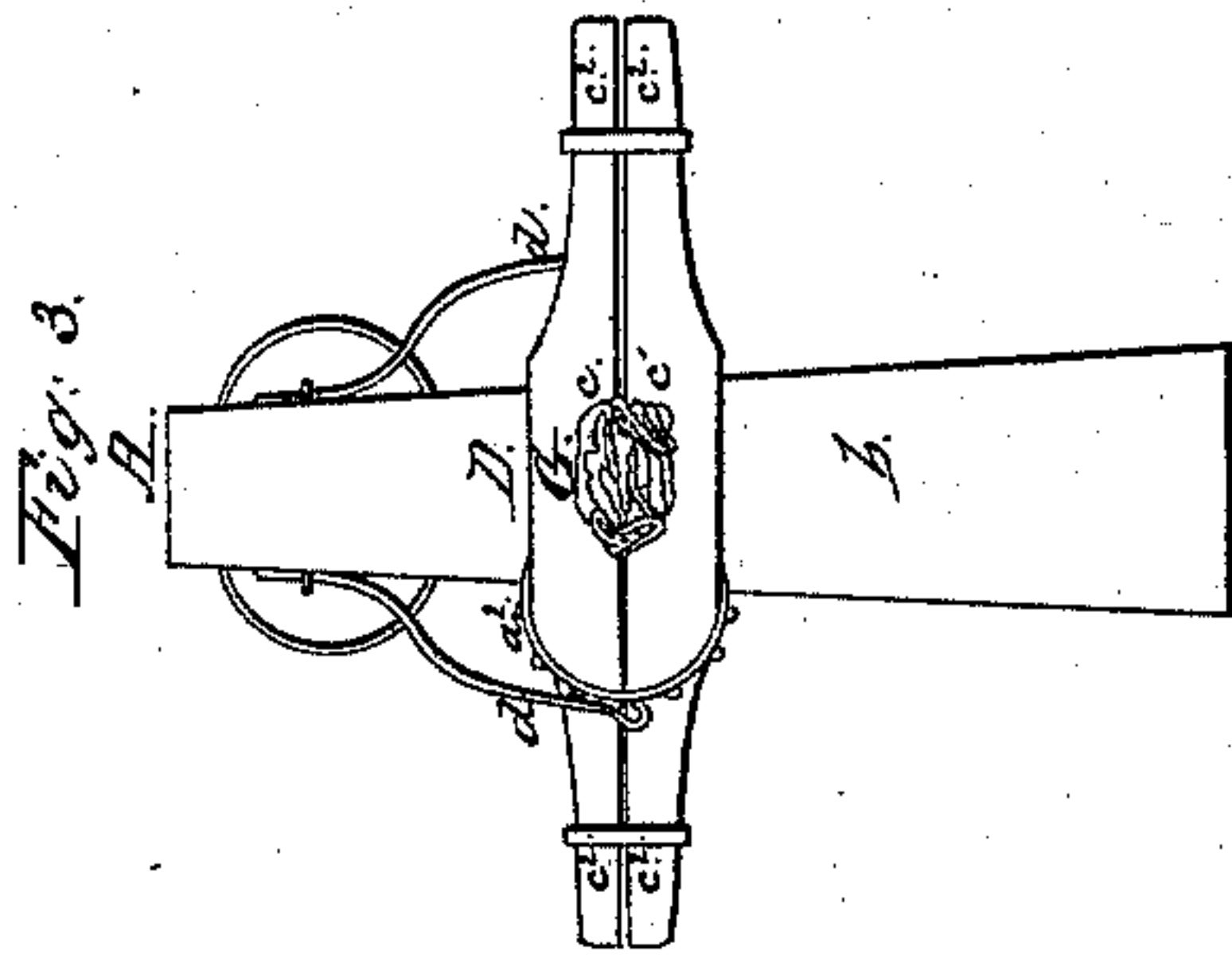
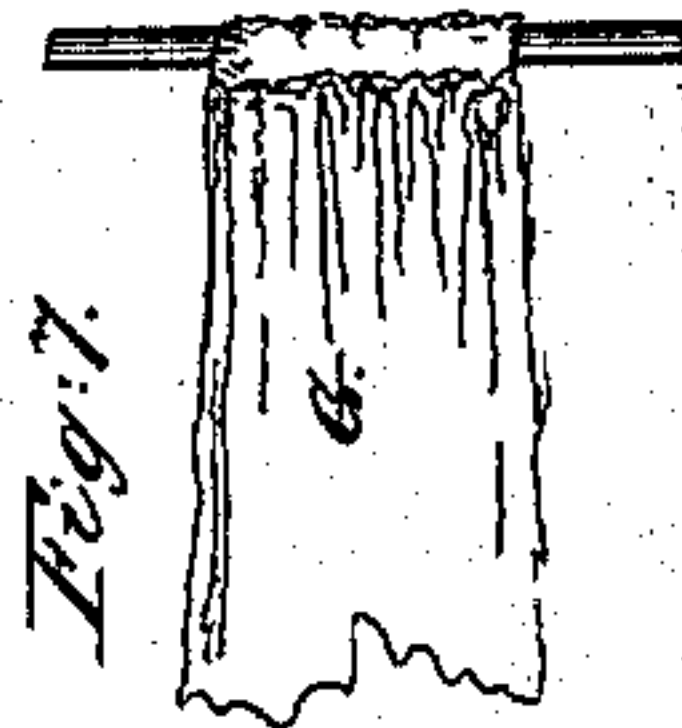
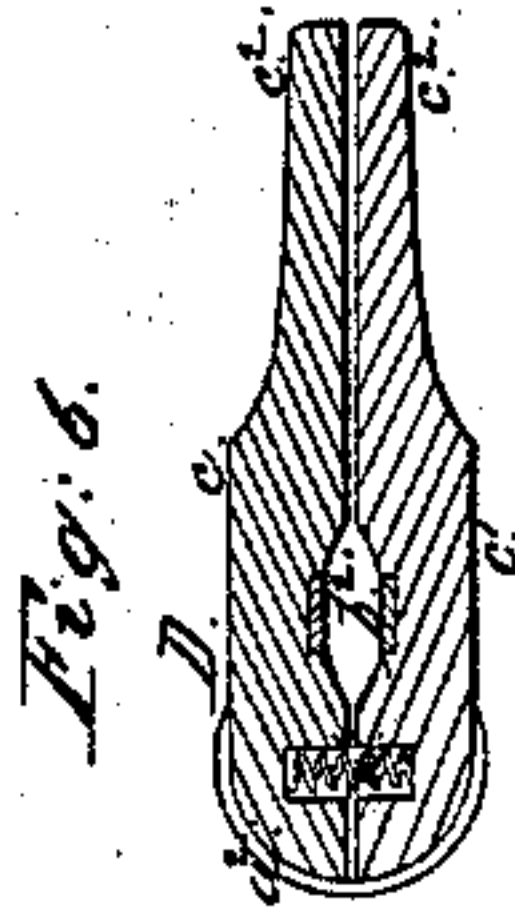
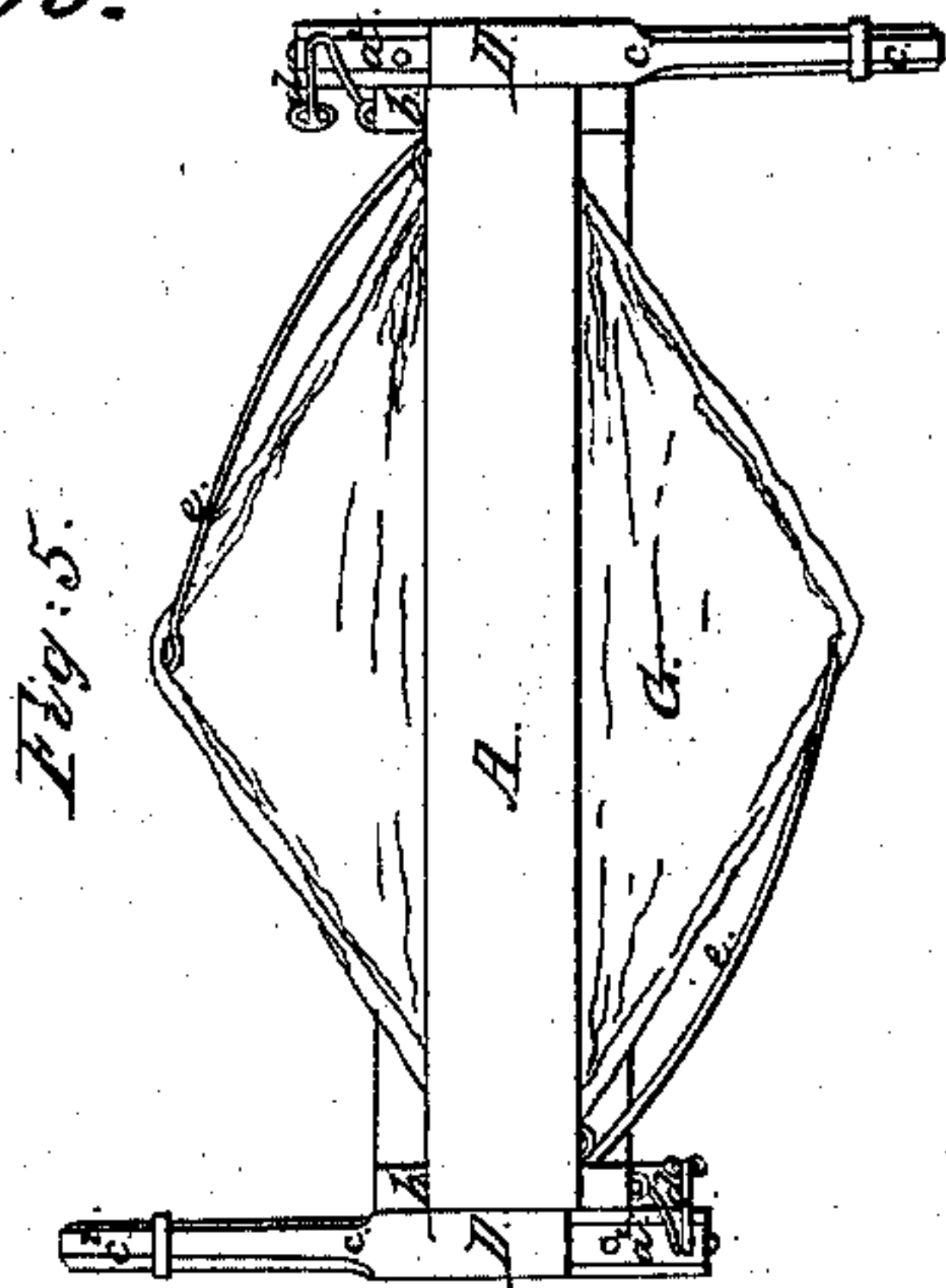


D. T. Robinson,

Cider Press.

N^o 60,060.

Patented Nov. 27, 1866.



Witnesses,

*C. J. Frost,
Richard A. Ripley.*

Inventor,

*Daniel T. Robinson,
by his Attorney,
Frederick Curtis.*

United States Patent Office.

IMPROVEMENT IN FRUIT PRESSES.

DANIEL T. ROBINSON, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 60,060, dated November 27, 1866.

SPECIFICATION.

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Be it known that I, DANIEL T. ROBINSON, of Boston, in the county of Suffolk, and State of Massachusetts, have invented a new and useful Implement or Machine for Expressing the Juice from Fruits of various kinds, as well as for various other purposes, and which I have called in the trade the Universal Press and Strainer; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, and in which—

Figure 1 is a front view.

Figure 2, a vertical and longitudinal section.

Figure 3, an end view.

Figure 4, a vertical and transverse section; and

Figure 5, a top view of the machine.

Figures 6 and 7 will be duly referred to.

The object of my present invention is to produce an implement which will answer the above-mentioned purposes easily and expeditiously, and one in which the material to be pressed may be allowed to stand in a compressed state for any length of time without the aid of continued manual power.

In the drawings above mentioned, A denotes a rectangular frame, having made in each of its opposite sides or standards, *b b*, a hole, *a*, for the reception of the ends of a sheet, G, of crash or other cloth, and which is to contain within its folds the material or article to be compressed. Applied to the outside face of each of the standards, *b b*, is a clamp, D, composed of two levers, *c c'*, united at one extremity by a leather strap, *a'*; the adjustable fulcrum of these levers being a metallic plate, *b'*, secured to their inner surfaces, and passing through the hole *a*, on its opposite sides, and being then bent at a right angle against the inner face of the standard, *b*, as shown in fig. 2 of the drawings. This connection of the clamp, D, with the frame, A, allows of its levers or jaws being brought together or distended, as occasion may require, a spiral spring, *a'*, being placed between the shorter arms of the levers for the purpose of forcing them apart. The handles or longer arms, *c'*, of the levers, *c c'*, project somewhat beyond the edges of the frame, A, in order to furnish a ready means of rotating the clamps on their adjustable fulcrum. A spring-catch or dog, *d*, is so applied to each end of the frame, A, as to extend into the path of movement of the clamps, D D, in order to retain them in position after the material may have been sufficiently compressed. Furthermore, two adjustable spring-arms, *e e*, are secured to the inner end of the standards, *b b*, as shown in fig. 4 of the drawings, in such manner as to allow of their being turned or sprung out into the horizontal position, as shown in fig. 5 of the drawings, in which position they serve to support the cloth or bag preparatory to and while it is being supplied with the material from which the juice is to be expressed.

In operating with the above-described apparatus, the ends of the sheet or piece of cloth are to be passed through the holes, *a a*, and between the jaws of the clamps, D D, the handles of which are then to be brought together and enclose the cloth tightly between them, the said handles being confined together by means of a link or strap passed over and encompassing them. Next, the spring-arms, *e e*, are to be sprung out into an extended horizontal position, and the sides of the cloth, G, hooked or caught upon their extremities, as shown in fig. 5 of the drawings, thus forming a trough or bag into which the fruit or other material is to be placed. The arms, *e e*, are then to be detached from the cloth, G, and sprung back into place in connection with a stud applied to the upper part of the frame. The edges of the cloth are then to be brought together, or lapped one over the other, and the clamps subsequently rotated in opposite directions, which will twist the cloth, G, with a powerful pressure and express the juice or liquid from whatever may be contained in it. The spring-dogs will retain the clamps and the cloth in this position for any length of time, or until the liquid may have been thoroughly expressed from the contents of the cloth. After this has been accomplished the dogs or catches, *d d*, may be retracted and the movement of the clamps reversed, which will untwist the cloth and allow its contents to be removed and a fresh supply substituted. Or, by removing the rings from the handles of the clamp, their jaws can be forced apart by the action of the spring situated between them and admit of the cloth being removed entirely from the machine.

I would remark that a modification of the clamps which I have contemplated, or which I consider would be a mechanical equivalent for them, is the employment in place of them of a stick or bar to extend into a hem made in the ends of the cloth, as shown in fig. 7 of the drawings. In place of the spiral spring between the

levers, I have contemplated connecting them by a steel strap, in the same manner as, and in place of, the leather strap shown in the accompanying model, this steel strap answering the purpose both of a hinge to connect them together and a spring to force them asunder.

One advantage of my invention is, that I am enabled to use a piece of cloth of any moderate size or shape without any previous preparation, such as being hemmed or made into a bag. Another advantage is, that by means of the spring-dogs or their equivalents, applied to the frame A, and operating in connection with the clamps D D, the cloth and its contents may be allowed to remain in a twisted or compressed state, without the presence of an attendant. It is this latter advantage which constitutes one of the most valuable features of the invention.

I claim the improved implement or machine constructed and operating substantially as above described, consisting of the frame A, spring-arms *e e*, dogs *d d*, and clamps D D, or their equivalents.

DANIEL T. ROBINSON.

Witnesses:

FRED. CURTIS,
C. W. BALDWIN.