

C. F. Dortenbach,

Cleaning Intestines of Animals.

N^o 38,888.

Patented June 16, 1863.

Fig. 1.

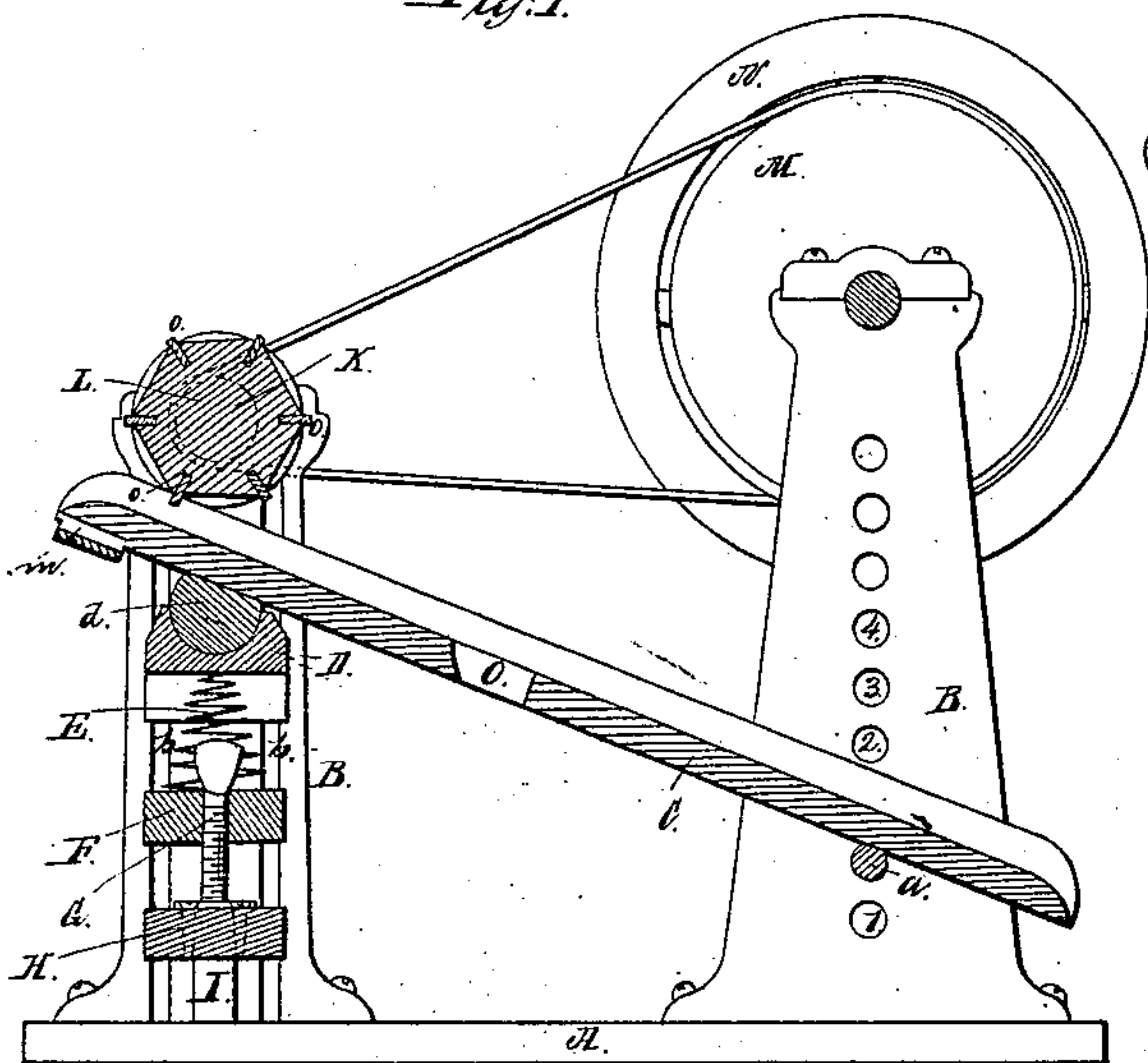


Fig. 3.

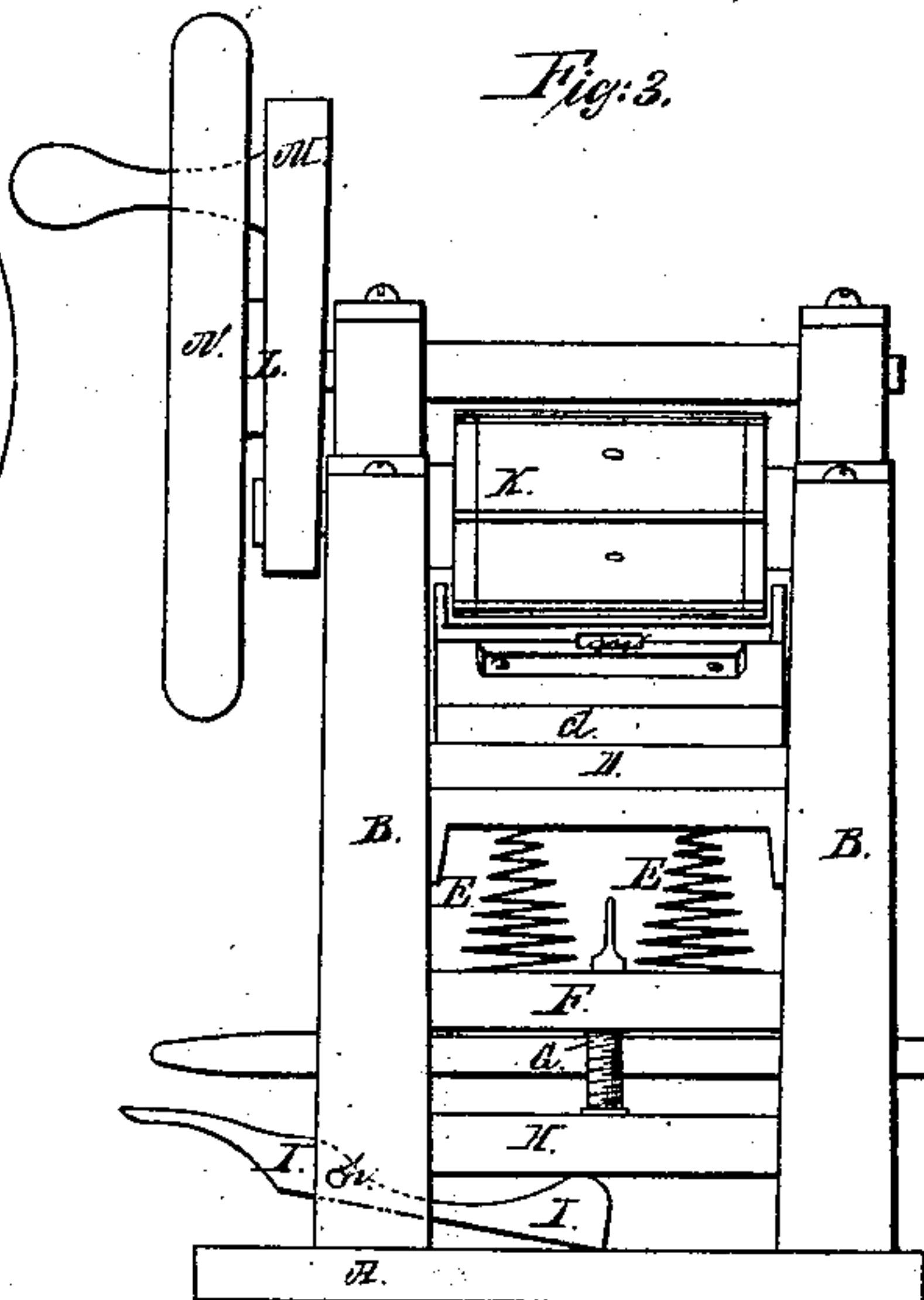


Fig. 2.

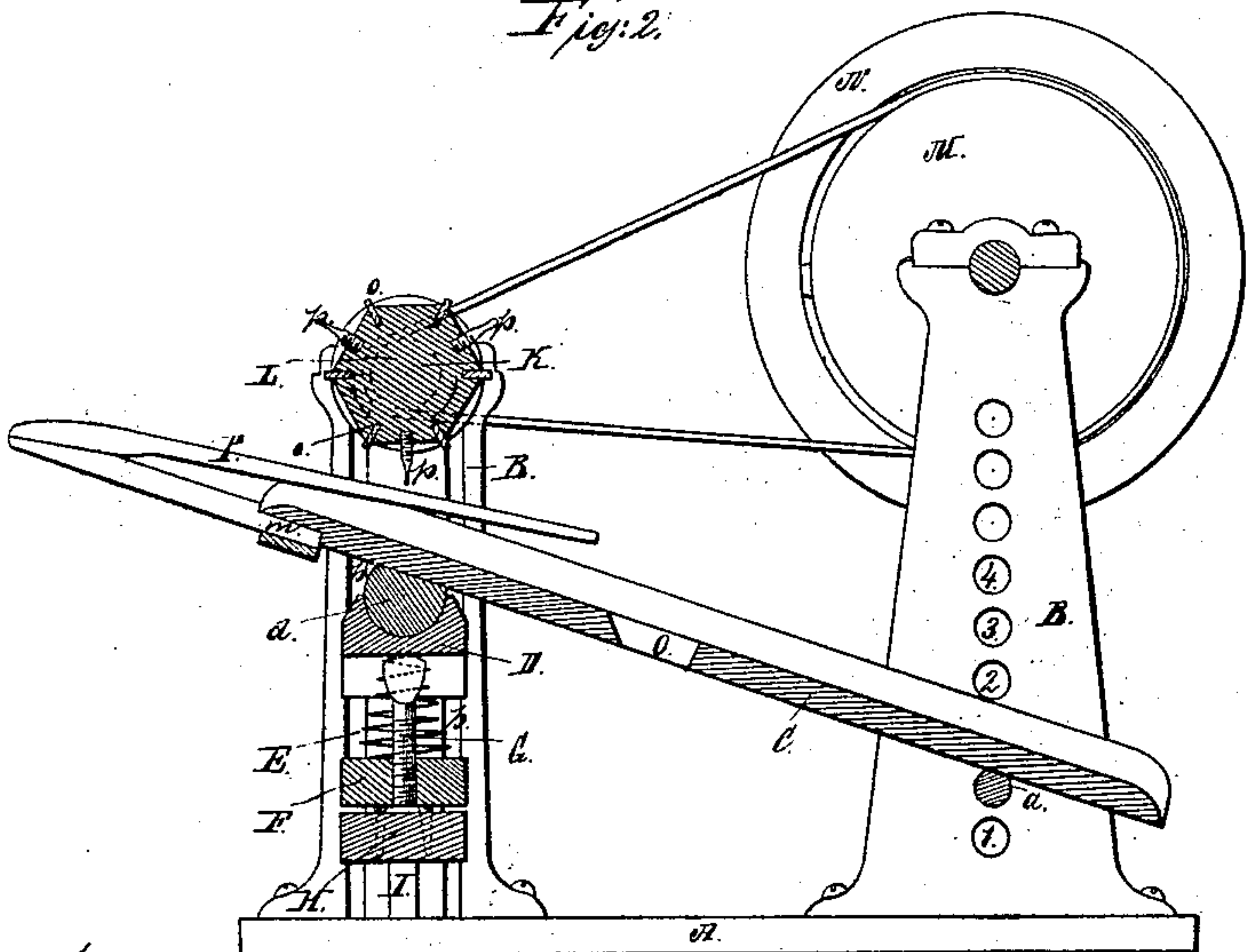


Fig. 4.



Witnesses:
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UNITED STATES PATENT OFFICE.

CHARLES F. DÖRTENBACH, OF CLEVELAND, OHIO.

IMPROVEMENT IN MACHINES FOR CLEANING ANIMALS' INTESTINES.

Specification forming part of Letters Patent No. 38,888, dated June 16, 1863.

To all whom it may concern:

Be it known that I, CHARLES F. DÖRTENBACH, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements for cleaning and turning the intestines of cattle, hogs, or sheep, which are to be used in the manufacture of sausages; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, in which—

Figures 1 and 2 represent longitudinal vertical sections through said machine. Fig. 3 represents an end view of the same. Fig. 4 represents a detached view, hereinafter to be referred to.

The operation of cleaning the intestines of animals and of turning their inside out to clean the same is a very laborious and tedious one, as each gut has to be cleaned separately, and as it takes a very experienced hand to turn them inside out, and I have therefore constructed a machine by which a number of intestines may be cleaned at one and the same operation, and by which they may be turned inside out.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A represents the bed-plate of the machine.

B represents the frame of the machine.

C represents an inclined board or table, on which the intestines are placed when they are to be cleaned. Its lower end rests on the rod *a*, and its height may be adjusted by inserting said rod into one of the holes 1 2 3, &c. The upper end is supported by the adjustable sliding block D, which is supported by the springs E, and which is retained in its perpendicular position by projections which extend into the grooves *b* of the frame. The table C has a cylindrical bearing, *d*, within the sliding block D, on which it may turn when its lower end is raised or lowered. The springs E are secured to another sliding block, F, the position of which may be adjusted by means of the set-screw G to give to said springs the proper tension, said screw having its bearing in the sliding board H, which may be raised by means of the tread-lever I, which turns on the fulcrum *h*.

K represents a rotary scraper, which may

be of a cylindrical or polygonal shape, and which is provided with a number of blades, *o*, having dull edges which extend a trifle beyond its circumference. It is mounted on bearings near the upper end of the inclined table, and receives a rotary motion from the pulley L, the latter being turned by means of a belt or otherwise from the pulley M and fly-wheel N.

The operation of the machine is as follows: A number of intestines—as many as can conveniently be held in one hand—are grasped at their ends, and are drawn from the lower end of the table upward under the rotary scraper. The operator then presses the upper end of the table C upward by depressing the treadle I, and motion being given to the rotary scraper K, the blades act on the intestines on the table and effectually scrape and clean them, the operator drawing them upward as they are cleaned. The mucus and other impurities pass down the inclined table and escape through the aperture O into a receptacle. The ends of the intestines, which were held by the operator, are then also subjected to the operation of the rotary scraper, and thus the outside of them is effectually cleaned; and the number which may be cleaned at the time depends principally upon the width of the table or the capacity of the machine.

In using this machine for turning the intestines inside out, the sliding blocks F and H and the inclined table C are screwed down to the lowest position, as represented in Fig. 2. A rod, P, is then inserted in the notch *m* at the upper end of the table, and the concave scrapers *p* (represented at Fig. 4) are screwed into suitable holes in the outside of the scraping cylinder. The concave edges of the scrapers correspond to the curvature of the circumference of the rod P.

When the various parts of the machine are adjusted as described, the end of the intestine is drawn from below over the end of the rod P until it comes within reach of the scrapers *p*. These then take hold of it and draw it up, the revolving scraper then turning in the direction of the red arrow, Fig. 2. When the entire length of the intestine has thus been drawn on the rod, the operator turns the upper end outward, and slides it over the body of the intestine on the stick P, so as to bring it within reach of the scraper *p*, reverses the mo-

tion of the rotary scraper, so as to turn it in the direction of the black arrow, and the machine will turn the entire intestine inside out. When a number of them have thus been turned, the machine is adjusted to the position represented in Fig. 1, and they are subjected to the scraping process above described. By interposing the springs E between the action of the treadle and scrapers the table C is made to yield if the pressure of the treadle should become too great, and the intestines are thus protected from being torn or injured by said scrapers.

Having thus fully described the nature of my invention, what I claim herein as new, and desire to secure by Letters Patent, is—

1. In combination with the rotary scrapers K, the inclined adjustable table C, for clean-

ing the intestines of animals, substantially in the manner herein described.

2. In combination with the adjustable table C, the springs E, for the purpose of causing the table to yield to the pressure of the scrapers, to protect the intestines from being injured by the scrapers, substantially in the manner herein described.

3. In combination with the rotary scraping-cylinder and adjustable table, the rod P and the convex scrapers *p*, for the purpose of turning the intestines inside out, substantially in the manner herein set forth.

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Witnesses:

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