

(No Model.)

W. HUNDENBORN & A. BACKHAUSEN.
MEAT CUTTER.

No. 550,071.

Patented Nov. 19, 1895.

Fig. 1.

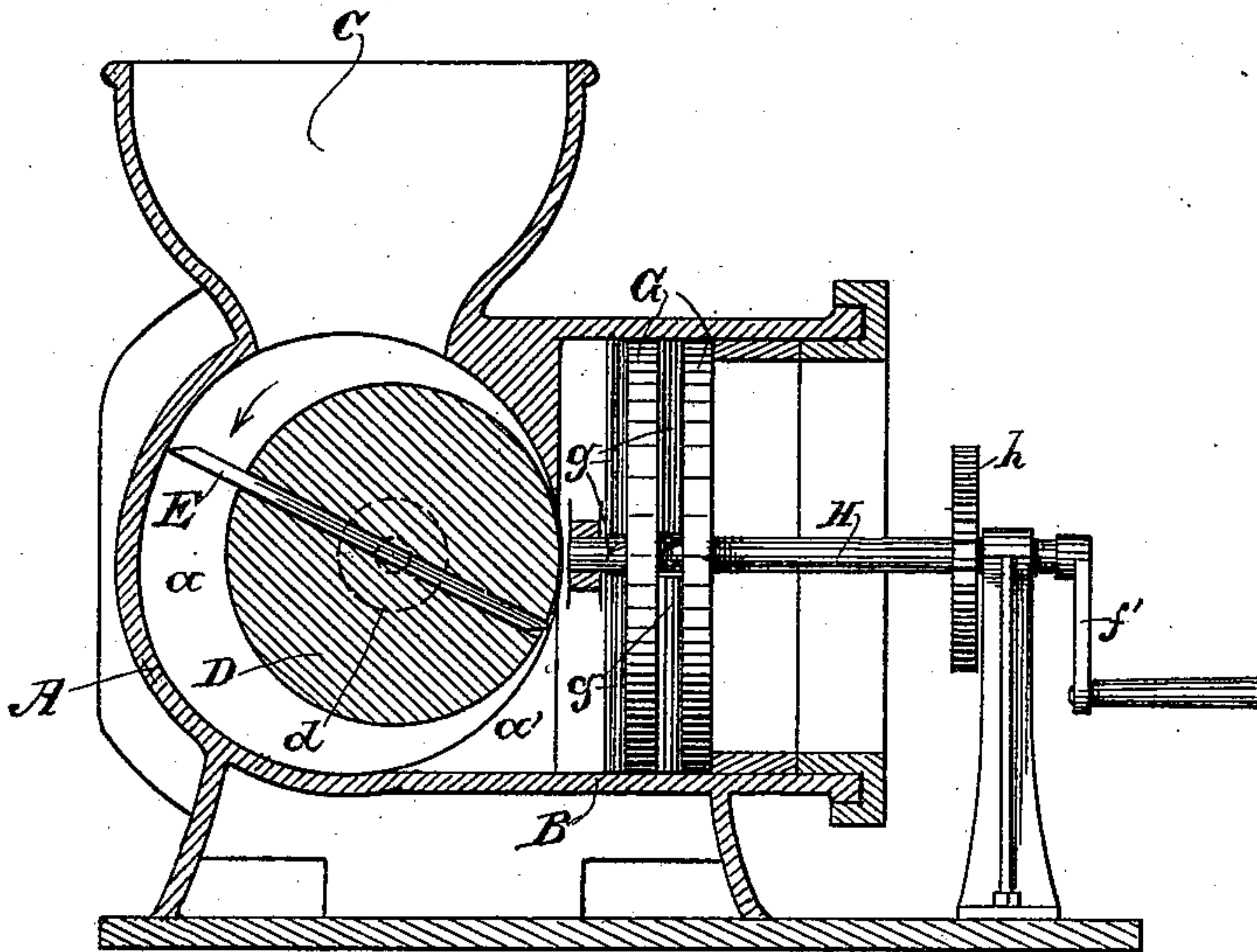


Fig. 2.

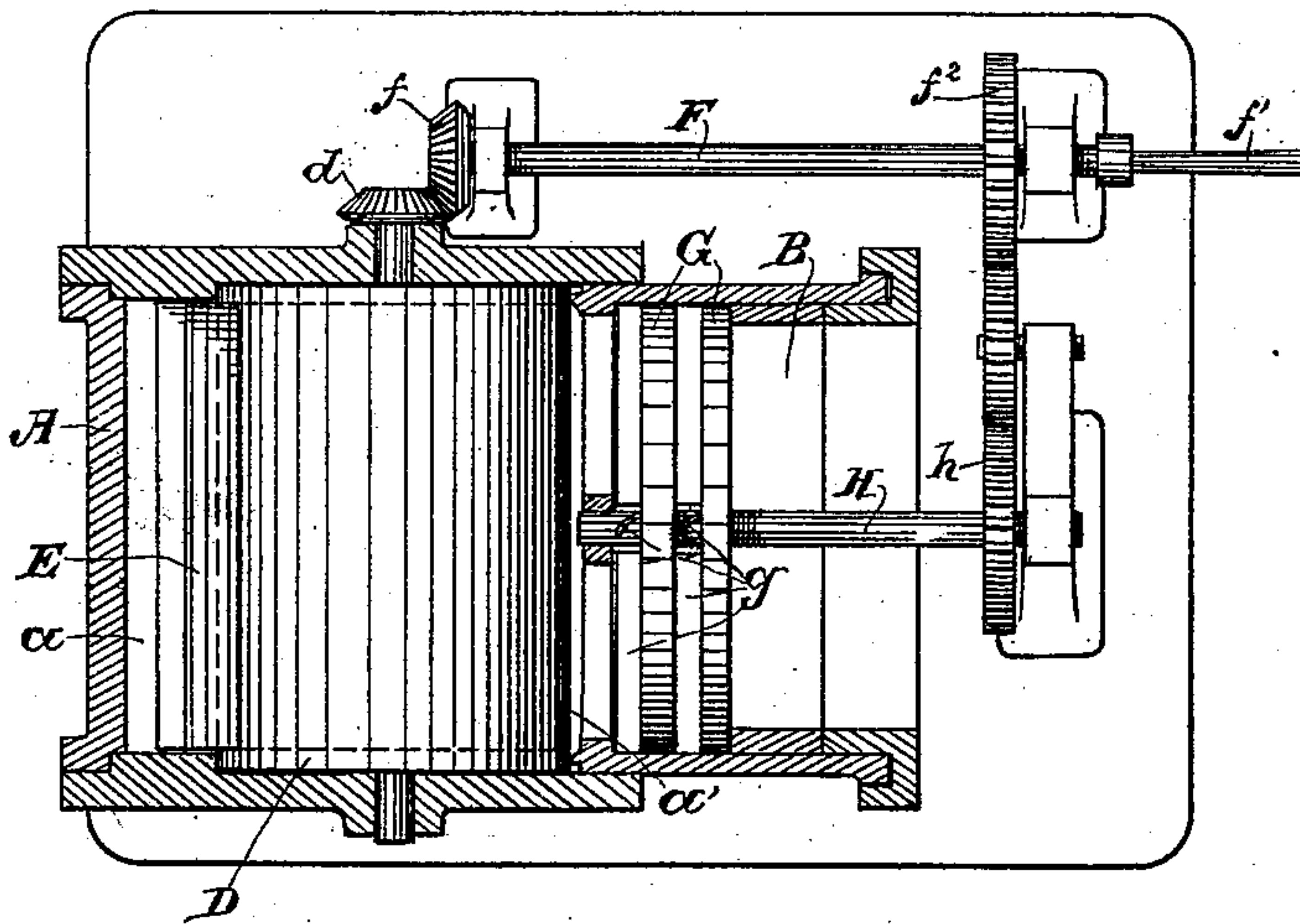
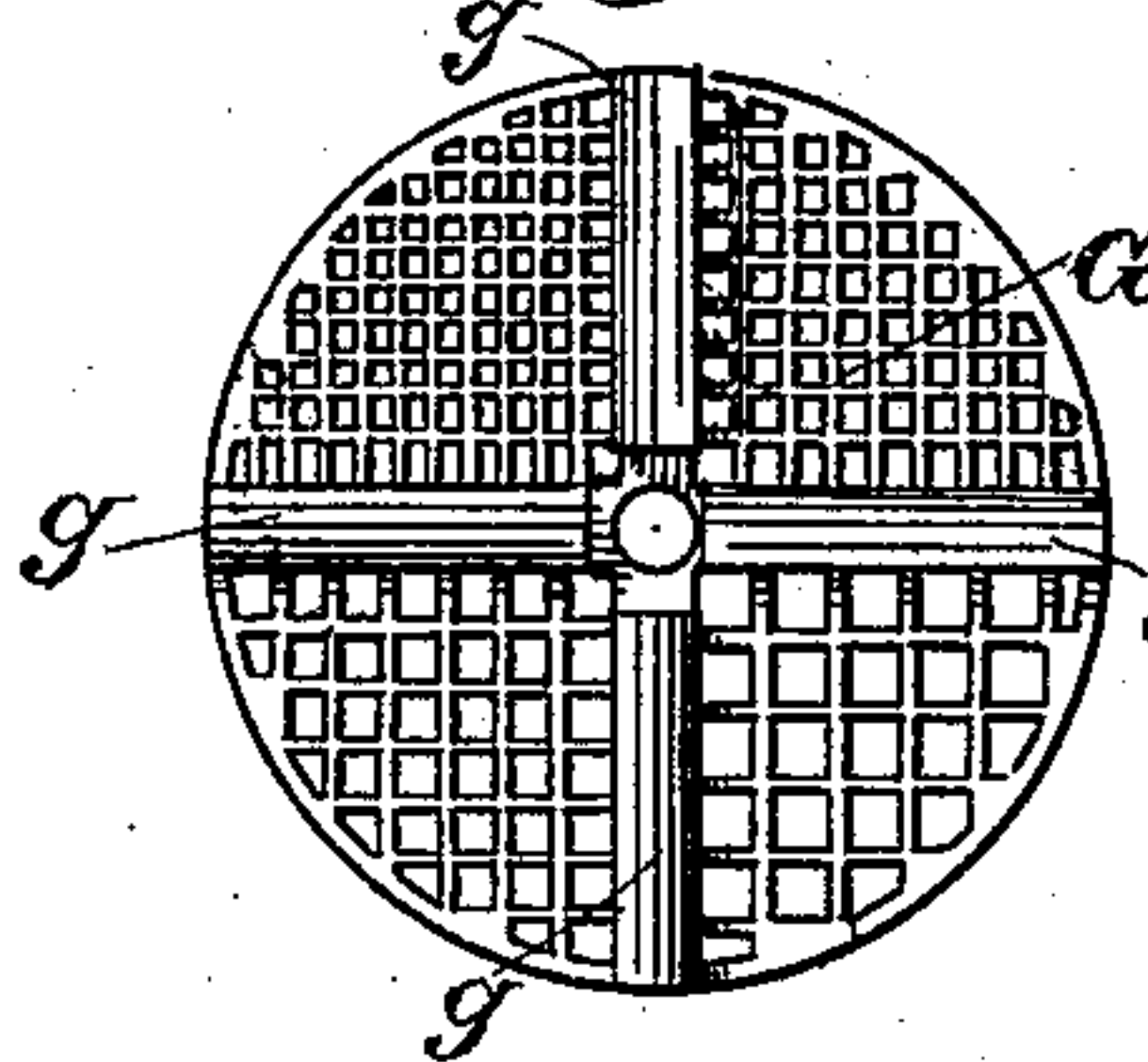


Fig. 3.



Witnesses,
J. H. Brown
J. F. Aschbeck

Inventors,
Wilhelm Hundeborn
Adolph Backhausen
By Dewey & Co. Attys

UNITED STATES PATENT OFFICE.

WILHELM HUNDENBORN AND ADOLPH BACKHAUSEN, OF ELBERFELD,
GERMANY, ASSIGNORS TO SIEGMUND KOHLBERG, OF SAME PLACE.

MEAT-CUTTER.

SPECIFICATION forming part of Letters Patent No. 550,071, dated November 19, 1895.

Application filed July 31, 1895. Serial No. 557,761. (No model.) Patented in Germany October 8, 1893, No. 74,626.

To all whom it may concern:

Be it known that we, WILHELM HUNDENBORN and ADOLPH BACKHAUSEN, citizens of Germany, residing at Elberfeld, Germany, have invented an Improvement in Meat-Cutters, (for which we have obtained a patent in Germany, No. 74,626, bearing date October 8, 1893;) and we hereby declare the following to be a full, clear, and exact description of the same.

Our invention relates to that class of meat-cutters in which the material is fed to knives mounted upon a perforated disk rotating in a vertical plane; and our invention consists of details of construction, arrangement, and combination, which we shall hereinafter fully describe and specifically claim.

Referring to the accompanying drawings for a more complete explanation of our invention, Figure 1 is a vertical section of our meat-cutter. Fig. 2 is a horizontal section of the same. Fig. 3 is a front elevation of one of the cutters.

The casing or shell of the machine is formed into two cylinders in planes at right angles to each other. One of these cylinders A is the feeding-cylinder and the other B is the cutting-cylinder. With the cylinder A communicates the supply-hopper C.

Mounted eccentrically within the feed-cylinder A is a rotating roller D, diametrically through which is made a slot extending practically the entire length of the roller and in which is fitted and adapted to slide freely the pusher-plate E, which approximately fills the diameter of the interior of the cylinder A, though not quite, so that it may rotate freely therein, and the interior of said cylinder A is not a perfect circle, but at its horizontal diameter it is somewhat flattened, in order to allow the pusher-plate, which has its center eccentric to the cylinder, to fit more accurately said cylinder and avoid too great a space between its end and the extremity of the horizontal diameter of said cylinder when the pusher-plate passes the horizontal.

At one side the eccentrically-mounted roller which forms the carrier for the pusher-plate comes up closely to the wall of the cylinder A, forming an abutment therewith, but at

the other side it leaves the space *a* communicating at its upper end with the hopper C and gradually decreasing in width toward the other side of the cylinder at its lower portion just below the abutment, where, as shown at *a'*, said cylinder communicates with the cutting-cylinder B.

The carrier-roller D is to be rotated by any suitable means—such, for example, as those here shown, and which consist of the bevel-pinion *d* on the end of its pivotal shaft, the bevel-pinion *f* engaging with the pinion *d* and mounted upon the power-shaft F, the other end of which carries the crank *f'* or has other means applied to it by which it is rotated.

Within the cutting-cylinder B is a perforated disk G, (shown clearly in Fig. 3,) and said disk has mounted upon it in radial planes the knives or cutters *g*, which are presented to the incoming material fed from the cylinder A. There may be one or more of these disks G, and for the sake of example I have here shown two, one behind the other and separated from each other, and where two or more are used it is best to graduate their perforations, so that the meat shall be reduced to any degree of fineness desired. These disks are driven in any suitable manner—as, for example, by means of the shaft H, upon which they are mounted, said shaft having a gear *h*, which meshes with a gear *f*² on the crank-shaft F. The construction and mode of operation of these cutting-disks are well known and form no part of our present invention, which, as we shall claim, lies wholly within the feeding mechanism and its combination with other parts in a meat-cutting machine.

In operation the meat is fed into the hopper C and from thence it passes down into the feed-space *a*, and by the rotating projecting end of the pusher-plate E is advanced in said space and is gradually compressed in the decreasing width of said space until it is forced around to the discharge-opening *a'*, leading into the cutting-cylinder. At this point it is in a compact compressed condition, having been reduced thereto gradually and gently and without tearing, and is thus presented to the action of the cutting-knives. By these

knives it is reduced to such a fineness that it will pass out through the perforations of the disks G.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

An improved meat cutter consisting of a casing or shell formed into two cylinders, in planes at right angles to each other, one of said cylinders being the feeding cylinder and the other the cutting cylinder, said feeding cylinder having a supply hopper and having one of its sides flattened, a roller mounted eccentrically within the feeding cylinder and operating closely against an abutment or wall formed at the junction of the two cylinders, at one side of the center only, whereby an opening is formed below the abutment for the passage of the material from one cylinder to

the other, said roller having a slot made diametrically through it, and extending approximately the entire length thereof, a single pusher-plate mounted to freely slide in said slot, cutting disks mounted in the cutting cylinder and operating in planes at right angles to the rotation of the roller, a shaft having a pinion to engage a pinion of the axis of the roller and rotate the latter, and gearing between said shaft and the cutting devices for operating the latter.

In witness whereof we have hereunto set our hands.

WILHELM HUNDENBORN.
ADOLPH BACKHAUSEN.

Witnesses:

F. H. STRAUSS,

A. STRAUSS.