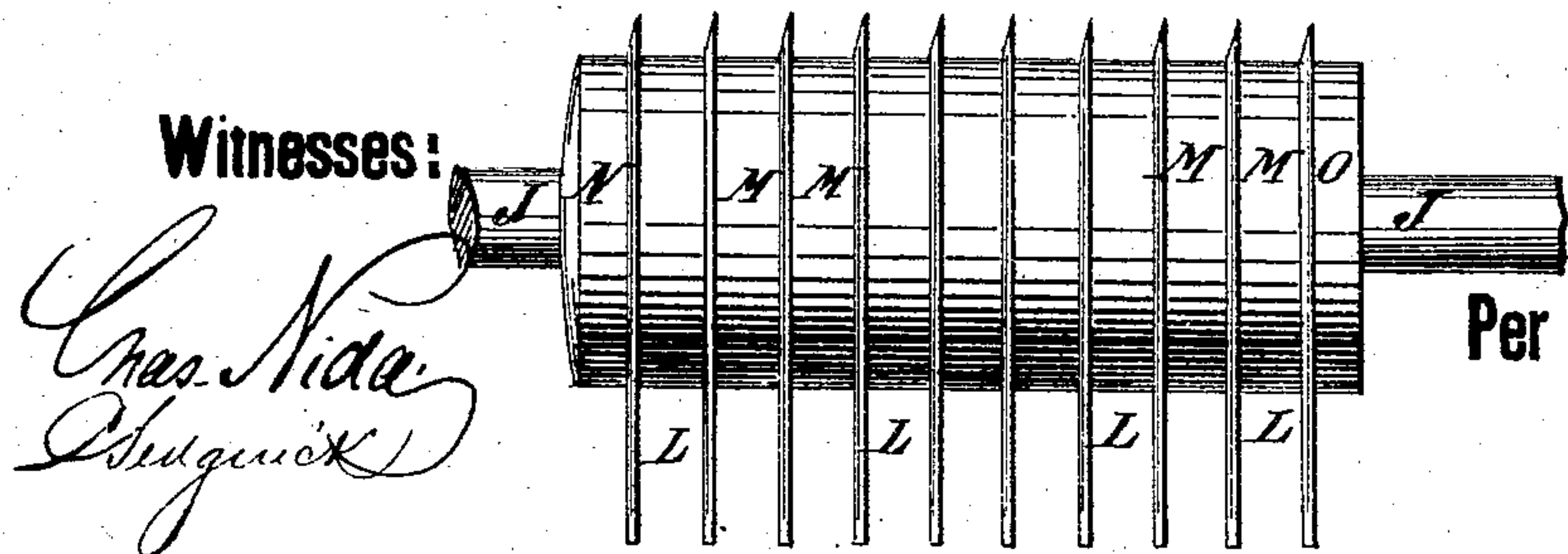
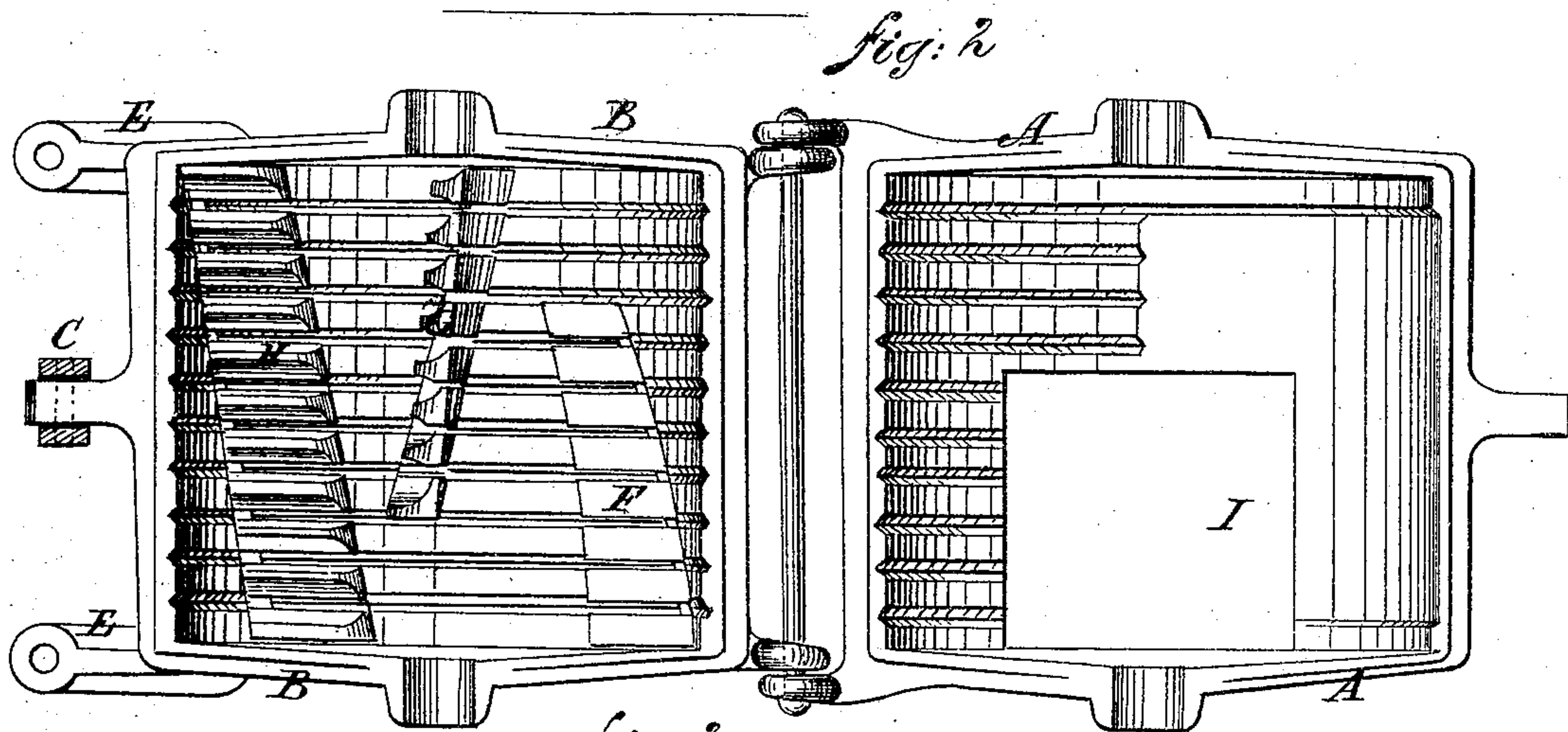
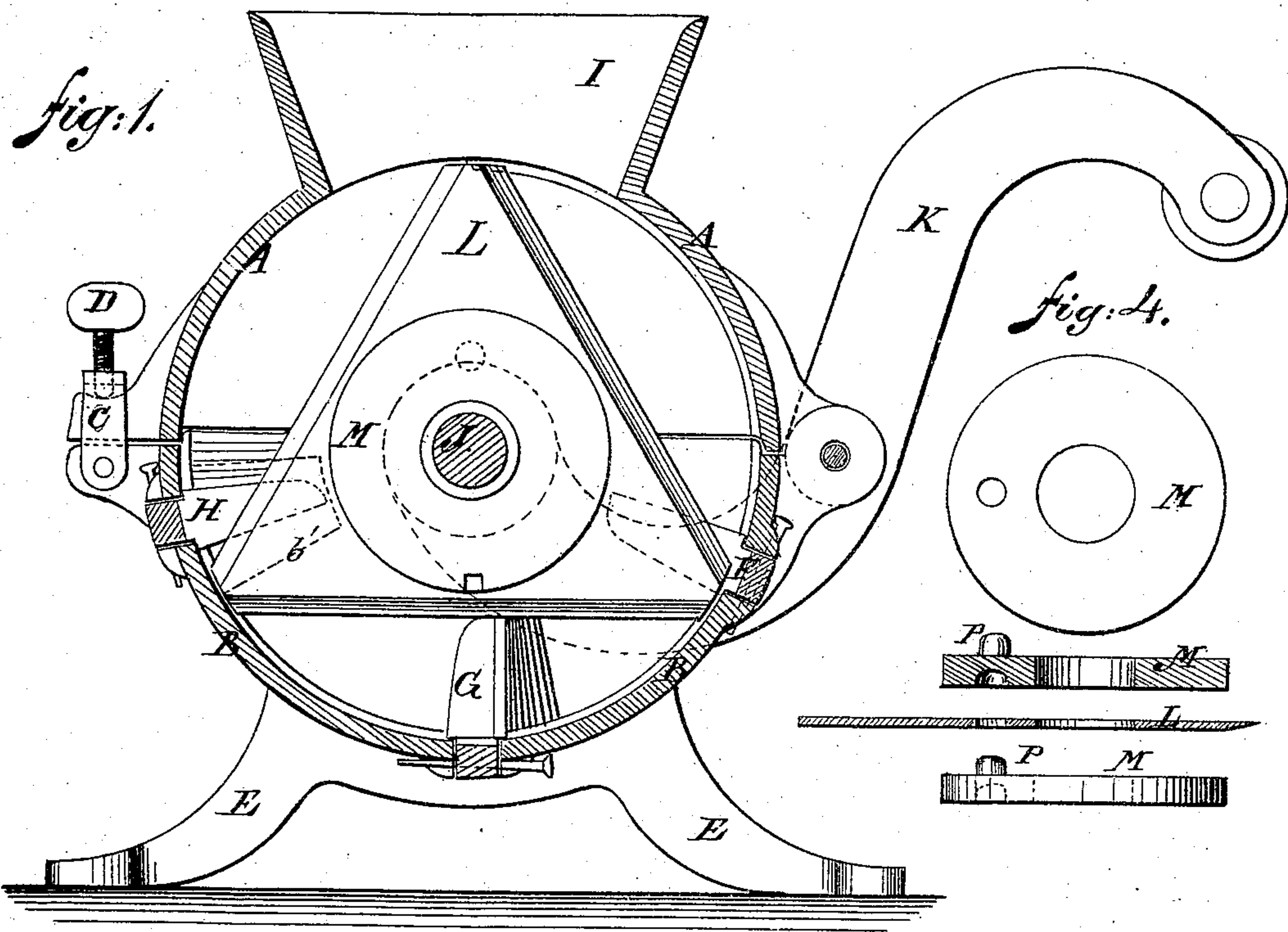


J. KNOPP.
Sausage-Meat Cutters.

No. 151,783.

Patented June 9, 1874.



Inventor:
J. Knopp
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UNITED STATES PATENT OFFICE.

JACOB KNOPP, OF COLUMBIANA, OHIO.

IMPROVEMENT IN SAUSAGE-MEAT CUTTERS.

Specification forming part of Letters Patent No. **151,783**, dated June 9, 1874; application filed March 7, 1874.

To all whom it may concern:

Be it known that I, JACOB KNOPP, of Columbiana, in the county of Columbiana and State of Ohio, have invented a new and useful Improvement in Sausage-Cutter Knives, of which the following is a specification:

Figure 1 is a vertical cross-section of my improved sausage-cutter, showing a knife in side view. Fig. 2 is a top view of the case opened, the knife-shaft and knives being removed. Fig. 3 is a side view of the knife-shaft and knives detached from the case. Fig. 4 are detail views of a knife and washers.

Similar letters of reference indicate corresponding parts.

The invention will first be fully described, and then pointed out in the claim.

A B is the case, which is made in the form of a short hollow cylinder, and in two parts, which are hinged to each other at one edge, and secured at the other edge, when closed, by a pivoted loop, C, and set-screw D, or other convenient fastening. The lower part D is provided with short legs E, by which it is secured to a bench or table. The lower part B of the case, and the forward half of the upper part A have V-shaped grooves formed in their inner surface, through which the points or angles of the knives sweep. In the lower part B of the case are formed inclined slots, in which are secured notched or slotted plates F G H. The two forward plates, F G, extend from the opposite ends of the case nearly to its other ends, so as to overlap each other, as shown in Fig. 2, and leave spaces at their alternate ends for the passage of the meat. The rear plate H extends entirely across the case, and its upper end terminates a little above the discharge-orifice *b'*. The toothed plates F G H thus form a zigzag inclined plane, along which the meat passes from the hopper I to the discharge-orifice *b'*, being all the time operated upon by the knives. In the adjacent edges of the ends of the parts A B of the case are formed half-round notches, to serve as bearings for the knife-shaft J, to one or both the ends of which are secured cranks K, by which the machine is operated. L are the knives, which are made triangular in form, and with cutting-edges upon all three sides. The points of the angles are cut off, as shown in Fig. 1, so that the wear of the knives will not shorten

them, and thus prevent their points from entering the grooves of the case A B. The knives L have a hole through their centers, to receive and fit upon the shaft J, and are kept at the proper distance apart by washers M, also placed upon said shaft. The knives L and washers M are clamped to each other by a nut, N, secured upon the shaft J, and pressing them against a nut or shoulder, O, placed upon the shaft J toward its other end. The knives L are arranged and held in line with each other by means of pins P attached to each washer M, and which are made of such a length as to pass through the adjacent knife L, and enter a hole or recess formed in the washers upon its other side, exactly opposite the base of the pin formed in said washer, as indicated in Fig. 4. The pin P of the first washer M, after passing through the hole in the first knife L, enters a hole or recess in the stationary collar, shoulder, or nut O. The pin P of the last washer M projects upon both sides, the inner part passing through the knife, and entering the next washer, and the outer part simply passing through the outer knife.

By this construction the knives have straight cutting-edges, so that they can be readily sharpened. They can also be readily reversed when dull, so as to present new cutting-edges, and thus avoid delay and loss of time from having to wait so often while the knives are being sharpened. They can also be cut from plates of sheet steel, to avoid waste of material.

The triangular knives enable the machine to be operated more easily, and at the same time cut the material thoroughly and very rapidly.

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

The combination, with cylindrical case, of inclined slotted plates F G H, and a rotary head having the series of triangular knives L fastened centrally thereon, all constructed and arranged substantially as and for the purpose specified.

JACOB KNOPP.

Witnesses:

D. ESTERLY,
JOHN VOGLESENG.