CHARLES FORSCHNER.

Improvement in Sausage Stuffers.

No. 119,700. Patented Oct. 10, 1871.

Fig. I.

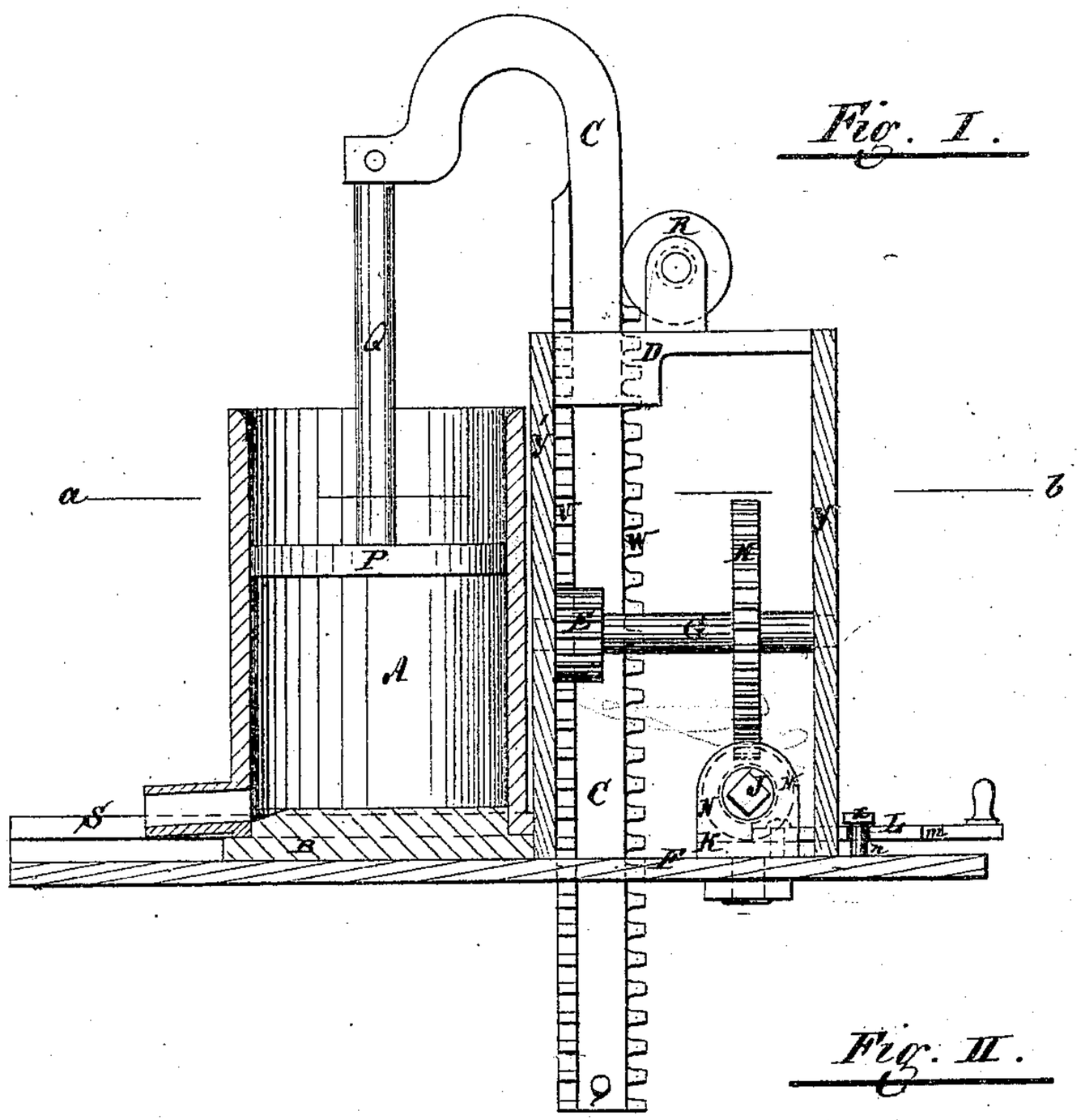
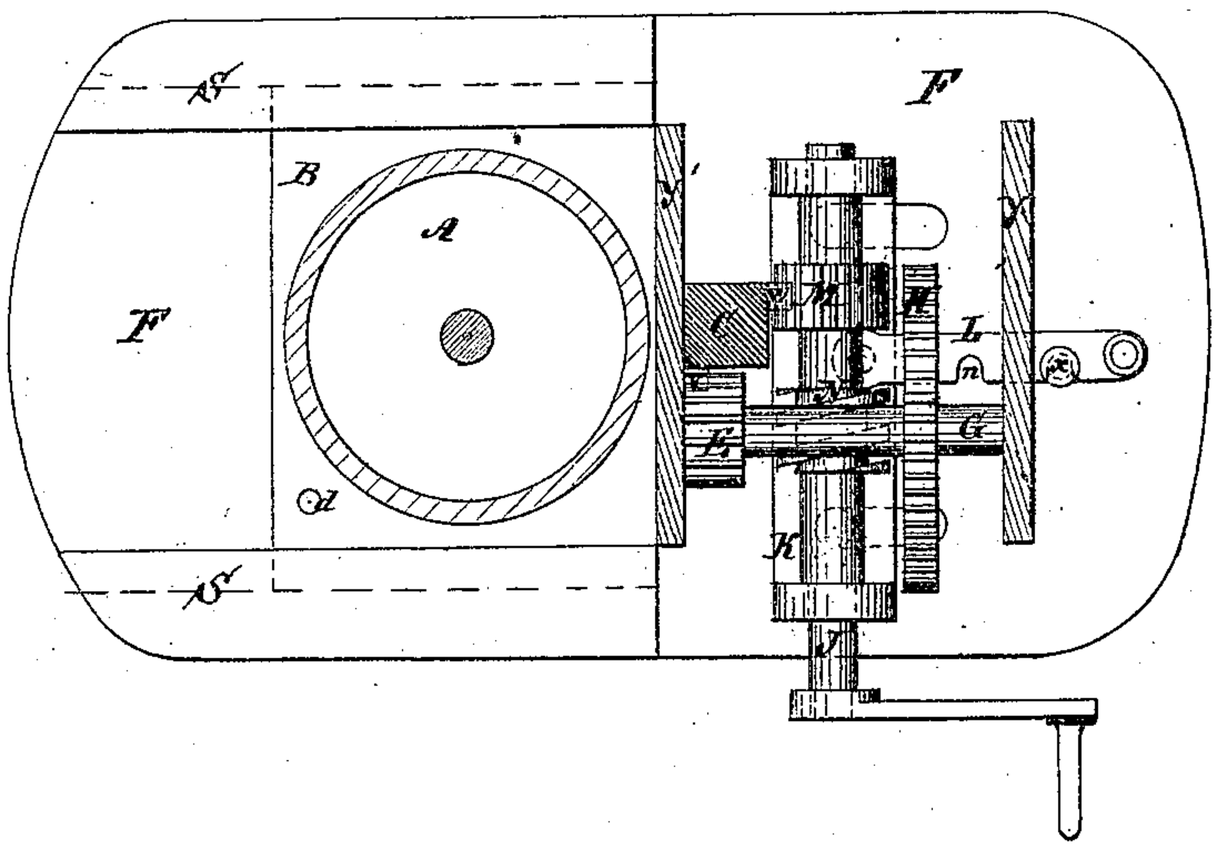


Fig. II.



Witnesses.

Henry E. Rauder.

Henry E. Robinson.

Inventor.

Chas Forschner

UNITED STATES PATENT OFFICE.

CHARLES FORSCHNER, OF NEW YORK, N. Y.

IMPROVEMENT IN SAUSAGE-STUFFERS.

Specification forming part of Letters Patent No. 119,700, dated October 10, 1871.

To all whom it may concern:

Be it known that I, CHARLES FORSCHNER, of New York, in the county and State of New York, have invented certain Improvements in Sausage-Machines, of which the following is a specification:

My invention relates to the combination of a movable shaft with the gearing in such a manner that in one position the piston shall be operated by a very slow motion while moving into the cylinder, and when moved in the other position the piston will be moved very quickly out of the cylinder.

In the accompanying drawing, Figure I represents a longitudinal section of a machine embodying my invention, and Fig. II is a horizontal section at the line *a b* in Fig. I.

F represents the bed-plate, upon which the frames Y Y′ are fastened to support the gearing. A is the cylinder, the bottom flanch B of which is fitted upon the bed-plate F between guides S S, capable of sliding inward and outward, and held in position through the pin *d* passing through the flanch B and into the bed-plate F, or by any other suitable arrangement. When the cylinder has been emptied and the piston P moved out of the same the cylinder is moved outward to be refilled, and the same may be easily taken away for the purpose of being cleaned. Against the frame Y′ a rod, C, is arranged, guided in the bed-plate F and in the guide D, attached near the top of the frames Y Y′. The upper end of this rod C is bent toward the cylinder A, and has the piston-rod Q attached, on the lower end of which the piston or plunger P, fitting into the cylinder A, is fixed. The rod C is provided with two racks, V and W, situated at right angles to each other. Into the rack V a pinion, E, is made to work, fast to a shaft, G, running in suitable bearings in the frames Y Y′. Upon this shaft G a wheel, H, is firmly fixed. Upon the bed-plate F a frame, K, is fitted, capable of being moved either toward the rod C or toward the gear-wheel H; a lever, L, being for that purpose attached to said frame K, and provided with two recesses, *n* and *m*, fitting on a pin, *x*, fast to the bed-plate F, whereby this frame K is fastened in either one or the other position desired. This frame K supports, in suitable bearings, a shaft, J, provided with a worm-wheel, N, and a pinion, M, and is operated by a suitable crank fitted on the end of said shaft.

When the frame K is moved near to the rod C, as shown in Fig. II, the pinion M will mesh into the teeth of the rack W fast on the rod C and will operate said rod C, and consequently the piston P, very quickly upward. When the frame K is moved toward and under the wheel H, as represented in Fig. I, the worm-wheel N will mesh into the teeth of said wheel H, turning the same, and consequently the pinion E, which, as before described, is fixed with this wheel H upon the same shaft G, and which said pinion E works into the rack V fast to the rod C, giving, through the combination of these gearings, a slow and steady motion to said rod C, and consequently to the piston P while moving the same downward into the cylinder.

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

1. The rod C, connected through the rod Q with the piston P, in combination with two racks, V and W, placed at right angles to each other, substantially as described.

2. The movable frame K supporting a shaft, J, provided with a worm-wheel, N, and a pinion, M, and operating the rod C either direct, through the combination of the pinion M with the rack W, or through the combination of the worm-wheel N, wheel H, pinion E, and rack V, substantially as and for the purpose hereinbefore set forth.

CHAS. FORSCHNER.

Witnesses:

HENRY E. ROEDER,

HENRY E. ROBINSON.

(51)