

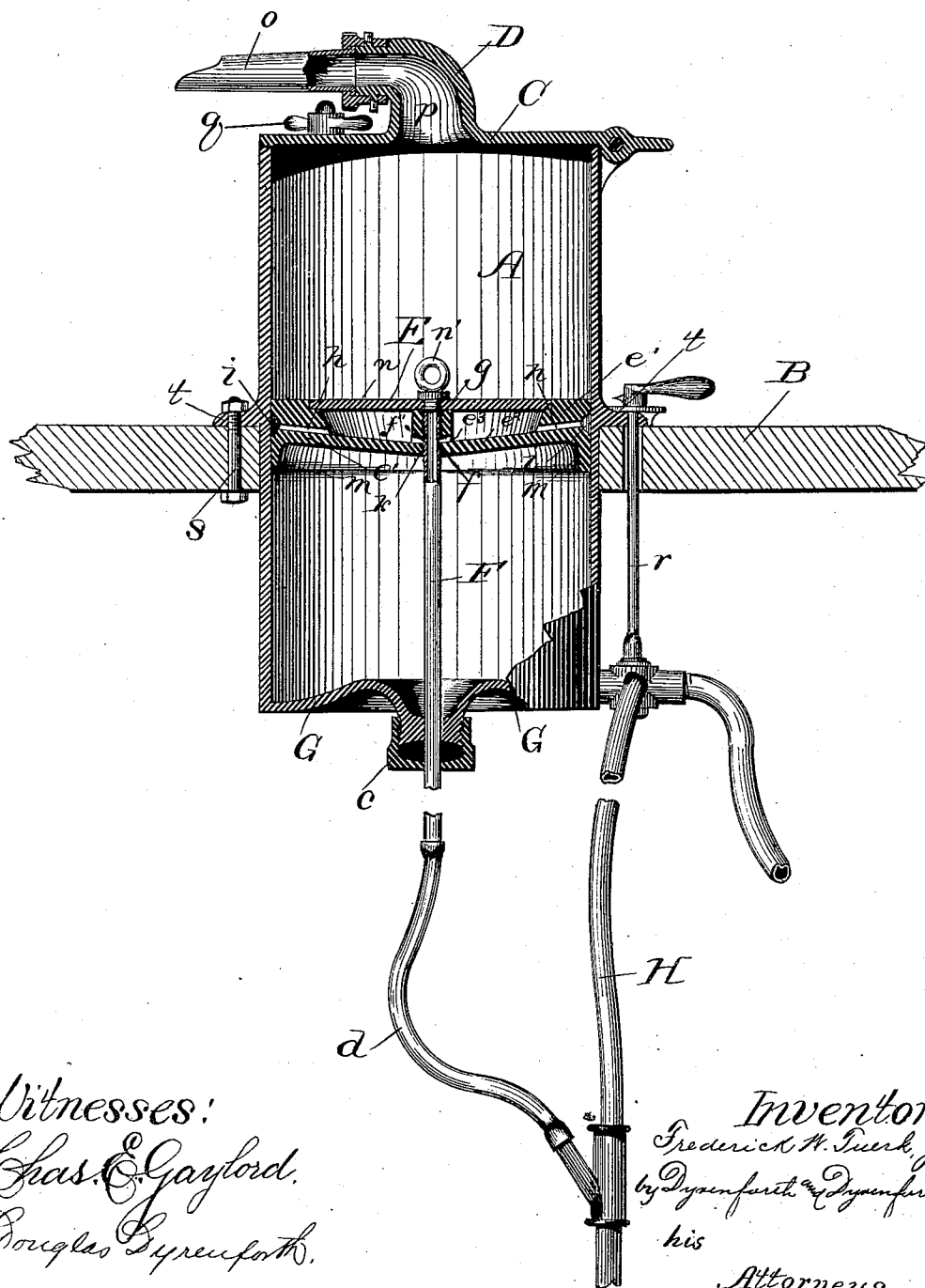
(No Model.)

F. W. TUERK, Jr.

HYDRAULIC SAUSAGE STUFFING MACHINE.

No. 313,556.

Patented Mar. 10, 1885.



Witnesses:

Chas. E. Gaylord.

Douglas Dyrenforth.

Inventor:

Frederick W. Turk, Jr.,
by Dyrenforth & Dyrenforth,
his

Attorneys.

UNITED STATES PATENT OFFICE.

FREDERICK W. TUERK, JR., OF CHICAGO, ILLINOIS.

HYDRAULIC SAUSAGE-STUFFING MACHINE.

SPECIFICATION forming part of Letters Patent No. 313,556, dated March 10, 1885.

Application filed February 27, 1884. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK W. TUERK, Jr., a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Hydraulic Sausage-Stuffing Machines; and I hereby declare the following to be full, clear, and exact description of the same.

My invention relates to an improvement upon the device patented to me March 11, 1884, No. 294,826.

It is the object of my present invention to avoid the necessity of forming the upper and lower parts of the shell of different relative proportions, thus permitting it to be cast with a perfectly smooth bore, which greatly facilitates the operation of casting and materially diminishes the expense of manufacture. This construction of the shell renders it possible to employ, without the use of packing, a piston of a much more desirable form than that shown in my patent above referred to.

My present invention consists in a sausage-stuffer having a hollow shell cast with a smooth bore, and provided with a piston-head dividing the shell into two chambers, the upper to contain the sausage-meat and the lower to receive the water, by the pressure and discharge of which the piston is operated, and carrying a hollow piston-rod extending through the bottom of the shell, the piston-head having a groove formed upon its circumference and passages leading from the groove to the interior of the piston-rod.

My invention consists, further, in certain details of construction and combinations of parts, all as hereinafter more fully set forth.

The drawing represents a vertical section of my improved sausage-stuffer.

A is the cylindrical shell provided with the flange *t* to support the device upon the table B, in which an opening is formed to receive the lower portion of the shell, and having openings to admit the bolt *s* and rod *r*, operating the three-way cock, by means of which bolt and rod the device is secured upon the table.

C is the cover hinged upon the shell and adjustably secured thereon by means of the swinging eyebolts *q*. The cover has the opening *p* and elbow-shaped outlet D, to which the spout

o is attached, all as shown and described in my aforesaid patent.

E is a piston-head, preferably cast hollow, as shown, and provided with a tightly-fitting cover, *n*, carrying the ring *n'*, to afford a handle, by means of which the piston may be manipulated when desired. A flange, *m*, projects downward from the lower edge of the piston-head to afford increased sliding surface for the same, and central openings in the piston-head and bottom of the shell are formed to receive the hollow metallic piston-rod F, provided with a screw-thread, *k*, formed upon its circumference toward its upper end to engage with a corresponding screw-thread provided within the central opening in the piston-head. The bottom G of the shell is irregular in form, as shown, to afford greater strength of the parts at the juncture of the bottom G and shell A, thereby to prevent rupture at this point by the pressure of the water, and to provide a concavity which shall produce a chamber underneath the piston-head when the latter occupies its lowest position within the shell to receive the water, by the pressure of which the piston is raised.

To obviate the use of packing, which would otherwise be required to prevent the entrance of water from the chamber underneath the piston into the chamber above for the sausage-meat, a groove, *i*, is formed around the periphery of the piston-head to receive any water that may rise with the motion of the piston, and slanting passages *h*, leading therefrom through the solid portion *e'* of the piston-head into the hollow portion of the same, having the oblique bottom *e''*, and into the slanting passages *e'*, formed in the hub *g* of the piston-head, and leading to apertures *f*, provided in the hollow piston-rod F at points where the passages *e'* meet the piston-rod, conduct the water into the latter, whence it passes off through the waste-pipe H by means of the hose-connection *d*, between the latter and the hollow piston-rod. The piston-rod F, which extends through the bottom of the shell A, forms not only a means of exit for water forced between the shell A and flange *m* of the piston-head during the operation of the latter, thus providing lubrication, but it also, owing to its rigidity, being steadied by the nut *c*, suitably

packed, as shown, affords a steady guide for the piston-head.

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

5 1. In a sausage-stuffer, the combination, with the shell A, of a piston-head, E, and hollow piston-rod F, extending through the bottom of the shell, the said piston-head having a groove formed upon its circumference, and
10 passages leading from the said groove to the interior of the piston-rod, substantially as described, and for the purpose set forth.

2. In a sausage-stuffer, the combination, with the shell A, of a hollow piston-head, E,
15 provided with a cover, *n*, and having a groove, *i*, formed upon its circumference, and passages *h*, which lead into the hollow portion of the piston head and into openings *e*³ in the hub *g*, and a hollow piston-rod, F, extending through
20 the bottom of the shell, and provided with openings *f*, substantially as described, and for the purpose set forth.

3. In a sausage-stuffer, the combination, with the shell A, having the flange *t*, of a hollow piston-head, E, provided with a cover, *n*,
25 and having a groove, *i*, formed upon its circumference, and oblique passages *h*, leading into the hollow portion of the piston-head provided with an oblique bottom, *e*², and into ob-

lique passages *e*³ in the hub *g*, and a hollow 30 piston-rod, F, extending through the bottom of the shell, and provided with openings *f*, registering with the passages *e*³, substantially as described, and for the purpose set forth.

4. A sausage-stuffer, comprising in combination the following elements, viz: a shell, A,
35 having the hinged cover C adjustably secured upon the said shell by means of swinging eye-bolts *q*, and provided with the elbow-shaped outlet D, and means for adjusting a spout, *o*,
40 thereon, hollow piston-head E, provided with a cover, *n*, and having a groove, *i*, formed upon its periphery, oblique passages *h*, leading into the hollow portion of the piston-head provided with an oblique bottom, *e*², and into
45 oblique passages *e*³ in the hub *g*, a hollow metallic piston-rod, F, provided with openings *f*, and passing through the bottom of the shell A, means for admitting and releasing the medium for operating the piston-head, and a tube, 50
d, connecting the piston-rod F and discharge-tube H, all being constructed and arranged to operate substantially as described.

FREDERICK W. TUERK, JR.

In presence of—

THOMAS DENNIS,
C. C. LINTHICUM.