No. 814,909. PATENTED MAR. 13, 1906.

E. F. KILER, Sr.

STEAMING GRAIN.

APPLICATION FILED DEC. 13, 1904.

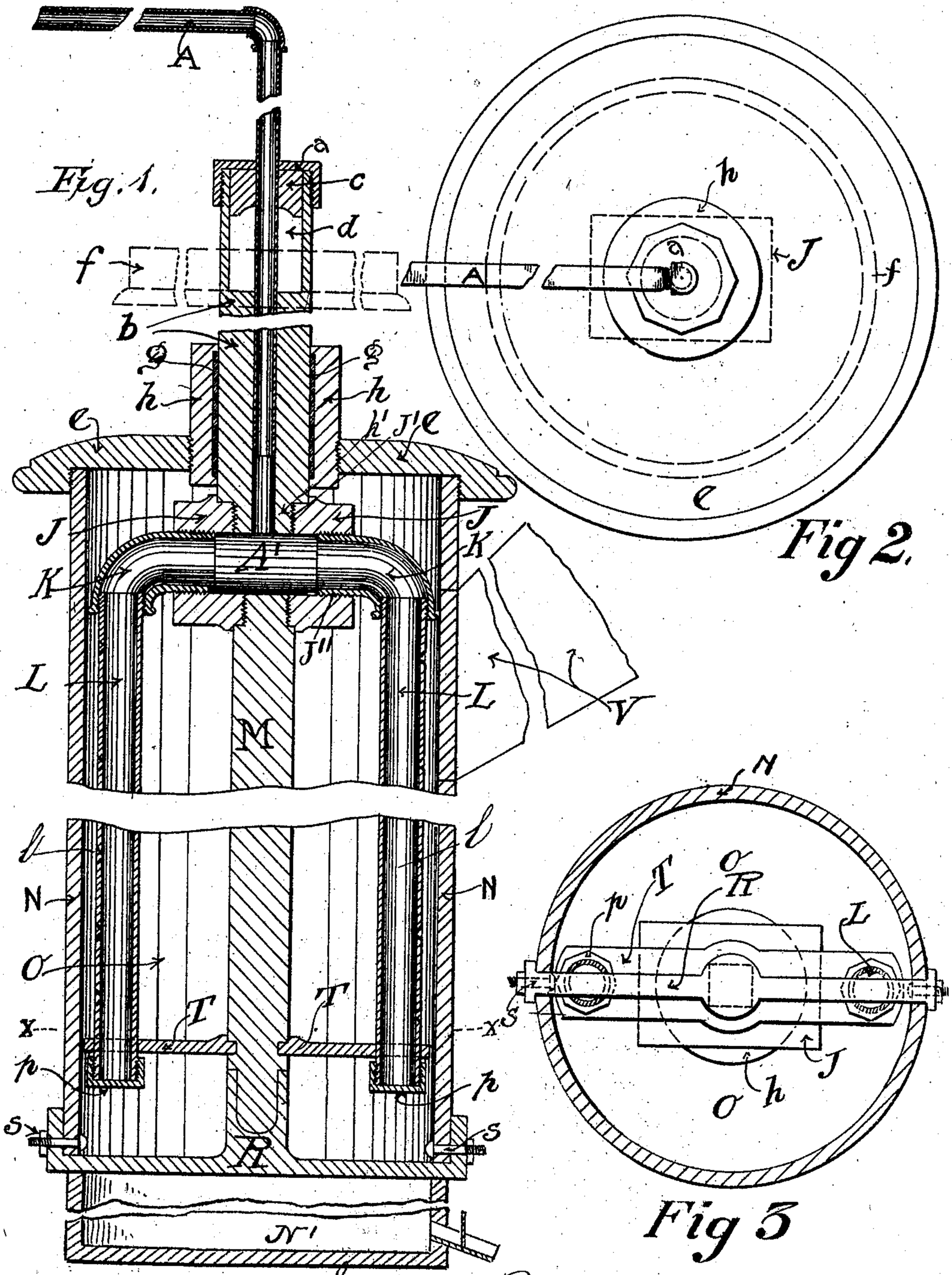

Fig. 1.

Fig 2.

Fig 3

WITNESSES:

E. A. Rizor

J. H. Smith

Edmond Francis Kiler Sr. INVENTOR.

UNITED STATES PATENT OFFICE.

EDMOND F. KILER, SR., OF SANTA BARBARA, CALIFORNIA.

STEAMING GRAIN.

No. 814,909. Specification of Letters Patent. Patented March 13, 1906.

Application filed December 13, 1904. Serial No. 236,730.

To all whom it may concern:

Be it known that I, EDMOND F. KILER, Sr., a citizen of the United States, residing at Santa Barbara, in the county of Santa Barbara and State of California, have invented new and useful Improvements in Steaming Grain, of which the following is a specification.

My invention has relation to machines for steaming grain; and it has for its object to provide a simple and practical machine of this character in which the grain is steamed and polished without breaking.

Description of drawings is as follows: Figure 1 is a vertical sectional view of my invention. Fig. 2 is a top plan view. Fig. 3 is a cross-section of Fig. 1 on the line *x x*.

My invention is described as follows:

A is a steam-pipe for conveying steam from the boiler to the receptacle for the grain.

b is a cylinder through which the steam-pipe A passes into the grain-receptacle.

a is a cap that fits on the top of the cylinder *b*. This cap is threaded and screws down over *b*.

c is a ring which is placed in the upper end of cylidner *b* for the purpose of pressing and packing the contents of *d*, which is an open receptacle for any kind of packing material.

Rigidly secured to the cylinder *b* is a pulley *f*, over which a band connects with an engine which furnishes motive power for the machine.

h is a boxing which surrounds the cylinder *b*.

g is a lining to the box *h*, composed of Babbitt metal to reduce friction.

e is a cap which covers the grain-receptacle, screwing down over the top of the same. The boxing *h* screws into the center of the cap *e*.

The steam-pipe A has secured to its lower end a larger cross-pipe A′, and the lower end of the cylinder *h* narrows into a threaded projection *h′*. Into this threaded projection is screwed a block of metal J, penetrated by a vertical threaded opening J′ and a horizontal threaded opening J². Two pipes screw into said block of metal, their free ends turning down. L represents two steam-pipes with perforations *l* to permit the steam to pass out into the grain. The upper ends of these steam-pipes are screwed into the downward-turned ends of pipes K. M represents an iron shaft the lower end of which is journaled in the bridge-tree R, the upper end being screwed in the lower end of block J. As a result of this combination when the pulley *f* is being revolved the said pipes are also revolved and stir the wheat. Any style of bottom applicable to this kind of device may be used in connection therewith. N is the outside casing of the grain-receptacle, and N′ is a vessel for receiving and discharging the steamed grain. O represents the grain-receptacle. *p* represents caps fitting on the lower end of said steam-pipes L. *s* represents bolts and nuts fastening said bottom to the casing.

V represents a chute conveying grain to the receptacle.

Arms T extend inwardly from the wall of the barrel and support the lower end of the shaft M.

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

1. A grain-steamer, consisting of an upright barrel, open at its lower end, adapted to be provided with any style bottom applicable to the device; a cap *e*, fitting on the upper end of said barrel, and having in its center a threaded perforation; a cylinder *h*, fitting vertically in said threaded perforation; a packing-cylinder *b*, fitting in the last-mentioned cylinder *h*, and adapted to revolve therein; a lining *g*, fitting between the two last-mentioned cylinders; a pulley *f*, rigidly secured to the cylinder *b*, above the upper end of said cylinder *h;* a packing-ring *c*, secured in the upper end of said cylinder *b;* a perforated cap *a*, secured on the upper end of said cylinder *b;* a steam-pipe A, passing down through said cylinder *b;* a cross-pipe A′, secured to the lower end of said pipe A; perforated cylinders K and L, branching out from said cross-pipe and running down parallel to each other to near the bottom of the barrel; a supporting-shaft M, extending from the lower part of the cross-cylinder A′, secured in block J, its lower end pivoted in the bearing *m;* arms T, extending inwardly from the wall of the barrel, supporting the lower end of said shaft, and a chute V, for conducting the grain in the said barrel, substantially as shown and described, and for the purposes set forth.

2. A vertical barrel open at its lower end, and adapted to be provided with a bottom; a perforated cap, secured on the upper end of said barrel; a bearing, vertically secured in the perforation of the said cap and carrying a lining; a cylinder, vertically journaled in said bearing; a pulley rigidly secured near the upper end of said cylinder; a steam-pipe, pass-

ing down through said cylinder; a packing-ring, secured in the upper end of said cylinder and held in by a cap; a perforated block, secured in the lower end of said cylinder; a U-shaped pipe, its horizontal part secured to said steam-pipe and in said block, its parallel arms perforated and extending downwardly into said barrel, said cylinder, said block and said U-shaped pipe adapted to be revolved by said pulley, and a chute adapted to carry the grain into said barrel, substantially as shown and described and for the purposes set forth.

In testimony whereof I affix my signature in presence of two subscribing witnesses.

EDMOND F. KILER, Sr.

Witnesses:
J. W. Bagley, Jr.,
E. A. Rizor.