

Barrel-Stoves.

No. 160,961

Patented March 16, 1875.

Fig: 1.

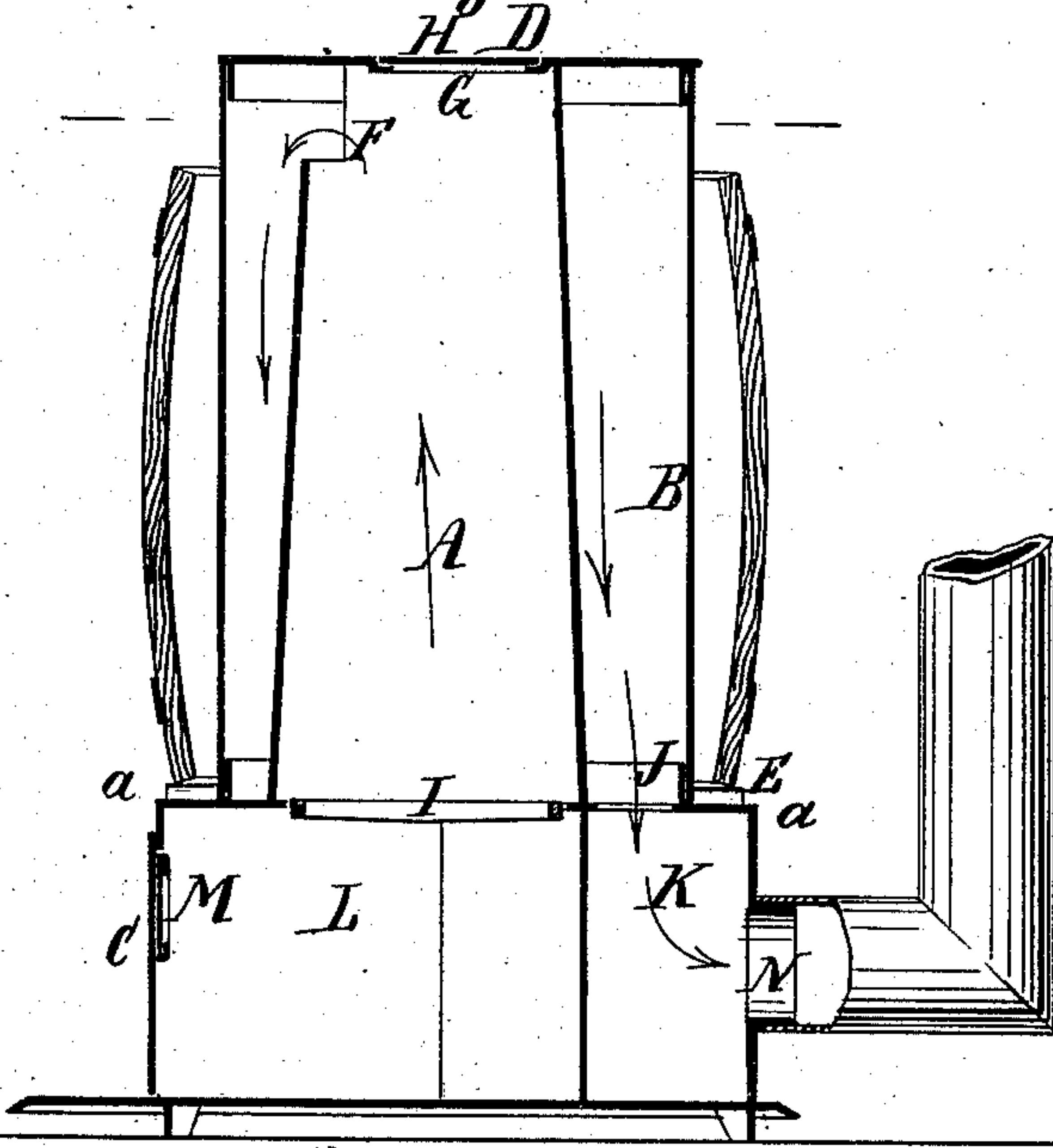
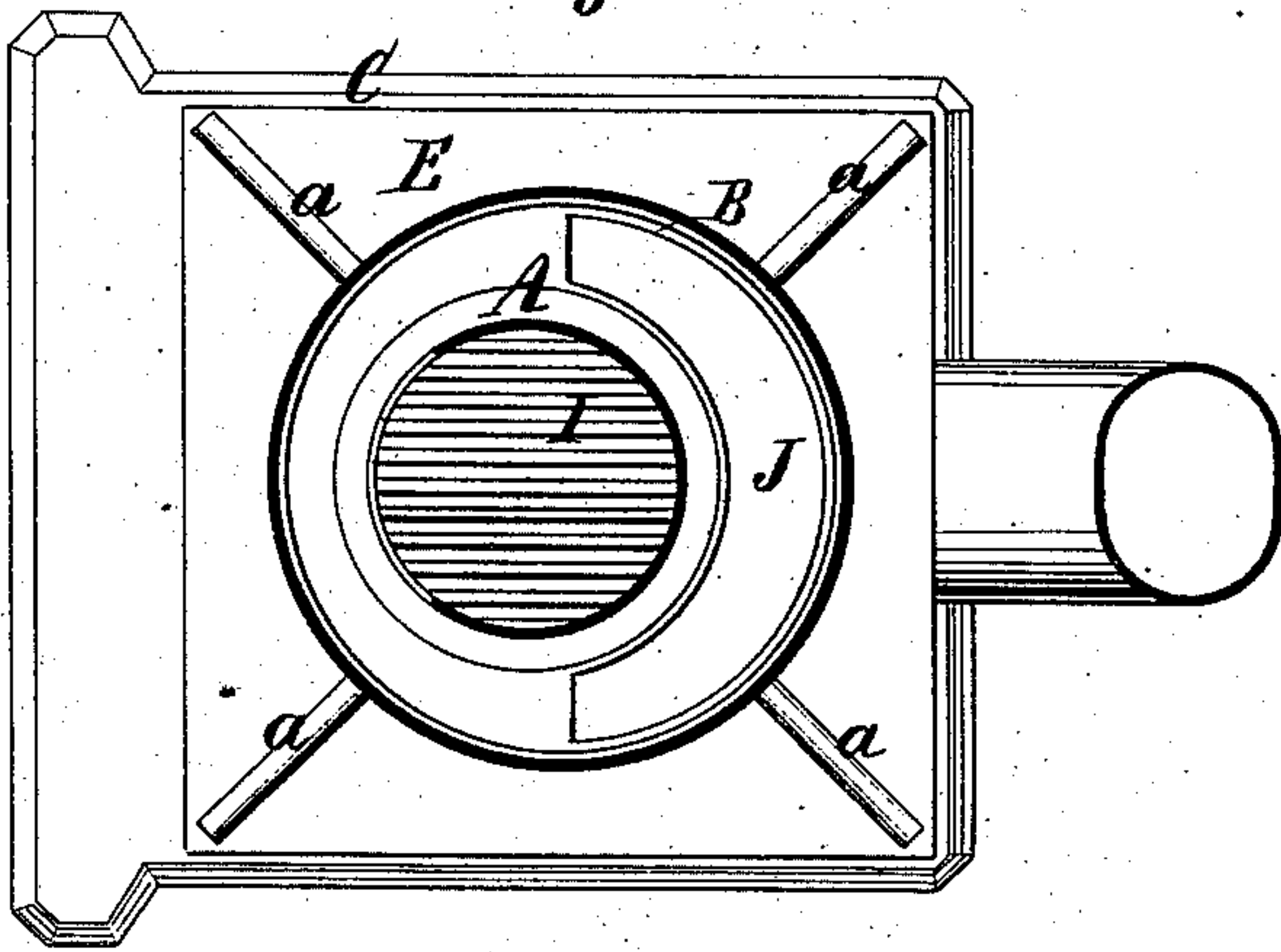


Fig: 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN BARREL-STOVES.

Specification forming part of Letters Patent No. **160,961**, dated March 16, 1875; application filed January 12, 1875.

To all whom it may concern:

Be it known that I, JAMES F. SCHOLLES, of Brooklyn, in the county of Kings and State of New York, have invented a certain new and Improved Barrel-Stove, of which the following is a specification:

This invention is illustrated in the accompanying drawing, in which Figure 1 represents a vertical central section. Fig. 2 is a horizontal section.

Similar letters indicate corresponding parts.

My invention relates to a stove adapted particularly for heating and drying wooden barrels, in order to impart to the same permanency of shape.

The stove is constructed of two cylinders, located within each other, and which communicate through an opening in the inner cylinder, (which contains the fire-grate) in combination with a top plate and base, which latter constitutes a support for the barrel to be heated, and whereby the barrel is held so as to encompass the outer cylinder. The said base is divided in such a manner as to constitute an ash-pit and a chamber to receive and discharge the products of combustion from the stove, the said chamber communicating with the outer or heating cylinder through a horizontal opening that forms a continuation of the space between the two cylinders. The inner cylinder is made in the form of a truncated cone, while the outer cylinder is perpendicular, whereby a larger space is formed at or near the top of the stove, at which point is located the opening of communication between the cylinders; and by this means a uniform and advantageous distribution of heat is obtained.

In the drawing, the letters A B designate the two cylinders of my barrel-stove, the outer one of which is preferably made of sheet-iron, and which are of about a height corresponding to that of the barrels for which the stove is to be used. C designates the base, and D the top plate, of the stove. The base C is made of a greater diameter than the outer cylinder B, so as to form a ledge, E, to support the barrel upon the base. When the barrel is placed on this ledge or support E the barrel encompasses the cylinder B, as shown in Fig. 1,

and the heat of the stove is thrown upon it. Upon the ledge E are formed ribs *a*, by which the barrel is held in a slightly-raised condition, and air can pass or circulate through it during the process of drying. The inner cylinder A, which is of cast-iron, is made conical, or in the form of a truncated cone, in contradistinction to the outer cylinder B, which is perpendicular, whereby the space between the two cylinders is rendered larger and freer toward the top of the stove, at which point the cylinders communicate with each other, as hereinafter described. The inner cylinder A is fixed to the base C at the bottom, and its wall at the same time serves to form at that point—namely, in the interior of the base C—two compartments, hereinafter referred to. The two cylinders A B are of equal height, so that when the top plate D is put in place the upper ends of the cylinders are closed. The products of combustion from the inner cylinder pass to the outer cylinder through an opening, F, formed in the inner cylinder, the said opening being preferably located at the top end of the cylinder, and on the side looking toward the front of the stove. In the top plate D is formed a feed-hole, G, with its lid H, that opens on the inner cylinder A—the cylinder containing the fire-grate I—whereby access can be had to the grate I, in order to kindle or replenish the fire. The products of combustion circulate around and downward in the outer cylinder B, as indicated by arrows marked in Fig. 1, to an opening, J, formed in the ledge-piece E of the base.

The opening J forms a continuation of about one-half of the annular space formed by or between the two cylinders A B, and the opening discharges into a chamber, K, of the base C. The chamber K is one of the two compartments produced by the wall of the cylinder A, as hereinbefore stated. The other compartment L of the base C constitutes the ash pit or pan of the stove, to which pit access is had by a door, M. The chamber K has a discharge-hole, N, provided with a projecting flange to receive the end of an ordinary stove-pipe. The chamber K thus receives and discharges the products of combustion, and no projections or obstructions need be had on the upper portion of the

stove, by reason of which the barrel or barrels can be put in place and taken from the stove with ease and facility.

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

The combination, in a cresset for barrels, of the central fuel-cylinder A, having the lateral opening F at its top, the cylinder B entirely surrounding the central cylinder, and the base C having the opening or passage J and discharge-chamber K, and shoulder *a* of the base, substantially as described, whereby the pro-

ducts of combustion are caused to ascend the central cylinder, descend the outer cylinder, and pass through the opening J into the discharge-chamber, as and for the purposes described.

In testimony that I claim the foregoing I have hereunto set my hand and seal.

JAS. F. SCHOLES. [L. S.]

Witnesses:

J. VAN SANTVOORD,
CHAS. WAHLERS.