

No. 714,807.

Patented Dec. 2, 1902.

L. T. LEET.

APPARATUS FOR MAKING SAND BRICKS.

(Application filed May 27, 1902.)

(No Model.)

Fig. 1.

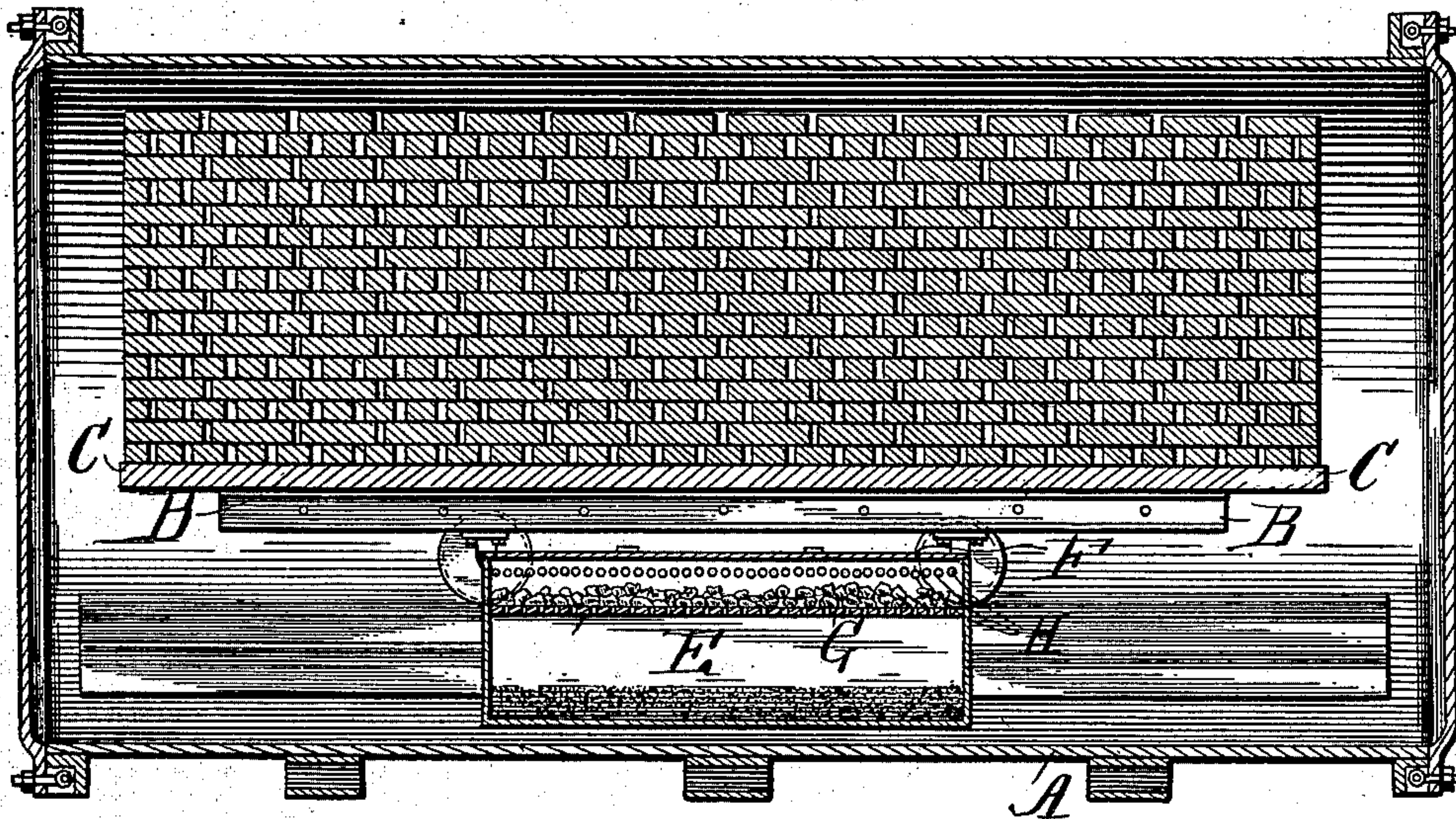
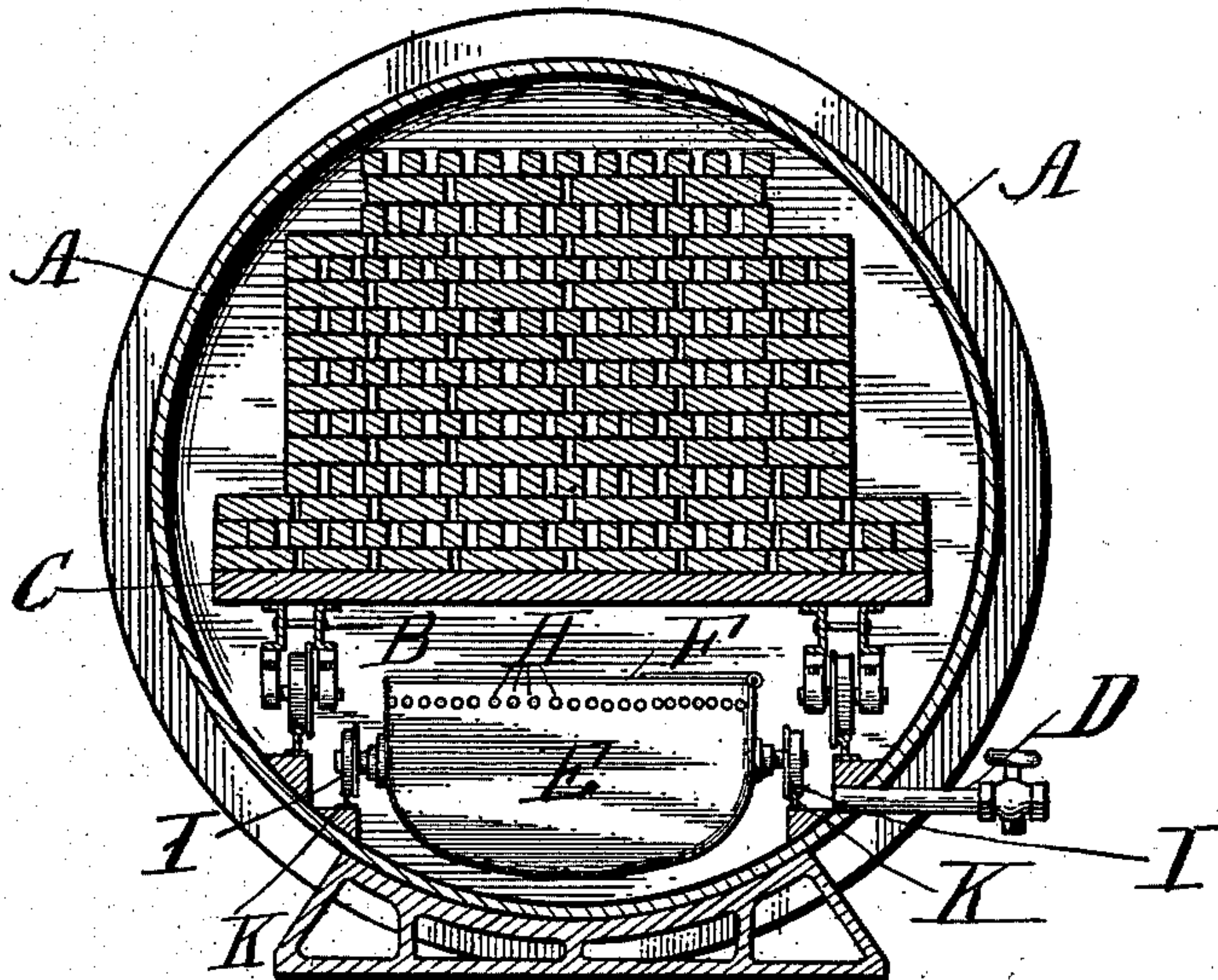


Fig. 2.



WITNESSES:

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APPARATUS FOR MAKING SAND BRICKS.

SPECIFICATION forming part of Letters Patent No. 714,807, dated December 2, 1902.

Application filed May 27, 1902. Serial No. 109,145. (No model.)

To all whom it may concern:

Be it known that I, LYNN T. LEET, a citizen of Canada, residing at Montreal, Canada, have invented a new and useful Improvement in Apparatus for Making Sand Bricks, of which the following is a specification.

This invention relates to apparatus for steam-indurating that kind of bricks which consists, essentially, of sand and lime and which are more generally known as "sand" bricks.

The apparatus will now be described with reference to the drawings, in which—

Figure 1 is a longitudinal vertical section, and Fig. 2 a transverse vertical section, of the apparatus.

Like letters refer to the same parts throughout the description.

A is a cylinder, of strong sheet-iron, into which steam under pressure is introduced during the operation of indurating.

B is a platform-car which serves to introduce the bricks into the cylinder, upon which they rest during the steam treatment and upon which they are removed when the operation is finished.

C is the platform of the car, upon which the bricks rest.

D is an outlet for regulating the depth of the water of condensation in the cylinder, which is indicated by a water-gage. (Not shown.)

E is a receptacle or box in which is placed the quicklime to be slaked during the operation of indurating.

F is a water-tight lid covering the lime-receptacle.

G is a perforated partition or grid in the upper portion of the lime-receptacle upon which the lumps of quicklime are placed previous to the introduction of the lime-receptacle into the indurating-cylinder.

H represents holes or perforations in the sides of the lime-receptacle, all above the partition G.

I represents wheels with which the lime-receptacle is supplied.

K is a track of rails upon which the lime-receptacles are rolled into and out of the cylinder A.

The operation of the apparatus is as follows: The bricks are placed upon the plat-

form-car A, and this is introduced into the cylinder. Pieces of quicklime are put on the grid G, which is located at a distance of about one-third from the top of the lime-receptacle. The cover or lid F is then applied, after which the wheeled receptacle E is placed in position below the car A. There may be a number of these receptacles E placed under one car, depending upon the relative lengths of the car and the lime-receptacle. The cylinder is then closed and high-pressure steam is introduced. Considerable condensation takes place when the steam strikes the bricks and the various parts of the apparatus, and a large portion of the steam is taken up directly by the quicklime and chemically combined therewith as water of hydration. In this way the lime is gradually slaked by steam, and as it slakes the pieces expand and disintegrate, the fine portions falling through the grid into the receptacle below, whereby fresh portions of the lumps are gradually exposed to the action of the steam until the quicklime is all slaked and converted into an impalpable powder, which falls through the grids, leaving any cores of unburnt lime or other impurities in the quicklime, if it should contain any, remaining on the grid. The cover protects the contents of the lime-container from coming in contact with water of condensation dripping from the bricks, car, or other portion of the apparatus, and thereby the formation of any crusts on the surface of the pieces of quicklime is prevented, which is very important to effect a uniform slaking of the quicklime and at the same time obtain the slaked lime in the form of a fine dry powder.

Other devices, such as properly-arranged plates or screens, may be used as an equivalent of the cover of the lime-receptacle.

What I claim as new is—

1. The combination of a cylinder capable of sustaining great pressure, a container for slaking lime and means for preventing water of condensation from coming in contact with the lime in the container.

2. A container for the steam-slaking of lime, comprising a box provided with a closed cover, a partition screen or grid in the upper portion of the box and perforations above the grid for admitting steam to the box.

3. In an apparatus for the steam-slaking
of lime, the combination of a perforated lime-
container with means for preventing water of
condensation from getting into the lime-con-
5 tainer.

In testimony whereof I have signed my
name to this specification, in the presence of

two subscribing witnesses, this 17th day of
May, 1902.

LYNN T. LEET.

Witnesses:

JOSHUA A. BELL,
B. F. KEINARD.