

S. D. Horton.

Tumbling Barrel.

N^o 57,907.

Patented Sep. 11, 1866.

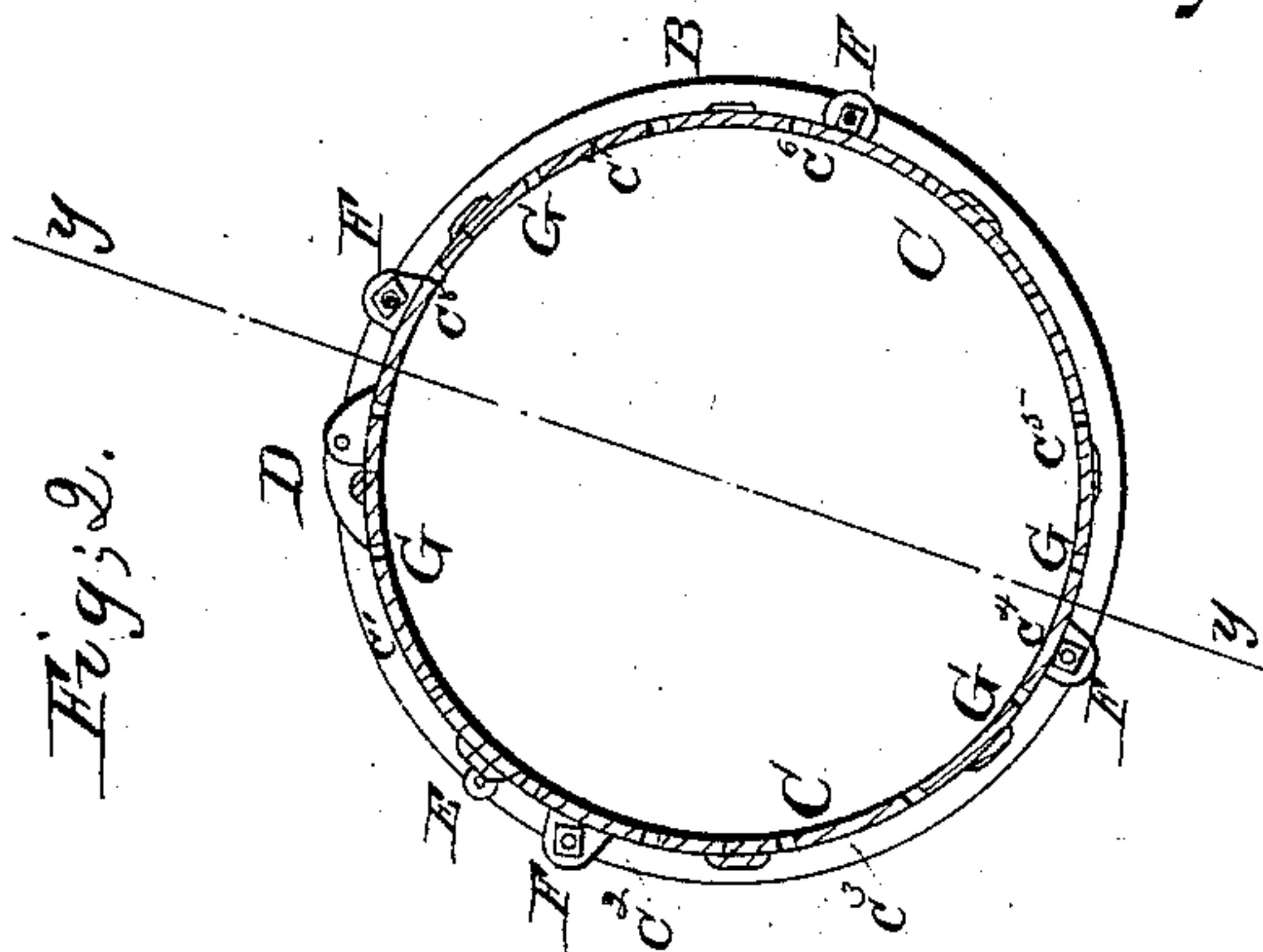
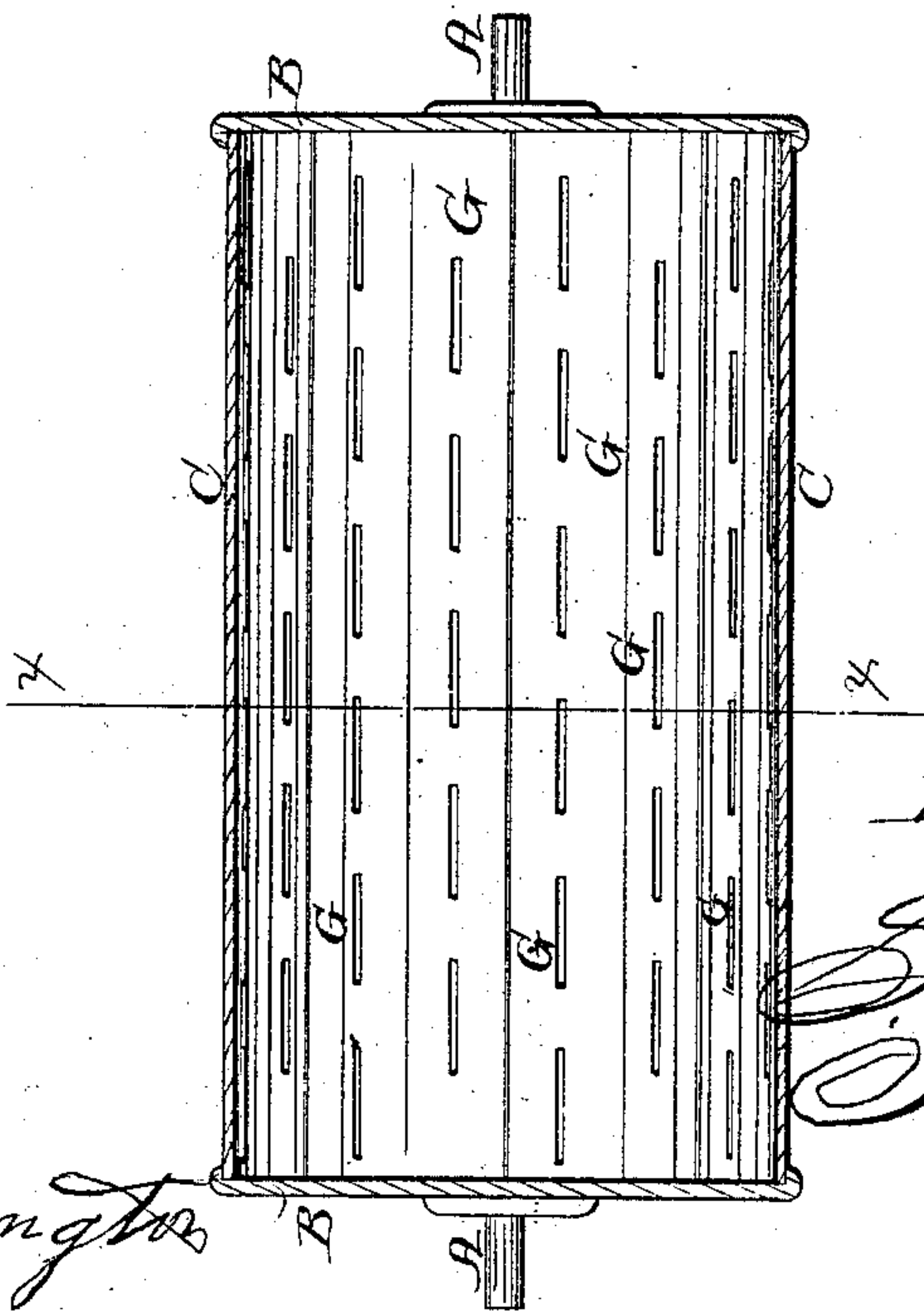


Fig. 1.



Witnesses,
J. H. Blount
Wm. Brown

Inventor,
S. D. Horton
Attorneys

UNITED STATES PATENT OFFICE.

STEPHEN D. HORTON, OF PEEKSKILL, NEW YORK.

IMPROVEMENT IN FOUNDERS' CLEANSING-MILLS.

Specification forming part of Letters Patent No. 57,907, dated September 11, 1866.

To all whom it may concern:

Be it known that I, STEPHEN D. HORTON, of Peekskill, in the county of Westchester and State of New York, have invented a new and useful Improvement in Iron Founders' Cleansing-Mills; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a longitudinal section of my improved cleaning-mill, taken through the line *y y*, Fig. 2. Fig. 2 is a cross-section of the same, taken through the line *xx*, Fig. 1.

Similar letters of reference indicate like parts.

My invention has for its object to furnish an improved cleaning-mill, by means of which the metal remaining in the material left in the furnace after drawing off the melted metal, and afterward crushed or ground, may be separated from the dirt readily and without waste of the metal; and it consists of a cleaning-mill the bodies of the staves of which are slotted with rectangular hopper-shaped slots or holes, as hereinafter more fully described.

A are the journals upon which the mill revolves. B are the heads or ends of the mill to which the journals A are attached, or with which said journals are made solid. These heads or ends B are made with a flange around their inside edge, as shown in Fig. 1, against which the ends of the staves C rest, and by which they are supported. Each of the staves C, which form the body of the mill, except *c'* and *c''*, is formed with a flange on its edge, which overlaps the edge of the next stave, as shown in Fig. 2.

The stave *c''* is formed without any edge flange, and the stave *c'* is formed with two, the one on its front edge being of the size and form of the flanges on the other staves, and the

flange on its rear or hinge edge being narrower, as shown, so as not to interfere with the opening or swinging back of said stave *c'*. Upon the front edge of the stave *c''* and upon the rear edge of stave *c'* are formed ears D, by means of which the stave *c'* is hinged to the stave *c''*, as shown in Fig. 2.

Upon the rear edge of the stave *c''* are formed ears E, which pass up through slots in the flange on the front edge of the stave *c'*, and the mill is held shut by keys passing through the said ears.

Upon the ends of the staves C are formed ears F, by means of which the staves are still further secured to the ends or heads B, these ears F being bolted fast to ears formed on the edge of the said heads B, as seen in Fig. 2.

Through the body of the staves C are formed slots G, about four inches in length, and about one-eighth of an inch in breadth on the inside of the staves, and three-sixteenths of an inch in breadth on the outside of said staves, making them hopper-shaped in form. This shape allows the dirt to pass through freely, and prevents them from becoming clogged.

The slots G should be so arranged that the slots in each row may be opposite the spaces between the slots in the next row, as shown in Fig. 1.

The slots G may be made oblique or inclined to the length of the staves; but I prefer to make them parallel with said length, as shown in the drawings.

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

An improved cleaning-mill, the bodies of the staves of which are slotted with rectangular hopper-shaped slots or holes, substantially as described, and for the purpose set forth.

STEPHEN D. HORTON.

Witnesses:

A. M. SEYMOUR,
WM. MABIE.