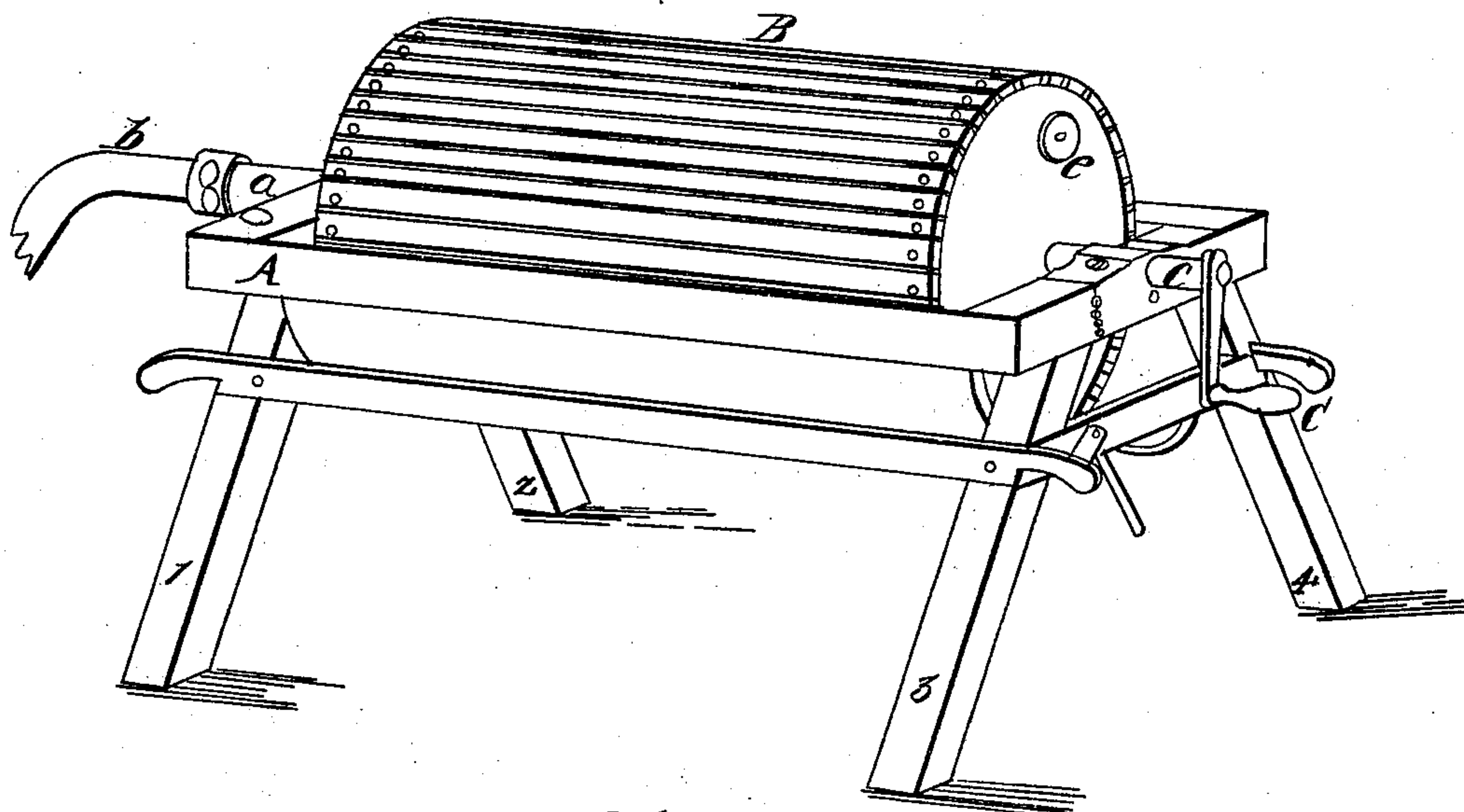


*F. Hinckel;*  
*Washer for Brewers.*

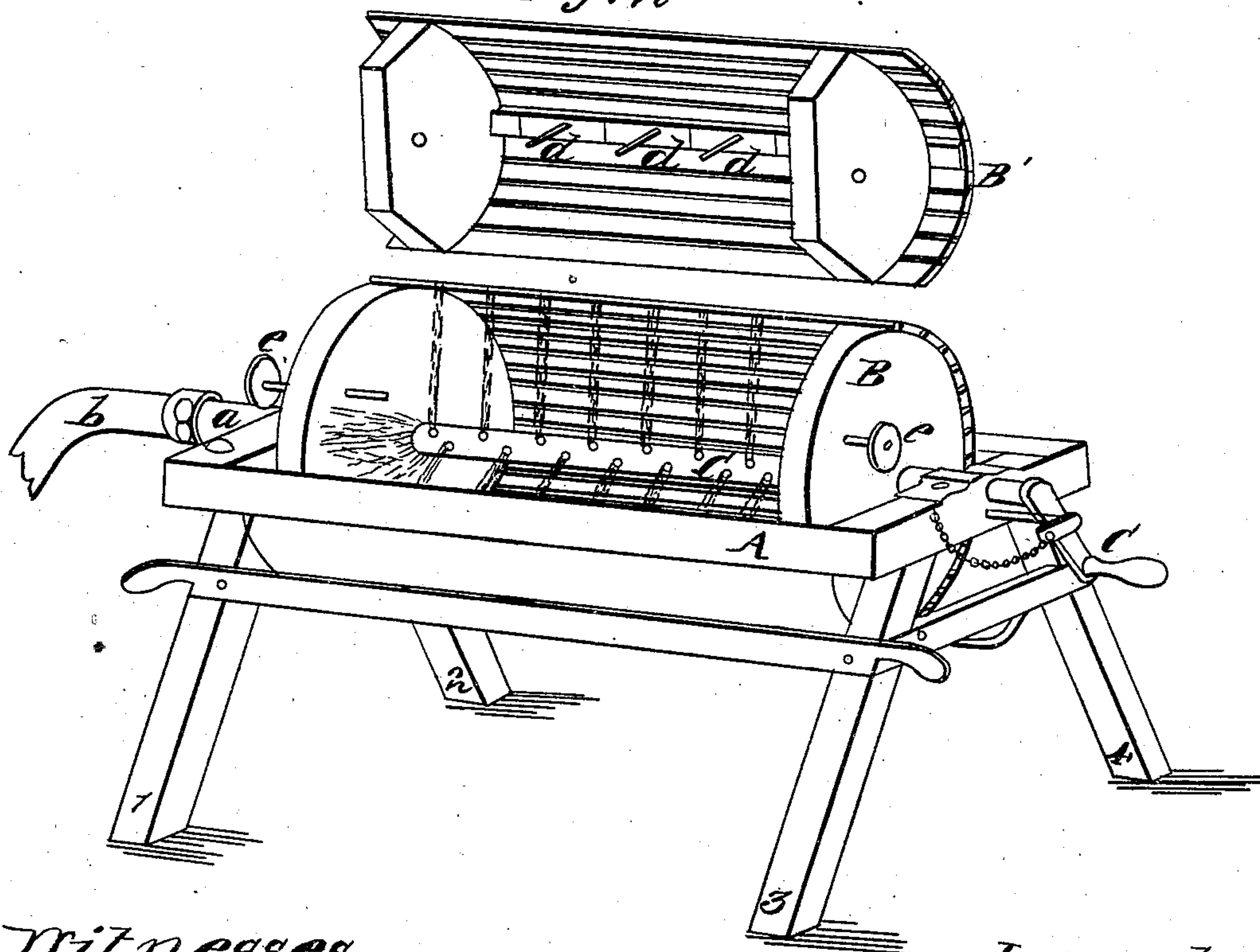
*No. 85,526.*

*Fig. 1.*

*Patented Jan. 5. 1869.*



*Fig. 2*



*Witnesses*  
*Alex. Gregory*  
*Adolph Seidensticker*

*Inventor*  
*Fred Hinckel*



# United States Patent Office.

FREDERICK HINCKEL, OF ALBANY, NEW YORK.

Letters Patent No. 85,526, dated January 5, 1869.

## IMPROVED MACHINE FOR WASHING SHAVINGS IN BREWERIES.

The Schedule referred to in these Letters Patent and making part of the same.

### To all whom it may concern:

Be it known that I, FREDERICK HINCKEL, of Albany, in the county of Albany, State of New York, have invented a new and improved Washer for Brewers, and other purposes; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to understand and use the same, reference being had to the accompanying drawings, forming part of this specification, of which—

Figure 1 represents a perspective view of my invention.

Figure 2 represents the same with the cover detached, showing the inside of the washer.

Similar letters indicate the same parts.

This invention relates to an improved machine for washing wood shavings and other articles, and consists in a hollow perforated shaft, in combination with a hollow cylinder, hung together in a frame for the purpose of discharging a fresh current of water in jets upon the contents of the cylinder while it revolves.

Wood shavings, purified with an alkali, are used by lager-beer brewers for clearing the beer of yeast before it is racked off from the large casks or vats. The shavings are put into the casks, and the particles or detached cells of yeast that remain suspended in the beer attach themselves to their surface, and sink with them to the bottom. These shavings have to be washed in order to use them over again, but by the ordinary method of washing them by hand-labor the operation is tedious and laborious. By means of my hydraulic jet-washer the shavings are quickly and thoroughly scoured, with a great saving of labor and expense.

For other things requiring their surfaces to be scoured or rubbed, and the adhering impurities to be removed rapidly, by the application of a fresh current of water, my improved washer is equally advantageous.

A is a strong rectangular frame, supported on legs, 1, 2, 3, 4.

B is a hollow cylinder, or barrel, made with open staves or perforated sides, and is suspended horizontally in the frame, on a hollow shaft, C, in which is a series of holes on all sides, as shown in fig. 2.

One end of the hollow shaft C is fitted to run in a

metal thimble, *a*, on which is screwed a pipe, *b*, for conveying water into the shaft. The other end of the shaft is closed, and carries a crank, *c*.

The cylinder B is made with a movable cover, B', which is secured in place readily with pins, *e e*, through the ends, or in any suitable manner.

On the inside of the cylinder are set rows of pegs, or projecting pins, *d d d*, on opposite sides, for the purpose of catching long shavings and holding them until they are carried up to a position above the shaft, as the cylinder revolves, at which point they will fall and shift their position, while the jets of water issuing from the perforated hollow shaft will be constantly discharged among them.

It will be seen that the fresh current of water, introduced into the cylinder by means of the perforated hollow shaft, will constantly and rapidly wash off any impurities from the surface of the shavings, or other articles, as their surfaces are presented, by the revolution of the cylinder, to the jets, the dirty water escaping immediately, through the lower side of the cylinder and the open frame-work. When the operation is completed, the water will run off clear, and the contents of the cylinder, after removing the cover, may be readily dumped into a receptacle placed underneath it. Or, the cylinder may be arranged to turn up at one end, on a hinge, to discharge the contents.

I am aware that cylindrical washing-machines are in use, and I disclaim the same as my invention; but having described my improvement,

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

1. The hollow perforated shaft C, in combination with the cylinder B and the frame A, arranged and operating substantially in the manner and for the purpose herein described.

2. The stop-pegs *d d d*, arranged on the inside of the cylinder B, in combination with the hollow perforated shaft C, as and for the purpose specified.

FRED. HINCKEL.

Witnesses:

A. V. DE WITT,  
JOHN VAN DYCK.