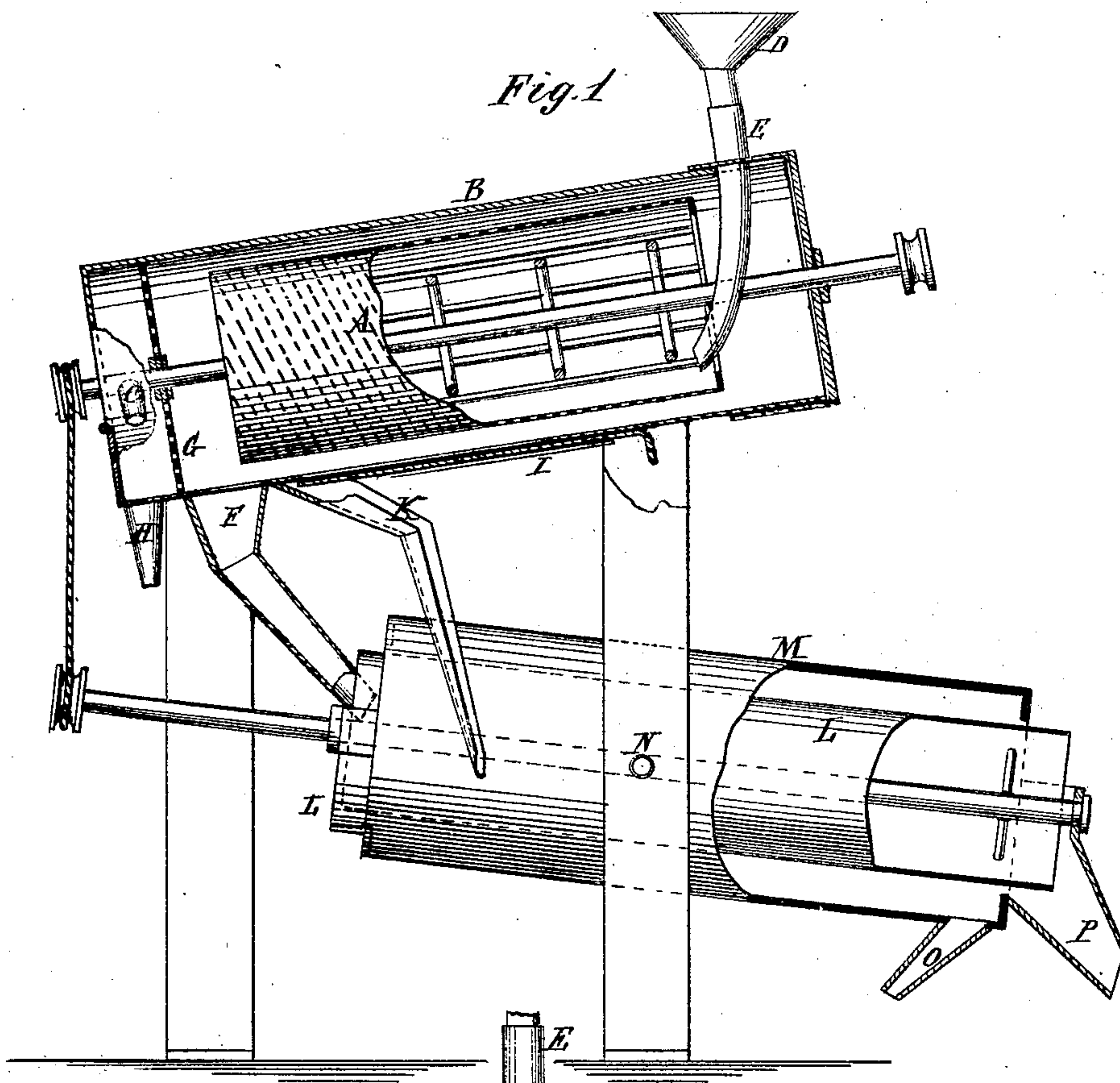


P. PROVOST.

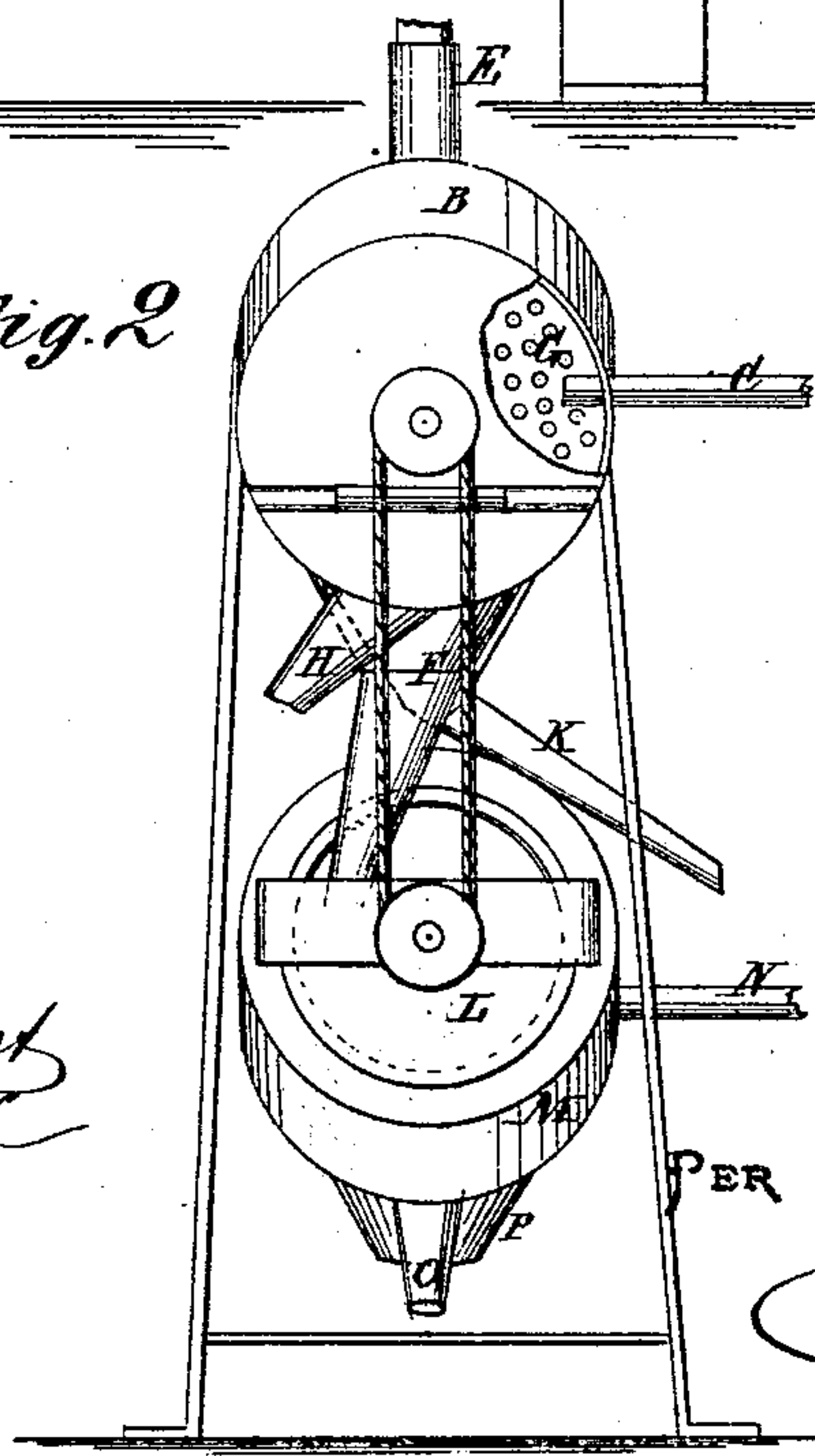
Improvement in Apparatus for Cleaning Grain.

No. 132,319.

Patented Oct. 15, 1872.



*Fig. 2*



Witnesses:

A. W. Almquist  
C. Sedgwick

Inventor:

P. Provost  
Munn & Co.  
Attorneys.

# UNITED STATES PATENT OFFICE.

PETER PROVOST, OF ROCHESTER, MINNESOTA.

## IMPROVEMENT IN APPARATUS FOR CLEANING GRAIN.

Specification forming part of Letters Patent No. 132,319, dated October 15, 1872.

*To all whom it may concern:*

Be it known that I, PETER PROVOST, of Rochester, in the county of Olmstead and State of Minnesota, have invented a new and useful Improvement in Cleaning Wheat, of which the following is a specification:

The invention consists in improving wheat-cleaners, substantially as hereinafter described and pointed out in the claim.

Figure 1 is partly a side elevation and partly a sectional elevation of my steaming-and-drying apparatus; and Fig. 2 is an end elevation with some parts broken out.

Similar letters of reference indicate corresponding parts.

A is a perforated cylinder or screen inclosed by a sheet-metal jacket, B, into which said jacket steam is admitted through a pipe, C, for enveloping the wheat which passes through the screen in an atmosphere of steam, for softening the matters adhering to the wheat; also the hull, to facilitate the removal of all extraneous matters, and as much of the hull as possible in the smutting or scouring machine, to which I conduct the wheat immediately after being so steamed. The wheat is admitted to the screen from the hopper D through the pipe E, and is discharged at the lower end above the spout F, for conducting it away above a perforated partition, G, which prevents it from going down to the escape-pipe H for the steam and water of condensation. The matters separated from the wheat by the screen fall upon the slide I, and are discharged into the spout K, which conducts them to the proper receptacle. The spout F conducts the wheat into a hollow sheet-metal cylinder, L, inclosed by a jacket, M, in such manner that steam may be used in the said jacket for drying off the moisture on the surface of the wheat in cold weather, which is sometimes necessary. The steam in this ap-

paratus is not permitted to come in contact with the wheat, but only to act on it by the heat transmitted through the cylinder. The steam is admitted to this jacket through the pipe N and escapes at O. The cylinder L projects at both ends through the heads of the jacket, which are fitted as closely to it as to prevent the escape of steam at the joints, and the wheat enters said cylinder at one end outside of the jacket and discharges from the projecting end at the other, through spout P, which is to conduct it to the smut-machine. This heating apparatus will only be employed for heating in cold weather, but the grain will pass through the cylinder L at all times, to save the expense of a separate conductor from screen A to the smut-machine; also, to utilize the said cylinder for scouring the wheat, which it does to a considerable extent.

I have found, in practice, that the scouring action of the smut-machine is greatly augmented when the wheat is passed through it after being steamed as above described, and I propose to treat it in this way.

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

1. The steaming-screen A and jacket B, perforated partition G, spouts E, F, H, and K, all combined and arranged substantially as specified.

2. The combination of the drying-cylinder L and jacket M with the steaming apparatus, substantially as specified.

3. The construction and arrangement of the drying-cylinder L, jacket M, steam-pipes N O, and grain-spouts F P, all substantially as specified.

PETER PROVOST.

Witnesses:

JAMES GEORGE,  
W. W. MAYS.