

E. M. Sealand.

Pavement Roller.

N^o 89,351.

Fig. 1. Patented Apr. 27, 1869.

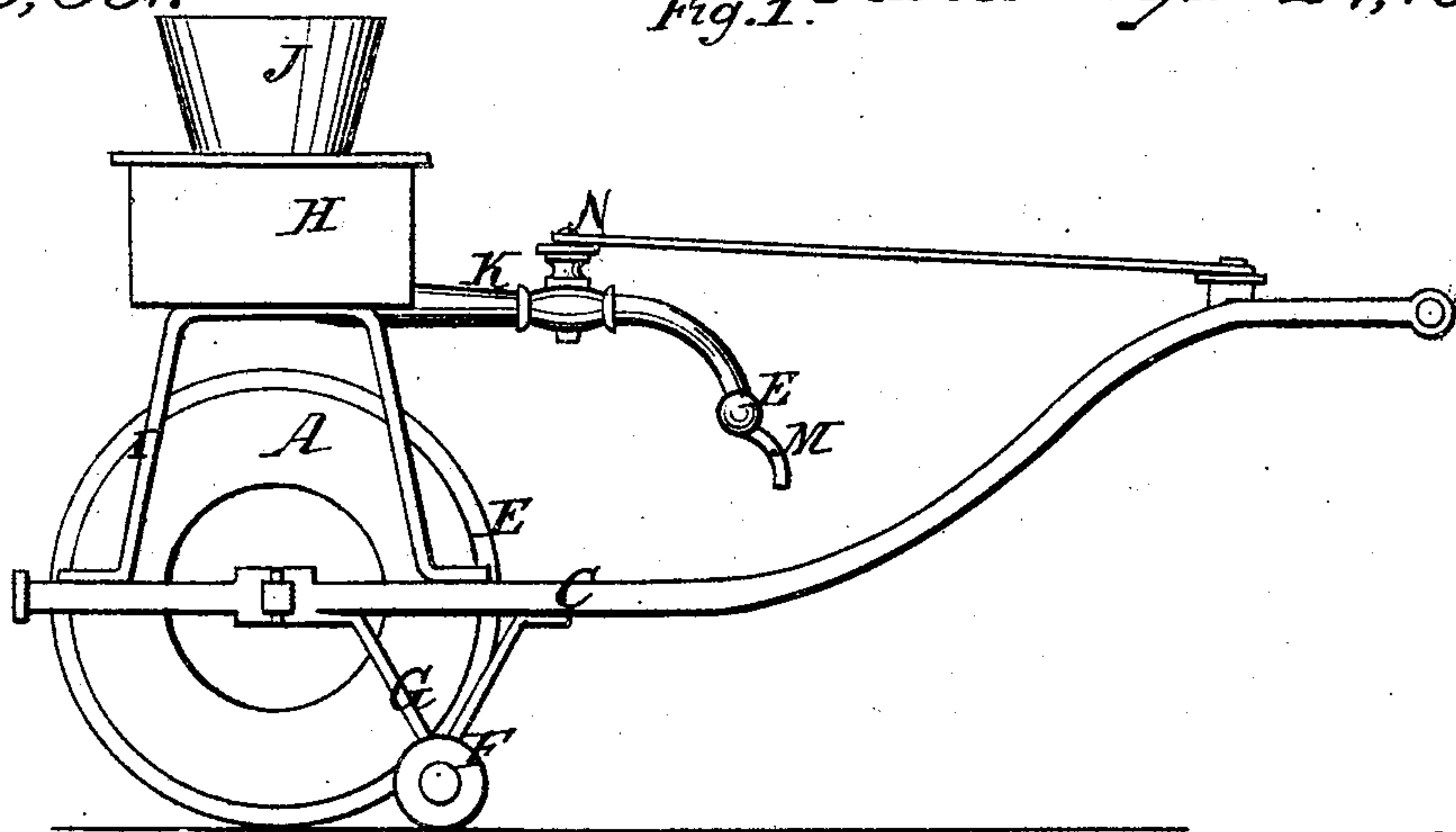


Fig. 2.

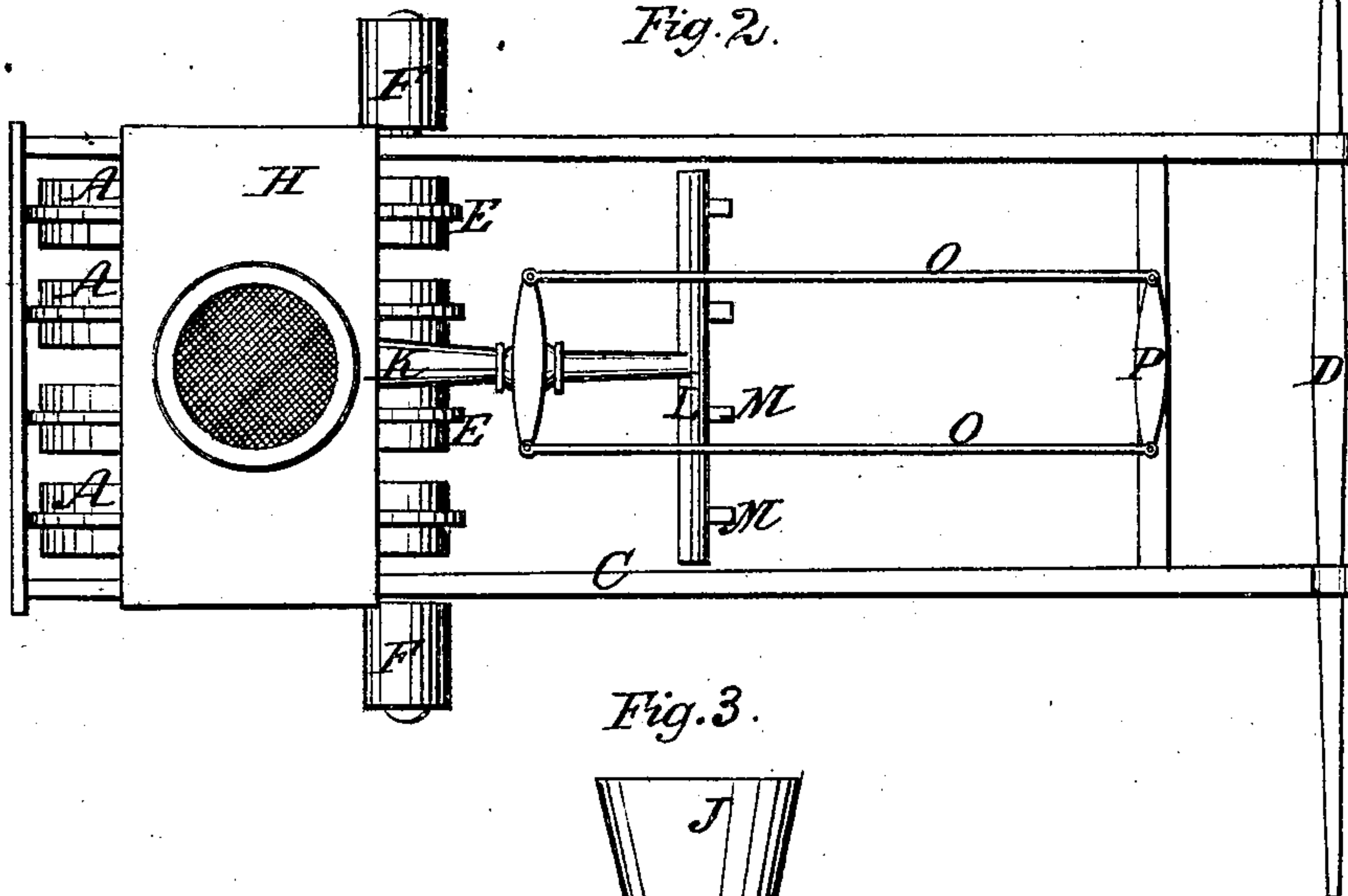
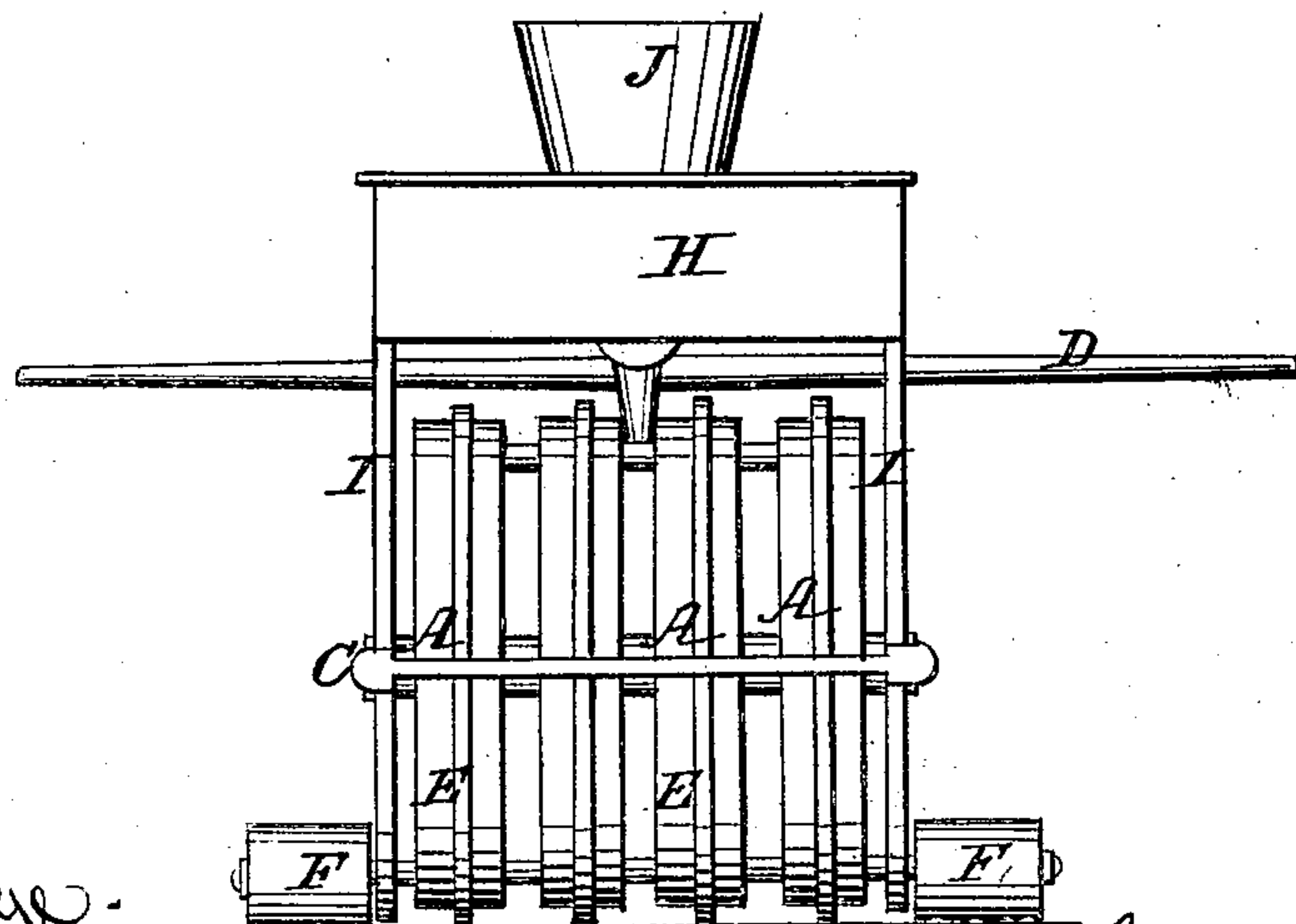


Fig. 3.



Witnesses.

*J. A. Burridge.
E. E. Waite.*

Inventor.

E. M. Sealand.



E. M. SEALAND, OF CLEVELAND, OHIO.

Letters Patent No. 89,351, dated April 27, 1869.

IMPROVED ROLLER FOR PAVEMENT.

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, E. M. SEALAND, of Cleveland, in the county of Cuyahoga, and State of Ohio, have invented certain new and useful Improvements in Machines for Constructing Nicolson Pavement; and I do hereby declare that the following is a full and complete description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a side view of the machine.

Figure 2, a top view.

Figure 3, a front view.

Like letters refer to like parts in the different views presented.

This invention relates to a series of rollers arranged upon a shaft, the periphery of each roller being provided with a central rib, of the thickness of the width of the spaces between the blocks of the pavement, and in which it runs, for the purpose of pressing the gravel therein.

In fig. 3, A represents the rollers mounted upon the shaft B, on which they roll, said shaft being rigidly secured in the frame C, whereby the rollers are drawn by the handle D.

E is a flange or central rib surrounding the face of the rollers, and which is a little less in thickness than the width of the spaces between the blocks of the pavement, to allow its turning freely therein.

F is a pair of supplementary rollers, secured to the frame by means of the stays G, the purpose of which is to support the machine in the position shown in fig. 1, answering, in this respect, as a pair of legs or standards, for keeping erect the machine, also for another purpose, hereinafter shown.

H is an oil-tank, supported above and over the rollers on standards I.

J is a funnel and strainer, whereby the oil is poured into the tank.

K is a discharging-pipe, projecting forward in front of the rollers, terminating in a cross-pipe, L, from which project, downward, distributing-pipes or nozzles M.

N is a stop-cock for regulating the discharge of oil, the same being operated by the links O, secured to a sway-bar, P, near the handle, within reach of those operating the machine.

Having thus described the construction of the machine, the practical operation of the same is as follows:

As above said, this machine is for rolling or forcing the gravel down between the blocks of the Nicolson pavement, and sprinkling thereon the tar employed in its construction.

When the machine is in position for operation, the flanges, or ribs E are adjusted in the groove between the blocks. Now, on pushing or drawing it in the direction of the grooves, the flanges will run therein, crushing and forcing the gravel down between the blocks more or less, as the machine is rolled backward and forward, from one side of the street to the other, and as it moves, sprinkling the tar upon the pavement from the discharging-nozzles M.

This part of the operation of laying the Nicolson pavement is usually done by a short flat bar of iron, about the thickness of the groove, in which it is laid edgewise on the gravel therein, and thus held and drawn along, by a handle to which it is attached, by one person, while a second strikes upon it with a paving set, thereby driving it down upon the gravel, setting the same into the groove. This is a slow, tedious, and some, and tedious operation, one groove only being done at a time, and requiring two persons to perform the work, and a third to sprinkle on the fluid-tar.

By the use of the roller above described, this work is done much more expeditiously, as several grooves are operated on at once, and with much less labor, as the machine can be easily managed by two persons, requiring no third person to pour on the tar.

The flanges E are lifted out of the grooves, for shifting the machine from groove to groove, by depressing the handle D.

The rollers A being on the opposite side of the small rollers F, the latter serve as a fulcrum for lifting the rollers and wheels, on which the machine may be turned around or trundled away.

It will be obvious that a greater or less number of rollers than that shown can be used, without in any way changing the principle of the machine.

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

1. The rollers A, more or less in number, provided with a central flange or rib, E, when arranged and operated in the manner as and for the purpose set forth.

2. The rollers F, as arranged in combination with the rollers E, substantially as and for the purpose specified.

3. The oil-tank H, provided with sprinkling-nozzles M, when arranged in relation to the rollers A, and operated conjointly therewith, in the manner substantially as and for the purpose described.

E. M. SEALAND.

Witnesses:

W. H. BURRIDGE,
E. E. WAITE.