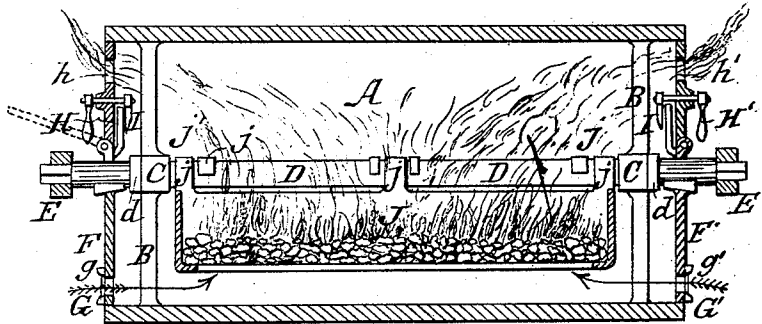
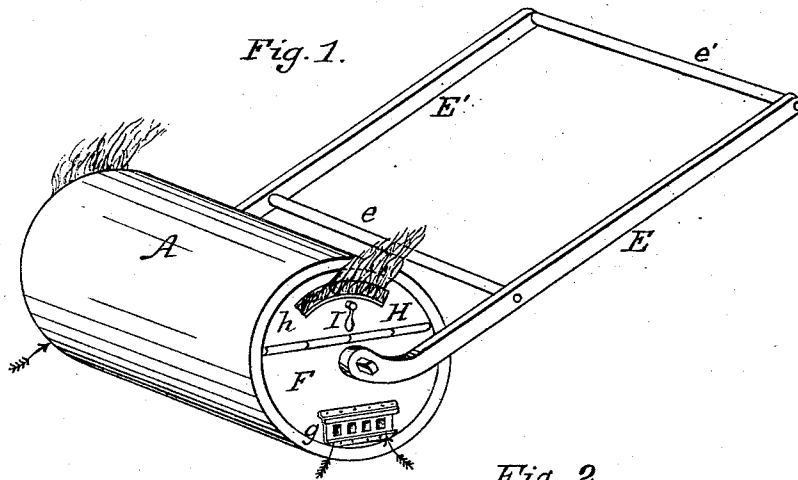


E. W. KITTREDGE.

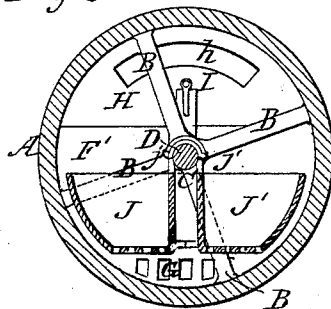
Road Roller.

No. 82,009.

Patented Sept. 8, 1868.



*Fig. 3.*



Witnesses:

Jas. H. Layman.  
Chas. Bauer

Inventor:

E. W. Kittredge  
By Knight Bros.  
Atty.

# UNITED STATES PATENT OFFICE.

EDMUND W. KITTREDGE, OF CINCINNATI, OHIO.

## IMPROVED PAVING-ROLLER.

Specification forming part of Letters Patent No. 82,009, dated September 8, 1868.

*To all whom it may concern:*

Be it known that I, EDMUND W. KITTREDGE, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Paving-Roller; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

This is an improvement on the class of rollers which are applied in a heated condition to the surfaces of composition pavements, roofing, &c., in order to compact and level the same; and my improvement consists in providing such rollers with one or more furnaces, suspended within them in such a way as to preserve its proper position during the rotation of the roller, in use or otherwise, the device dispensing with the necessity of removing the roller from its work to become heated, and also serving to keep the roller at a more uniform heat than is possible by the present mode of placing over a fire, the device also serving to greatly economize in fuel, as compared with said method of heating.

In the accompanying drawings, Figure 1 is a perspective view of a roller embodying my invention. Fig. 2 is a vertical section of my roller in the plane of its axis. Fig. 3 is a transverse section thereof, the last two drawings being on an enlarged scale.

A is the roller proper, preferably a hollow but heavy cylinder of cast-iron, whose arms B terminate in central hubs C C, capable of revolving around an axle, D, and confined thereto by metallic collars *d d'*.

The axle D has immovably attached to it a pair of thills, E E', connected by bar *e* and handle *e'*, and two heads, F F', which fit just within their respective ends of the cylinder A, and, while serving to properly confine the heat, are at the same time so provided near their lower parts with draft-inlets G G', and near

their upper parts with apertures *h h'*, for the escape of smoke, as to enable an active combustion of the fuel.

The upper portion of said head consists of a door, H or H', capable of being closed by a button, I, or other suitable device, and serving, when open, to admit to the interior of the roller one or more cressets or fire-baskets, J J', which are suspended to the axle by means of hooks *j j'*. The doors H H' also serve, when open, to admit fuel.

The draft-inlets G G' may be partially or wholly closable, by means of registers *g g'*.

While preferring the form herein selected, I reserve the right to modify the same in some cases. For example, I may employ a roller thus heated by suspended cressets, the ends of the roller being left open; or, where covers are employed, they may be attached to the roller, instead of to the shaft.

I claim herein as new, and of my invention—

1. The suspension of one or more cressets to the axle within the revolving cylinder, substantially as and for the purpose set forth.

2. The closing with covers the ends of a revolving roller, within which are suspended one or more cressets for holding fire, substantially as and for the purpose set forth.

3. The arrangement of cylinder A, revolving on a fixed axle, D, from which are suspended one or more cressets, J, and to which are secured the perforated heads F F', as and for the purpose set forth.

4. In combination with the elements A D J F F', one or more doors, H, for the purpose explained.

In testimony of which invention I hereunto set my hand.

EDMUND W. KITTREDGE.

Witnesses:

GEO. H. KNIGHT,  
JAMES H. LAYMAN.