

E. P. MORONG.

Improvement in Wood-Pavements.

No. 132,682.

Patented Oct. 29, 1872.

Fig. 1.

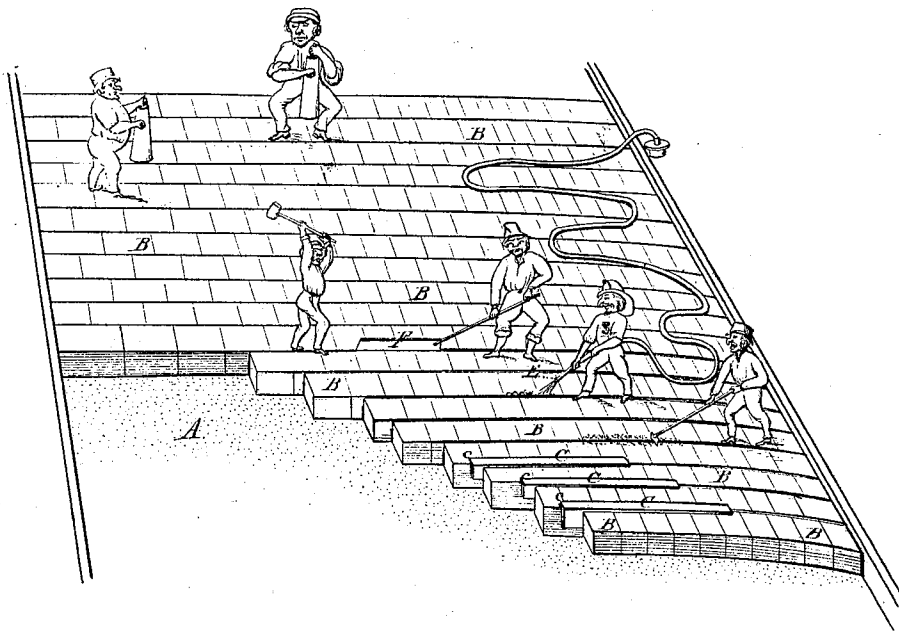
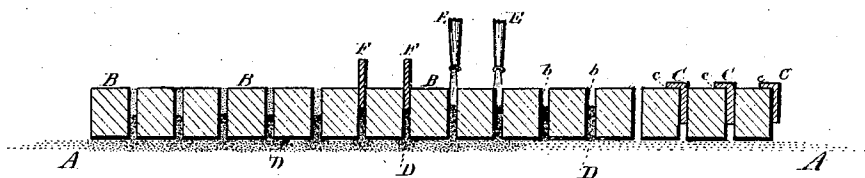


Fig. 2.



Witnesses:
C. H. Poole.
Geo. S. Prindle.

Inventor,
Edward P. Morong
by his Atty.
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UNITED STATES PATENT OFFICE.

EDWARD P. MORONG, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN LAYING WOOD PAVEMENTS.

Specification forming part of Letters Patent No. 132,682, dated October 29, 1872.

To all whom it may concern:

Be it known that I, EDWARD P. MORONG, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Method of Laying Pavements; and do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a perspective view of a street in which a pavement is being laid by means of and in accordance with my improved method; and Fig. 2 is a section of the pavement upon a line with the direction of the street.

Letters of like name and kind refer to like parts in each of the figures.

My invention consists in a series of manipulations constituting a method for laying pavements, whereby time, labor, and expense in laying the pavement are saved, and it is rendered more easy to take up and replace in case of repair to the substructure of the streets, and more solid and durable.

The pavement is of that class in which rectangular blocks, separated by narrow channels packed with pebbles or gravel, form the wearing part of the pavement; and the principal novelty in the whole method is the "puddling" or softening the earth foundation of the pavement after the blocks are laid and the channels partly packed with pebbles or gravel, before ramming.

No flooring of wood or other material need be prepared for this pavement, but the blocks are laid directly on the graded bed, and then partially embedded in the earth foundation while it is in a puddled or muddy condition.

The gravel or earth road-bed A is first graded to the form required, and to a proper height to allow for the depth of the blocks when rammed. Upon this graded earth foundation the blocks B are set in the usual way of setting stone blocks. Upon the upper edges of the set blocks is hung a parting strip, C, by a bracket, c, projecting from one side. This parting strip is shallower than the blocks, and is to be removed as the work progresses. A second row of blocks is laid against the parting strip, and on the removal of the parting strip a channel, b, will remain

between the two rows of blocks. This channel is next filled about two-thirds full with pebbles or gravel D, poured in from a shovel or scoop or other proper tool. The nozzle of a hose, pipe, or watering-pot, E, is next introduced to the partially-filled channel, and sufficient water allowed to flow through among the pebble-packing to saturate the earth foundation or render it puddled or muddy. The pebbles are then rammed by aid of an iron blade, F, such as is used in laying the Nicholson pavement, and subsequently the blocks are rammed into the foundation while it is still puddled or muddy. The channels are now filled with pebbles or gravel, and the whole pavement covered with gravel or sand in the usual way.

I prefer at this stage to give a second ramming, but it is not absolutely essential.

In consolidating a road-bed or "form" preparatory to setting pavement it has not been unusual to sprinkle the soil with water and then roll or ram the earth so as to get a hard foundation; and, after the blocks have been set and covered with a thin final sand dressing, water has been applied to wash the sand into the interstices between the blocks.

But these uses of water differ from mine. I desire the road-bed to be in shape, but not hard, when the blocks are set. I fill the channels with pebbles, and the blocks are thus braced on all sides and hold their position. I then soften the road-bed with the use of a profusion of water conducted and directed into the channels themselves; ram the pebbles so that they wedge against the blocks and form rude ratchets or pawls to hold and brace the rows of blocks against each other as the blocks are rammed down; and I then ram the blocks well into the muddy bed, where they all set when left alone—each like a post in its post-hole—while the mud also rises among the pebbles and interstices of the blocks, forming a sort of natural conglomerate in the channels.

The described parting strip I believe to be novel, and propose to patent in another application.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

The method of puddling the foundation-bed of wood pavements, and of giving to the latter a firm bearing, consisting in applying water to said foundation after the blocks have been laid in position and the channels partly filled with pebbles or gravel, and afterward ramming said filling and blocks, substantially as specified.

In testimony that I claim the foregoing I have hereunto set my hand this 5th day of September, 1872.

EDWARD P. MORONG.

Witnesses:

GEO. S. PRINDLE,
JOHN R. YOUNG.