

# UNITED STATES PATENT OFFICE.

BERNARDO SHEIL, OF LONDON, ENGLAND, ASSIGNOR OF ONE-HALF HIS  
RIGHT TO NEWCOMBE EDWARD BLACKALL, OF SAME PLACE.

## IMPROVEMENT IN PAVING-BLOCKS.

Specification forming part of Letters Patent No. **181,601**, dated August 29, 1876; application filed  
April 4, 1876.

*To all whom it may concern:*

Be it known that I, BERNARDO SHEIL, of London, England, have invented certain Improvements in the Manufacture of Blocks for Paving Roads and Ways, of which the following is a specification:

The object of this invention is the manufacture of blocks for paving roads and ways, such blocks, when laid, presenting a level and even surface, at the same time providing a safe footing for horses, so as to prevent their slipping, and giving them a firm hold thereon.

I employ an improved composition composed of tar-oil, pitch, chalk, and sand in the proportions of about six gallons of oil to one ton, together, of the other materials, the whole being thoroughly mixed together until a compound is formed by boiling, care being taken to add the tar-oil to the other materials during the boiling.

I manufacture the improved blocks for paving, by means of iron frames of suitable dimensions, in which I lay, by preference, four or other suitable number of blocks of wood about six inches deep, twenty-two inches long, and three inches wide, placed in parallel directions, and at intervals of about three inches apart, which intervals I fill up with broken granite.

The improved composition, heated to boiling-point, as hereinbefore described, is then poured onto the iron frame so as to fill up all the interstices between the said materials in the same, and form one solid block. When the blocks are cool, they are turned out of the frames and are ready for use.

I form the improved paving-blocks, by preference, about twenty-two inches long, fourteen inches wide, and seven inches deep.

In paving roads with the improved blocks, these blocks may, if required, be laid in rows alternately with blocks of wood, at a distance of about three inches apart, the whole being laid upon a bed of concrete, or the paving may be entirely of my improved blocks.

This improved paving-block, in addition to providing against the dangers to which horses are exposed by slipping and of being lamed, affords great facility for getting at the water and gas pipes, and can be removed with less trouble, and more expeditiously than other ordinary paving now in use, besides being cleaner and less liable to form dust and mud.

The proportions of the several materials employed, are substantially as follows: say, five hundred weight of pitch, seven and one-half hundred weight of chalk, and seven and one-half hundred weight of said, to which is added the six gallons of oil above named.

Having now described my invention, and the best means I am acquainted with for carrying the same into effect, what I claim is—

The improved manufacture of paving-block described, consisting of pieces of wood intervaled with broken granite, and having the interstices filled in with a composition of tar-oil, pitch, chalk, and sand, in the proportions, substantially, of about six gallons of oil to about five hundred weight of pitch, seven and one-half hundred weight of chalk, and seven and one-half hundred weight of sand, the oil being added while boiling.

BERNARDO SHEIL.

Witnesses:

G. F. REDFERN,  
W. AIMÉ.