

(No Model.)

R. I. COWDEN.  
PAVING BLOCK.

No. 381,341.

Patented Apr. 17, 1888.

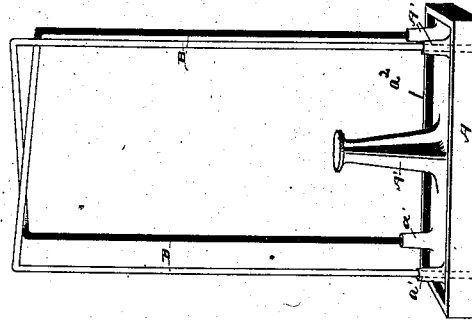


Fig. 3.

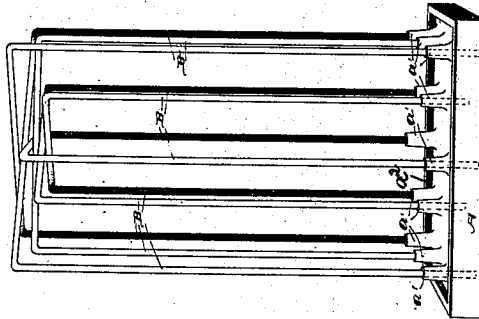


Fig. 2.

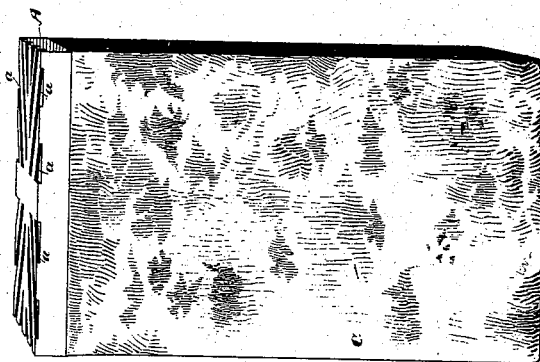


Fig. 1.

WITNESSES.

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# UNITED STATES PATENT OFFICE.

REYNOLDS I. COWDEN, OF LEETONIA, OHIO, ASSIGNOR OF ONE-HALF TO  
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## PAVING-BLOCK.

SPECIFICATION forming part of Letters Patent No. 381,341, dated April 17, 1888.

Application filed April 22, 1887. Serial No. 225,786. (No model.)

*To all whom it may concern:*

Be it known that I, REYNOLDS I. COWDEN, of Leetonia, in the county of Columbiana and State of Ohio, have invented certain new and useful Improvements in Paving-Blocks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

My invention relates to an improved paving-block as a new article of manufacture, in which a metal cap is employed, the same having one or more anchors attached, with a backing of furnace-slag or other suitable material applied in a molten or plastic state and allowed to harden, the object being to provide a superior paving-block at a reduced initial cost.

In the accompanying drawings, Figure 1 is a view in perspective of my improved paving-block. Figs. 2 and 3 are views in perspective showing in inverted position the caps and different arrangement of anchors suitable in carrying out my invention.

A represents a metal cap, usually of cast-iron on account of the cheapness of this material, the same having on the face or upper side thereof grooves *a* or suitable depressions or projections to form a suitable rough surface to prevent the paving from being too slippery, and on its lower face, at its outer edge, with the rib or rim *a'*, which latter preferably extends around all sides of the cap and overlaps the upper edges of the block. The arrangement of grooves *a* shown in Fig. 1 is considered well adapted to this purpose; but doubtless other forms would answer quite as well. Suitable anchors are connected with the cap A, and to save expense such anchors, if of wrought metal, should be "cast in." There is no essential form or arrangement for such anchors, and it may be found necessary to vary the number and form thereof, according to the material used for backing, and so long as the anchors are made to hold the backing firmly against the cap they will have performed their functions regardless of number, size, form, or arrangement thereof.

In Figs. 2 and 3 anchors B consist of rods bent in the form of bails, with the ends thereof

cast in the respective caps, with bosses *a'* forming a part of the cap to give more depth of metal, and consequently a stronger hold of the cap on the anchor. In Fig. 3 is shown an anchor, A', cast integral with the cap. The anchors shown are well adapted to the purpose, but are probably no better than various other forms or arrangements that might be devised.

The backing C is preferably of furnace-slag on account of the cheapness and of the superior qualities of this material for the purpose.

In making this paving-block where slag is used for a backing molds of the proper form are made in the sand and the caps, with anchors attached, are placed, respectively, in such molds and in the inverted position shown in Figs. 2 and 3, after which the molds are filled with slag. Furnace-slag can hardly be said to have a market value, unless it be of the negative kind, as it more frequently costs something to have the slag carted off or disposed of in some way, and yet this slag has superior qualities for such backing, being hard, indestructible, and sufficiently tenacious for the purpose. Such paving-blocks would of course be made at a blast-furnace, where the cap could be made almost as cheap per pound as pig-iron, and where the slag as drawn from the furnace can be run into "pools" made in the sand, where it could be kept in a molten state until it could be ladled into the molds. These paving-blocks can be made of any form in plan that is desired, and the "furnace-men" would not be likely to object to any depth of block that might be ordered, as an increase in the depth of the backing would only result in disposing of an extra amount of worthless material, so far as its value for any other purpose is concerned. In the vicinity of blast-furnaces, or in places even hundreds of miles away, where railroad facilities or other cheap transportation can be had, I know of no material that can compete with the furnace-slag for the purpose aforesaid. In places where, from the cost of transportation, the furnace-slag cannot be used, other material at hand—such, for instance, as various cements and clay—may be applied in a plastic state and allowed to harden.

What I claim is—

As a new article of manufacture, a paving-  
block consisting, essentially, of a body or back-  
ing and metal cap or head, the latter having  
5 a projecting rim or rib on the outer edge of its  
inner or lower face adapted to overlap the ad-  
jacent edges of the body of backing, and anchors  
consisting, essentially, of the rods bent into loop  
form and rigidly secured at their end to said  
10 inner or lower face of the cap or head and em-

bedded in the body or backing, substantially  
as set forth.

In testimony whereof I sign this specifica-  
tion, in the presence of two witnesses, this 8th  
day of April, 1887.

REYNOLDS I. COWDEN.

Witnesses:

JOHN I. McMILLAN,  
J. S. GREENAMYER.