

UNITED STATES PATENT OFFICE.

LUKE W. OSBORN, OF YOUNGSTOWN, OHIO.

IMPROVEMENT IN COMPOSITIONS FOR ARTIFICIAL STONE.

Specification forming part of Letters Patent No. **151,795**, dated June 9, 1874; application filed January 24, 1874.

To all whom it may concern:

Be it known that I, LUKE W. OSBORN, of Youngstown, in the county of Mahoning and State of Ohio, have invented a new and useful Improvement in Artificial Stone, of which the following is a specification:

My invention has for its object to furnish an improved artificial stone cast in slabs or blocks of any required size and shape for laying sidewalks, for the foundation of iron fences, for well-covers, door-steps, drain-tile, sewer-pipe, and other purposes; which will not crumble or wear through, as imperfect blocks cannot be transported and laid; which shall have a light-grey color upon its surface to prevent it from absorbing the sun's rays and being softened; which may be made of different colors, or may have patterns or figures of different colors upon its surface; and which shall be less expensive than concrete spread continuously upon the ground, and much less expensive than natural stone. The invention consists in slabs or blocks of artificial stone, the upper parts of which for any desired depth are made of a light-grey color by the application of gum-turpentine, pine-resin, and aqua ammonia, in the proportions herein-after stated, to the cement forming said upper portions, as hereinafter set forth.

In making my improved artificial stone, sand or other suitable material while hot is saturated with boiling coal-tar, hardened with sulphuric acid, as described in Letters Patent No. 94,785, issued to J. W. Smith, September 14, 1869. This mixture when cast or molded

produces a black concrete, and forms the body of my improved slabs or blocks. The upper part of the slabs or blocks for any desired thickness is made of a light-grey color in the following manner: Gum-turpentine, resin, and aqua ammonia are mixed together in the proportions of one pound of gum-turpentine, two pounds of pine-resin, and one fluid ounce of aqua ammonia, and enough of the mixture is added to the coal-tar to produce a dark-grey color, which, when the hot sand is added, changes to a light grey. In molding the slabs or blocks the molds are filled to any desired point with the dark cement, and the rest of the space is filled with the gray cement, and the blocks are hardened with pressure in the ordinary way. By adding suitable pigments the surface of the blocks may be made of any desired color or patterns, or figures of any desired shape may be formed upon said surface.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

Slabs or blocks of artificial stone, the upper parts of which for any desired depth are made of a light-grey color by the application of gum-turpentine, pine-resin, and aqua ammonia, in the proportions herein stated, to the cement forming said upper portions, substantially as herein set forth.

LUKE W. OSBORN.

Witnesses:

SAMUEL C. ROOK,
JOHN T. JONES.