

UNITED STATES PATENT OFFICE.

NATHAN B. ABBOTT, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN COMPOSITIONS FOR PAVEMENTS.

Specification forming part of Letters Patent No. 112,764, dated March 21, 1871.

To all whom it may concern:

Be it known that I, NATHAN B. ABBOTT, of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Composition Pavements; and the following is hereby declared to be a correct description of the same:

This invention relates to that class of composition pavement composed mainly of sand, gravel, ashes, broken stone, &c., mixed with tar or other bituminous material to form an elastic and water-proof road or pavement.

I make use of pitch from the redistillation of coal-tar or asphalt in connection with crude creosote, employing about seven parts of the former to one of the latter. To this I add sand, gravel, ashes, broken stone, or either of them, in the desired proportions, and the mass, while hot, is to be stirred to render the mass homogeneous. The pitch should not be as soft as that usually used for roofing, neither is it to be of a brittle nature, but of a tough character, somewhat similar to asphalt.

The composition is to be applied while hot to the roadway, and, besides possessing the advantages of an elastic and water-proof road or pavement, said composition makes a pavement that will set very quickly after being laid, allowing travel over the same much sooner than the composition pavements heretofore in use, and at the same time said pavement will not be affected by heat, in consequence of the absence of light oils contained in the coal-tar, and which are not found in pitch from the redistillation of coal-tar.

The above composition may be slightly varied as follows: Pitch from the redistillation of coal-tar, about nine parts, and of creosote, one part. To this may be added about two parts of coal-tar, either crude or distilled.

Sand, gravel, broken stone, ashes, &c., or either of them, are to be employed with the above, and the whole thoroughly mixed while hot, and applied to the road as aforesaid.

This composition makes a pavement similar to the first named, and possesses the same advantages.

The creosote combined with the pitch makes the composition very tough, and prevents it becoming too hard and brittle, and renders the same sufficiently elastic to prevent its breaking up, and the creosote becomes a bond of union with the earthy materials by penetrating the interstices and spreading upon the entire surfaces of the particles.

The composition is especially intended as a surface for street and road pavements, and may be laid upon a foundation of cobble or other stones, and it is to be rolled and finished at once.

I claim as my invention—

The composition formed of coal-tar, pitch, or asphalt, and creosote, with the other ingredients named.

Signed by me this 11th day of October, 1870.

NATHAN B. ABBOTT.

Witnesses:

HAROLD SERRELL,
GEO. T. PINCKNEY.