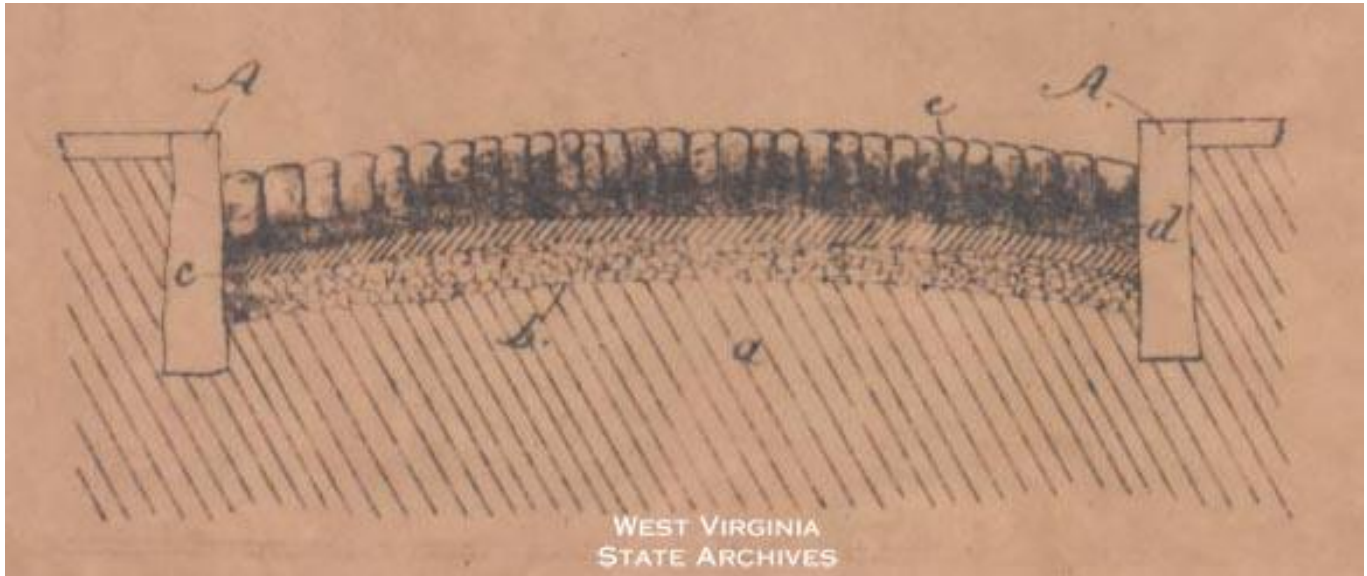


ON THIS DAY IN WEST VIRGINIA HISTORY APRIL 23



Drawing of Pavement Patented by Modicai Levi

Mordicai Levi of Charleston, who is credited with inventing the first brick pavement in the United States, was granted a patent for the process on April 23, 1889.

CSO: SS.8.24, ELA.8.1

Investigate the Document: (Patent For First Brick Street; Letter to Centennial Commission of West Virginia, Ms80-214)

1. Which Charleston street was the first to be paved with brick?
2. What were the conditions of many roads and streets around the county prior to brick pavement?
3. In what year did Mordecai Levi pave the first street in Charleston?

Think Critically: What is the significance of Levi's patent to the evolution of transportation?

UNITED STATES PATENT OFFICE.

MORDICAI LEVI, OF CHARLESTON, WEST VIRGINIA.

PAVEMENT FOR STREETS OR ROADS.

SPECIFICATION forming part of Letters Patent No. 401,759, dated April 22, 1889.

Application filed November 10, 1888. Serial No. 291,284. No model.

To all whom it may concern:

Be it known that I, MORDICAI LEVI, a citizen of the United States, residing at Charleston, in the county of Kanawha and State of West Virginia, have invented and produced a new and Improved Pavement for Streets or Roads; and I do declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part thereof.

My improved pavement is made in the following way: After the required grading or filling to receive the road bed is complete, I first put down a layer of comminuted stone—
15 such as broken stone or slate, gravel, or sand. Upon this I place a layer composed of asphalt or its equivalent tar suitably prepared and mixed with any comminuted material capable of giving the layer bulk and consistency—
20 such as pulverized stone or slate, sand, ground bark, sawdust, or wood pulpe. Upon this I place a layer of sand, and upon this I place a surface layer of hard-burned brick, stone, paving-blocks, wood, or other suitable material.

Having reference to the drawing, *a* represents the earth properly graded, *b* is the layer of comminuted stone, *c* is the layer of asphalt mixed with a suitable comminuted material, *d* is the layer of sand, and *e* is the surface layer. *A* and *B* represent the curbs. The pavement thus formed is cheap in construction and contains all the elements of durability.

What I claim as my invention, and desire to secure by Letters Patent, is—

A pavement consisting of a first or bottom layer of comminuted stone, of a second layer composed of asphalt and any suitable comminuted material, of a third layer of sand, and of a fourth or surface layer of any suitable material substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

MORDICAI LEVI.

Witnesses:

R. J. ANDERSON,
A. T. CARROLL.

June 7, 1962

Centennial Commission of West Virginia
State Capitol
Charleston, West Virginia

Dear Sirs:

I thought you might be interested in the following, which is a "First". The information below has been told in old Charleston newspapers at the time of the laying of the first brick pavement on Summer's Street, and has been retold through the years. The method of laying the first brick pavement in the U. S. was invented by Mr. M. Levi, a Charlestonian, and a piece of it was first laid on Summers Street in 1870, as an experiment. In 1873 the entire block was paved by this method (between Va. and Kanawha Sts. on Summers), and Mr. Levi was also the contractor. Dr. Hale, his business associate for many years here, financed the paving, by public subscription. (I am sure Dr. Hale, who was the promoter in the business partnership, not the inventor, would not have wished to get the credit for inventing said brick paving method, but he sometimes is given credit, mistakenly because he financed it). Mr. M. Levi's son, Mr. Plus R. Levi, is still living in Charleston and is ninety years old).

There have been several rather recent newspaper stories: one by Mr. Maginnis was in the Charleston Gazette of October 4th, 1953 and reviewed the first brick pavement and told that M. Levi invented it. The article was entitled, "Story of the Streets, Out of the Mud". Mr. Maginnis also told of how a reproduction of the paving method which was invented by M. Levi and laid on Summers Street, was exhibited as late as 1933 at the Century of Progress Exposition held in Chicago, Illinois, after having been first verified by the National Research Council as being the first brick pavement ever laid in the U. S. and its inventor as being Mr. Mordecai Levi, who laid it first on Summers Street in Charleston, W. Va. The bricks and a copy of the original Patent Grant were from the collection of Dr. Roy Bird Cook, of Charleston.

The original patent for the paving method invented by M. Levi is in the possession of a grand-daughter of Mr. Levi, Mrs. Robt. Cassady of Charleston. It bears the official seal of the U. S. Patent Office in Washington, D. C. and is signed by the Assistant Secretary of the Interior, and the Commissioner of Patents. It "grants to Mordecai Levi and his heirs or assigns for the term of seventeen years from the twenty-third day of April, one thousand eight hundred and eighty-nine, the exclusive right to make, use, and vend the said invention throughout the United States and the Territories thereof". The page facing describes the method of paving in detail, and there is also a drawing of a cross-section of the pavement. The patent number is 401,752.

-2-

Another newspaper story on August 13, 1939, reviewed the paving of the first brick street in the U. S., under the heading "First Brick Pavement Laid in City". This article is by Mr. George Summers of the Charleston Daily Mail, and states that "Mr. Levi invented a brick street paving and superintended the laying in Summers Street, it being the first block of such paving in history". He also assisted in building the first State Capitol in Charleston, and the Hale House; the latter in its time the largest and finest hotel in the state. He was the first superintendent of the Charleston Water Works". Mr. Summers goes on to recount: "The first attempt to build a hard-surfaced street in Charleston was when the block of Summers Street between Kanawha and Virginia was paved with brick in the fall of 1873. And it was the first brick street paving laid in the history of the world". He continues: "The system of paving was devised by Mordecai Levi, close business associate of Dr. John Hale, who financed it". "The block of paving was laid on Levi's plans with Levi directing the work and Hale bearing the expense". The street paving was by no means the only work of public improvement in which Dr. Hale and Mr. Levi were associated. Charleston's first Capitol, and also the Hale House were built of the same partnership with Mr. Levi as contractor". "Mr. Levi built the Hale House in 91 days, after contractors in the East had said it would take them six months ... and this saved the Capitol for Charleston". (In 1871 the capitol of West Virginia was being returned from Wheeling to Charleston and the legislators were demanding better hotel accommodations than were available in Charleston). "Mr. Levi superintended the construction for Dr. Hale, who financed these structures. To Levi as builder, as well as to Dr. Hale, Charleston owes much today". "Mr. Levi was for many years, superintendent of the Charleston Water Works System. He built the mechanical part and installed the Levi High Pressure Filter, a great improvement on earlier methods of filtration for the city water supply". "Mr. Levi was also associated in brick making with Dr. Hale".

I repeat: The first, and experimental, paving (invented by M. Levi) was laid in 1870 by him, with Dr. Hale applying to the city council for permission to lay it at his own expense. This was on Summers Street, in front of Gates Paint Store, and the paving of the block by this method was completed in 1873. Later M. Levi obtained a patent for his invention, this was after he improved the method by changing the way of preparing the planks used under the bricks and sand.

I have sought to bring you the facts from old newspapers, and from more recent reviews in newspapers here, of the invention. Also to call attention to the fact that it was exhibited at the Chicago Fair in 1933 after first being verified by the National Research Council as being the first brick pavement laid in the U. S. and its inventor as M. Levi. A cross section of the paving was shown, with some of the original bricks. (Collection of Dr. Roy Bird Cook).

-3-

I hoped the invention would be of interest and would be presented as a "First" at our own West Virginia Centennial. (I have copies of the original Patent Grant, one of which I shall enclose).

Sincerely,

Nancy Wilson Cassady
(Mrs. Robert Cassady)
2218 E. Washington Street
Charleston, West Virginia

June 7, 1962

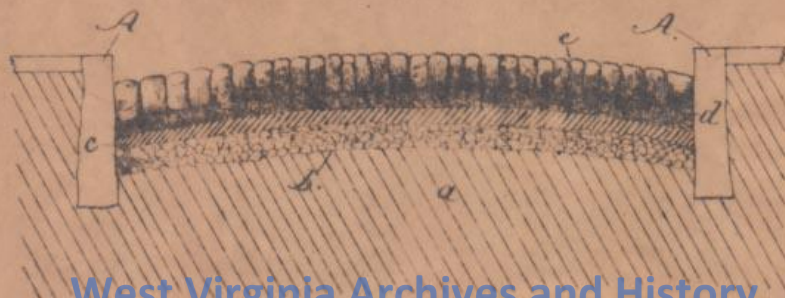
(No Model.)

M. LEVI.

PAVEMENT FOR STREETS OR ROADS.

No. 401,752.

Patented Apr. 23, 1889.



West Virginia Archives and History

Witnesses:
Thos. Houghton.
Robt. Sutton.

Inventor:
Mortimer Levi
By his Atty.
D. A. Mc Knight.