H. M. F. V. STAMP & J. A. HAYDON.

PAVEMENT.

No. 185,795. Patented Dec. 26, 1876.

Fig. 1.

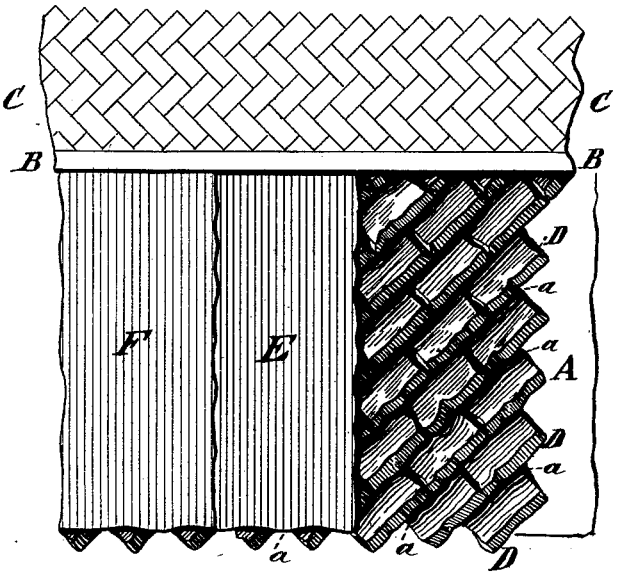
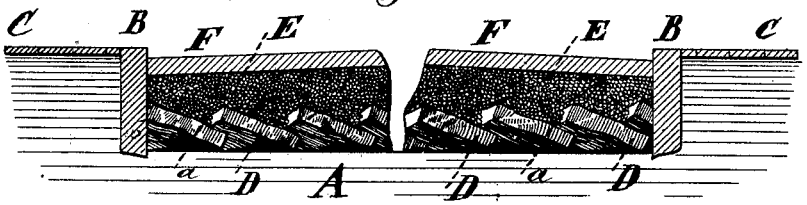


Fig. 2



Attest:
E. E. Court
C. A. Snow.

Inventor:
Hendrick M. F. V. Stamp
and John A. Haydon.
by Louis Bagger & Co.
Attys.

UNITED STATES PATENT OFFICE.

HENDRICK M. F. V. STAMP, OF WASHINGTON, DISTRICT OF COLUMBIA, AND JOHN A. HAYDON, OF FREDERICK, MARYLAND.

IMPROVEMENT IN PAVEMENTS.

Specification forming part of Letters Patent No **185,795**, dated December 26, 1876; application filed November 11, 1876.

To all whom it may concern:

Be it known that we, HENDRICK M. F. V. STAMP, of Washington, in the District of Columbia, and JOHN A. HAYDON, of Frederick, in the county of Frederick and State of Maryland, have invented certain new and useful Improvements in Pavements; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, which forms a part of this specification, and in which—

Figure 1 represents a top plan, portions of the several layers or strata having been successively removed to show the construction; and Fig. 2 is a cross-section.

Similar letters of reference indicate corresponding parts in both the figures.

Our invention consists in an improved method of constructing or building up a combined stone, concrete, and asphalt pavement, substantially as hereinafter more fully described, and pointed out in the claims.

In the drawing, A is the road-bed, B the curb stones, and C the sidewalks, of a street or highway. The road-bed is first graded in the usual manner, after which the stone foundation or base of the pavement is placed in position. This consists of slabs of (preferably stratified) stone, about four inches in thickness, twenty inches in length, and of any suitable or convenient width, which are set into the road-bed at an angle of about twenty-six degrees, and arranged obliquely from curb to curb, so that each row or line of stones will present an angle of about forty-five degrees to the line of the curb.

Care must be taken in setting the stones (denoted by D in the drawing) in such a manner that each row shall break joints with the rows next to it, so that a solid and compact body of stone is formed, extending from curb to curb, and forming a series of alternating grooves and ridges on top, running in straight lines across street, at an angle of about forty-five degrees.

Upon the top of the ridged or corrugated substratum thus formed we place a layer of concrete, (denoted by E.) This layer is forced well into the grooves or recesses *a*, filling out all open spaces or interstices formed by the unevenness of the stones D, so that the whole will be firmly bound together, after which the top is smoothed off, to prepare it to receive the top-dressing F. The latter consists of a thin layer of natural or artificial asphalt, spread evenly upon the concrete E, and rolled or rammed until it forms a perfectly smooth and even surface.

By this method of building up a pavement we secure the greatest possible strength and durability. The stone foundation, once set, will never need repair, which is confined simply to the top-dressing; yet, at the same time, any part of this foundation may readily be so constructed that it can be removed and again replaced, whenever this becomes desirable for the purpose of getting access to sewers, water and gas mains, &c. For instance, sections of the pavement that lie over manholes, sewer-traps, &c., may be built up in metal frames detached from the surrounding portion of the pavement, so that these detached sections may be lifted out and again reinserted without disturbing in the least the construction or coherency of the pavement.

The concrete, being forced into the corrugations formed by the peculiar manner of setting the stones, is not liable to crack or settle, as in pavements where the concrete is spread upon an even or yielding surface, but will remain hard and firm under all atmospherical or climatic changes and influences, and under all conditions of wear or travel on the surface of the pavement.

The required elasticity is readily obtained by changing the composition or thickness of the top-dressing to suit the use or climatic influences to which the pavement is subjected.

Having thus described our invention, we claim and desire to secure by Letters Patent of the United States—

1. In a pavement, the combination of a stone substratum, consisting of slabs D, set into the road-bed at an angle, presenting a series of corrugations or depressions, *a*, on top, with a layer of concrete, E, substantially as and for the purpose herein shown and specified.

2. The improved pavement herein described, consisting of a stone substratum, formed by slabs D, set into the road-bed at an angle, an intermediate layer, E, of concrete, and a top-dressing, F, the whole constructed and combined substantially in the manner and for the purpose herein set forth.

In testimony that we claim the foregoing as our own we have hereunto affixed our signatures in presence of two witnesses.

HENDRICK M. F. V. STAMP.
JOHN A. HAYDON.

Witnesses:
LOUIS BAGGER,
WM. BAGGER.