

(No Model.)

L. H. MILLER & F. SCHILLINGER.

COMBINED WOOD AND ASPHALT AND CONCRETE WALK.

No. 356,004.

Patented Jan. 11, 1887.

Fig 1.

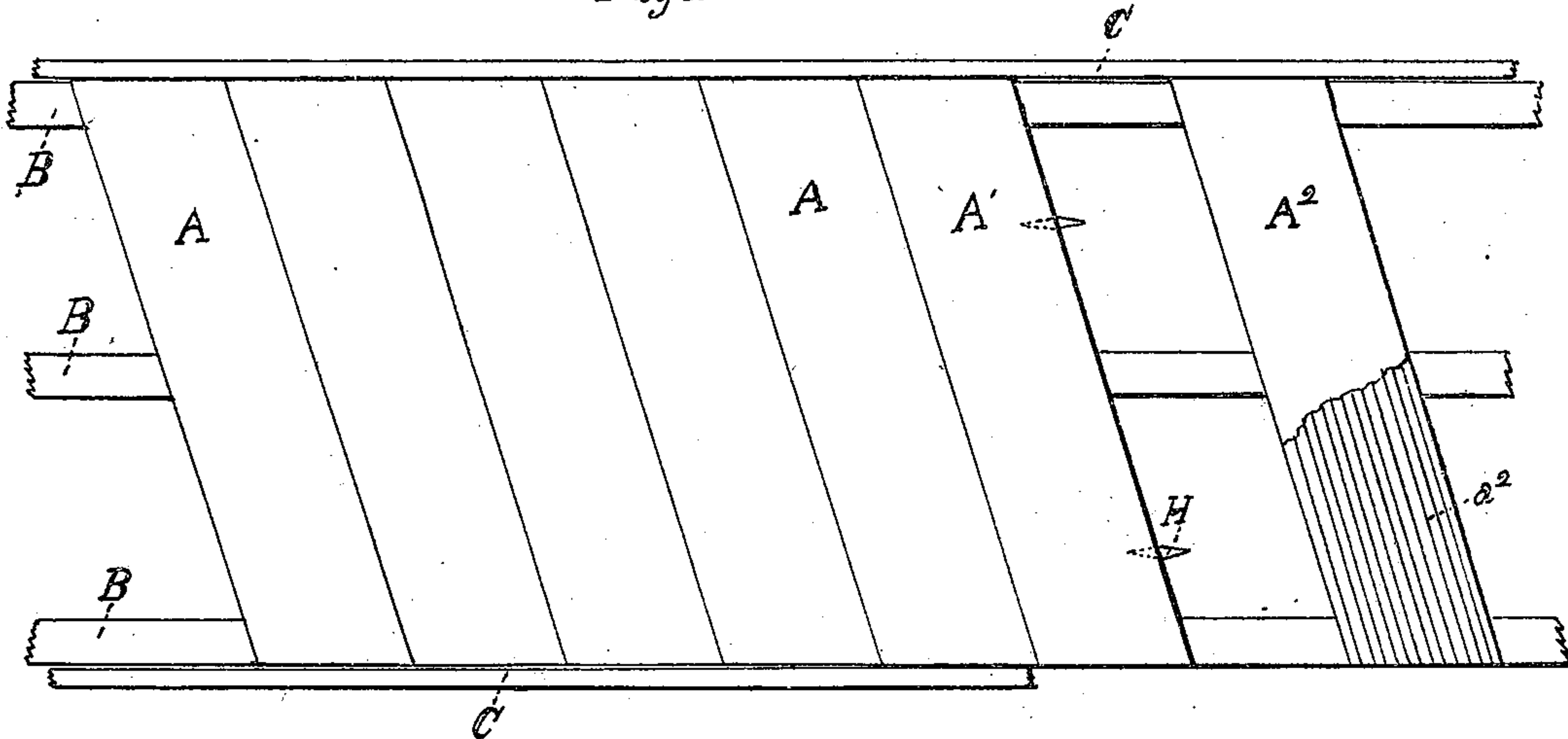


Fig 2.

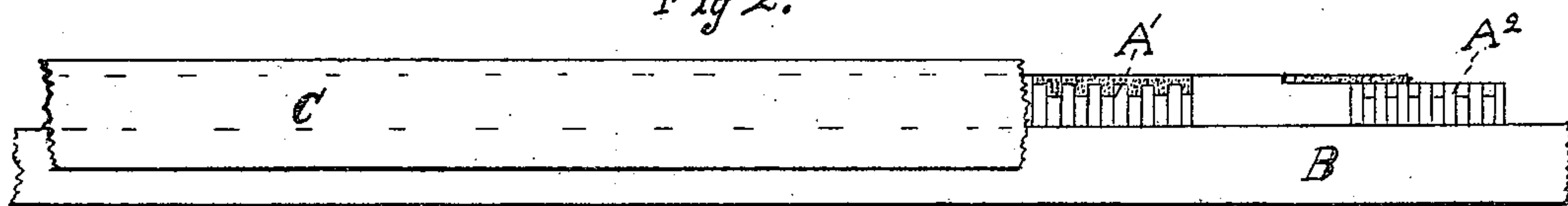


Fig 3.

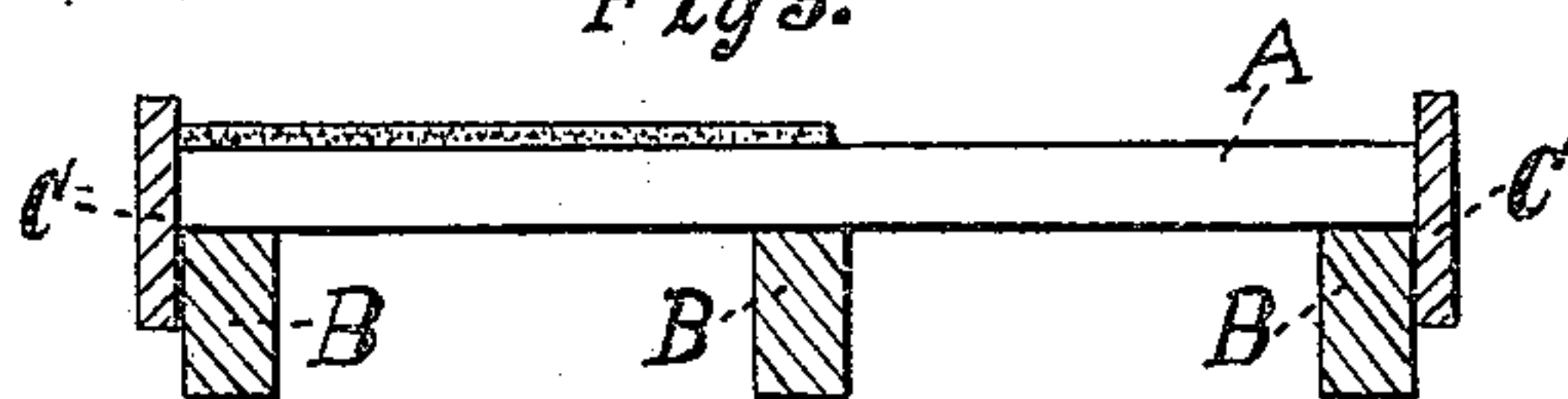


Fig 4.

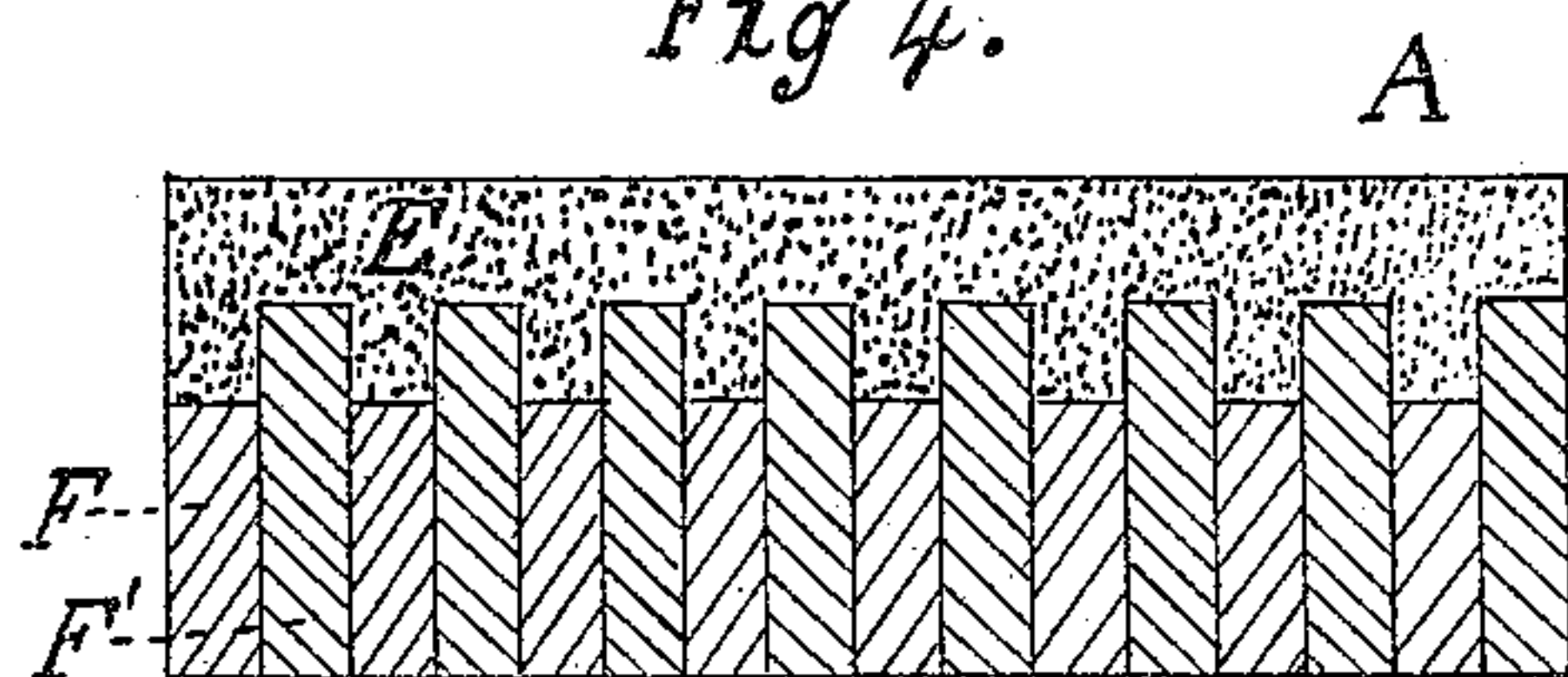


Fig 5.

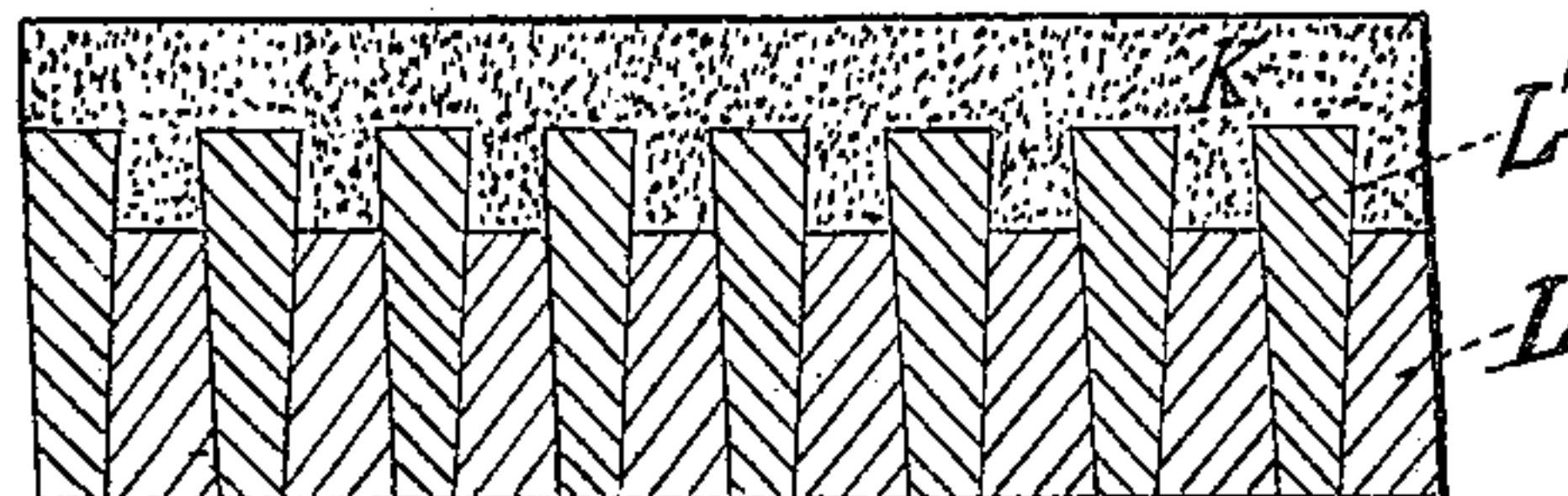
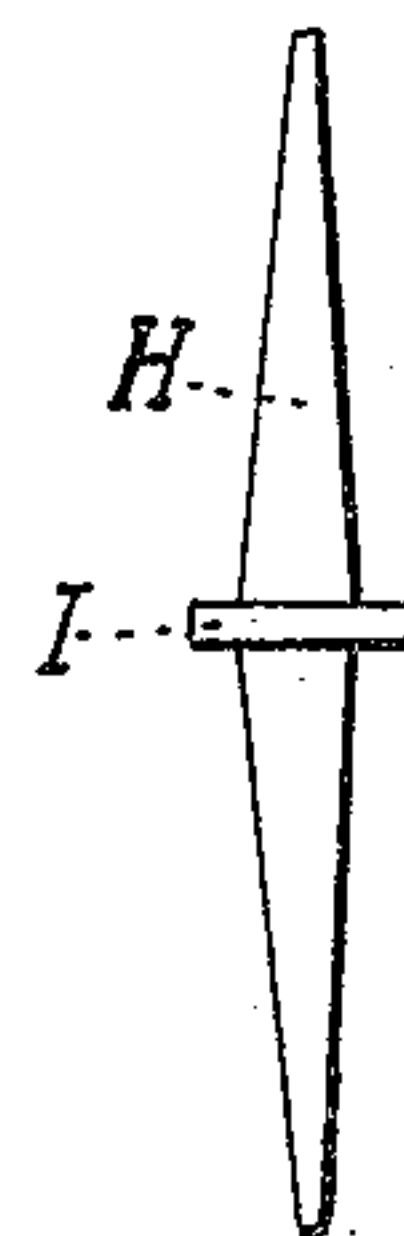


Fig 6.



WITNESSES:

Joseph W. Clouse
William H. Tucker.

INVENTORS:

Larnard H. Miller
Frederick Schillinger
BY
J. W. Clouse

ATTORNEY

UNITED STATES PATENT OFFICE.

LEONARD H. MILLER AND FREDERICK SCHILLINGER, OF TOLEDO, OHIO.

COMBINED WOOD AND ASPHALT AND CONCRETE WALK.

SPECIFICATION forming part of Letters Patent No. 356,004, dated January 11, 1887.

Application filed August 5, 1886. Serial No. 210,101. (No model.)

To all whom it may concern:

Be it known that we, LEONARD H. MILLER and FREDERICK SCHILLINGER, both citizens of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented new and useful Improvements in Combination Wood and Asphalt and Concrete Walks, of which the following is a specification.

Our invention relates to improvements in that class of work known as "asphalt and concrete walks, floors, crossings, paving, and water-proof sidings, wall - ceilings," and other uses.

The object of our invention is to remedy the defects and to obviate the imperfections in the construction and durability of such walks, &c., as are now made, and to avoid the disadvantages of preparing and laying down such walks, &c., under the present system of such work—such as the blockading of public walks for several days, the excavating and laying of special beds of broken stone and sand to receive the asphalt or concrete, and the heating, pounding, and transporting of the material, and the appliances for manipulating the same from place to place. The laying of walks in this way requires several separate operations, and even more if the drainage is bad in the place where the walk is to be laid.

Our further objects are to remedy the present difficulty of upheaval and cracking by frost, and to provide a ready-prepared material for walks that may be laid down and taken up, if desired, which not only possesses all of the good qualities of the present asphalt and concrete walks, but these greater advantages already enumerated and others.

We accomplish these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of the walk complete with broken section. Fig. 2 is a side section view. Fig. 3 is an end cross-section. Fig. 4 is an enlarged detail end view of a section separate. Fig. 5 is an enlarged detail end view of a section, showing a modified form of the slats. Fig. 6 is a dowel-nail used between the sections, in all of which views like letters refer to like parts.

B B B represent sills or stringers, as in the

ordinary plank-walks, which are laid usually upon the ground. On these sills B B prepared sections of walk A A are laid, and secured by nails to the sills B B.

C C are curbing-strips, which are nailed to the sills B B and to the ends of the sections A A.

H H are double-pointed dowel-nails, driven into the edges of the sections A A to secure them together. The double-pointed nail H is provided with a flange projection, I, in the center to prevent it from driving more than half into either section A A.

The ends of the sections A A are cut skewing, so that the sections lie bias or diagonal on the sills B B, thus making a stronger and more durable walk, and affording a better way to nail them through the curbing-strips C C.

The sills B B B and the curbing-strips C C are of ordinary lumber; but may be made more lasting by being dipped in hot coal-tar or asphalt to protect them from the dampness.

The sections A A, &c., are especially prepared, and they consist of a series of strips or slats, F and F', nailed firmly together, the slats F being narrow and each alternate slat F' being wider, leaving the bottom side straight, flat, and smooth, to lie on the stringers B B, and the top side presenting a grooved surface, which is filled and faced by a preparation of asphalt or concrete, E, the grooves forming a clinch for the asphalt or concrete E.

The sections A are prepared by nailing the slats F and F' together, and cutting them the required bevel on the ends. Then they are dipped in a bath of hot tar or asphalt, and sanded while hot. Then they are placed in a box or form and the preparation of asphalt or concrete filled in on top and pressed or rolled down firm and solid. In this manner the sections of walk may be ready-made, of any desired length, width, or thickness, and shipped ready to lay down.

The sections A may be laid square across, cutting the ends square, if desired; but the skewing cut on the ends of the sections gives a chance, by setting the nails sloping, to drive them into the side wood through the curbing C C.

A² represents a section where the asphalt or concrete facing is removed, showing the top of the slats a².

Fig. 5 shows a modified form of a section of the grooves on top formed by the slats L L', every other slat L', or each alternate slat L' being wider and also thicker in the projecting part, thus giving a taper to each slat L and L', which makes the grooves dovetail in form, and gives a clinch and firmer hold for the asphalt or concrete, either form of which we design to use for different grades of work.

10 Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A pavement or walk consisting of sections A, each comprising a series of slats of 15 different height, the lowest alternating with the highest, and a concrete surface, E, covering the upper ends of all the slats and entering the spaces between the highest slats, substantially as described.

2. In a combination-section for walks, the 20 series of tapered slats L and L', secured together, in combination with the preparation of asphalt or concrete K, prepared and formed as described and specified.

3. In a combination wood and asphalt and 25 concrete walk, the sections A A, having their ends cut square or skewing, in combination with the nails H, curbing-strips C C, and sills B B B, all secured together, as described and specified. 30

In testimony whereof we have hereunto set our hands in the presence of two subscribing witnesses.

LEONARD H. MILLER.

FREDERICK SCHILLINGER.

Witnesses:

JOSEPH N. CLOUSE,

WILLIAM H. TUCKER.