R. C. Phillips. Wooden Pavement

No. 121,544. Patented Dec. 5, 1871.

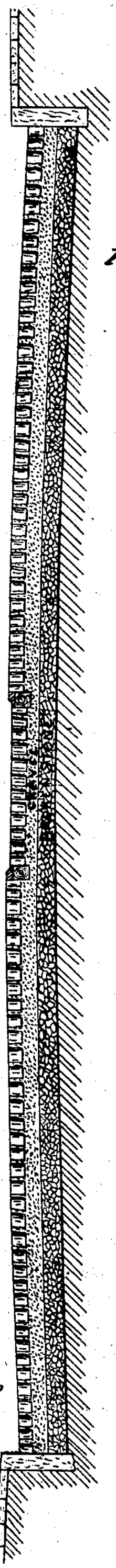

Fig 3.

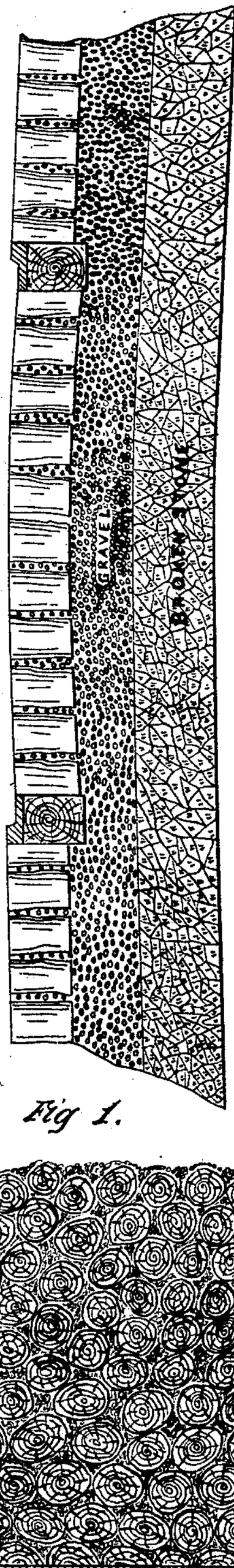

Fig 2.

Fig 1.

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121,544

UNITED STATES PATENT OFFICE.

ROBERT C. PHILLIPS, OF CINCINNATI, OHIO.

IMPROVEMENT IN WOODEN PAVEMENTS.

Specification forming part of Letters Patent No. 121,544, dated December 5, 1871.

To all whom it may concern:

Be it known that I, ROBERT C. PHILLIPS, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Street and other Highway Pavements, of which the following is a specification:

My improvement consists mainly in the use of wood of any suitable kind, in its natural or undress state—that is, in the form of round blocks or sections of small trees, or the branches of trees, from which the bark has been removed—cut as nearly at right angles to their length as may be, generally in lengths of about six inches, their diameters varying from three to twelve inches. These are placed upon end upon a bed or foundation composed of a stratum or layer of broken stone about eight inches deep, upon which a course of coarse sand or gravel of, say, six inches in depth, is spread, the whole properly rolled or rammed, so as to be solid, and presenting an even or uniform surface for the blocks to rest upon. Upon this the blocks are placed upon end, as nearly together as may be, in such manner as to form an even or uniform surface. They are then rolled or rammed heavily, so as to force them well down upon the bed. The spaces or openings between the blocks are then filled with good hard coarse gravel and sand, and again rolled or rammed, after which the whole is covered with gravel or sand to a depth of about one inch, when the travel may be turned on.

As stated above these blocks may be composed of any suitable wood, but locust is preferred. White oak, white cedar, (*arbor vitæ*,) chestnut, yellow pine, and others, afford good material.

The blocks may be used as they come from the forest, or they may be treated by any of the processes commonly applied to render woods hard and prevent decay, such as Burnetizing, creasoting, &c.

Thus the wooden portion of the pavements is composed of blocks cut from the tree, or branch of a tree, in its natural state, the bark only being removed; and, as above stated, may be of any size, from three inches upward. Blocks of large size may be split in half or other parts, where the situation may require a flat or straight side, as along a line of curb, a rail, or similar position.

Figure 1 is a plan of a portion of a street paved with my rough blocks, together with a portion of the curb. Fig. 2 is a vertical section, showing a portion of a street paved with these blocks, with a rail track, and the bed of broken stone with the covering of gravel, as usually put down; and Fig. 3 is a section of a street thus paved from curb to curb with a rail track in the center.

I thus produce a pavement which can be laid as easily and with less expense than cobble-stone pavement, and which has been found in practice to be more durable than the most approved wooden pavements hitherto in use.

I do not claim broadly the use of wooden blocks in the state in which they are cut from the tree or branches; nor yet do I claim the foundation of stone or gravel, and the filling of the spaces between the block with sand or gravel, separately considered; but

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

A wooden pavement, composed of blocks of any desired wood, cut from the trunks or branches of trees or saplings, of any desired length, in their natural form, the bark only being removed, placed with their fibers vertical, upon a bed of broken stone and gravel, or sand, or either of them, the spaces between the blocks being filled with gravel or sand, the whole made compact by ramming, rolling, or other proper method, as herein shown and described.

ROBERT C. PHILLIPS.

Witnesses:

ALBERT E. TRIPP,
HARRY BLACKBURN.

(110)