

UNITED STATES PATENT OFFICE.

JOSEPH HAY AMIES, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE AMIES ASPHALT COMPANY, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF SOUTH DAKOTA.

SHEET-WOOD PAVING.

934,030.

Specification of Letters Patent. Patented Sept. 14, 1909.

No Drawing.

Application filed March 30, 1909. Serial No. 486,802.

To all whom it may concern:

Be it known that I, JOSEPH HAY AMIES, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a certain new and useful Improvement in Sheet-Wood Paving, of which the following is a specification.

This invention relates to surfacing and re-surfacing pavements and the like, with sheet wooden materials.

Wood paving is desirable for the reason that it is noiseless, dustless, sanitary and of nice appearance. When made of hard wood block however it is very expensive, and otherwise unsatisfactory. The close grain of the wood block, used for paving, prevents the creosote, with which it is treated, from penetrating sufficiently into the block to delay internal rot. Not only so, but the creosote will not prevent water from penetrating the block because the creosote must be of a specific gravity that will admit of its association with rain or snow water and in this way the water soaks into the wood, and by alternate dampening and dryings, at frequent intervals, decay is hastened. The sheet wood paving of the invention possesses all the advantages and obviates all the objections of wood block pavements.

The invention is practiced as follows:—I use comminuted fibers, preferably such as old newspapers, and the like, and to the said material I may add paper composed largely of what the manufacturer calls "hard stock"; or I may add other long line fibers; or I may use with the above, peat or hay or straw or other like materials; or I may use these separately. When using waste paper I first reduce it to a pulp and mix therewith a sufficient amount of clean, sharp very fine sand, in order to separate the fibers, and to prevent the pulp from forming into hard, tangled lumps. When the pulp, thus mixed with the sand, is almost dry, the mass is agitated and the sand and fibers thus separated. When this is done the fibers will be practically straight, independent and untangled. In this condition the fibers are mixed with a due amount of calcium oxid;

or I may use calcium hydrate; the fibers are then treated with crude naphtha or other light oil or combinations thereof. The calcium oxid will take up all the remaining water in the pulp and in slacking will produce considerable heat. Advantage of this fact is taken to add any desirable asphaltic or other bituminous, resinous or carbonaceous elements, either separately or combinedly, and when these are well mixed I then add sufficient dampened sand or the like, which has been previously mixed with a desired amount of crushed calcium oxid to coat over the mass. This treatment will procure a granular and friable condition of composition. It may now be laid in sheet form at convenience upon a foundation such as is used to receive wood blocks. This sheet wood paving is calculated to supersede wood blocks on account of its superiority since it possesses all the advantages of the said wood block paving and also many others not possessed by it, among which may be considered its greatly extended durability and low cost, as compared with wood block paving.

What I claim is:—

The herein described method of making a paving which consists in taking comminuted fibers, and the like, the same having been mixed with sharp sand, then separating therefrom, the sand, by agitation, to secure untangled independent fibers, then coating the independent fibers with light oil, then mixing the same with calcium oxid or calcium hydrate and asphaltic or other bituminous, resinous, carbonaceous, and like elements, then mixing the mass with dampened sand and the like, and calcium oxid to secure a friable and granular condition of the resulting composition, and at convenience laying the same upon a suitable foundation, in the manner and for the purposes fully described.

In testimony whereof I have hereunto signed my name.

JOSEPH HAY AMIES.

Witnesses:

WILLIAM J. JACKSON,
S. F. KOCH.