

S. E. GROSS.
Pavement.

No. 198,606.

Patented Dec. 25, 1877.

Fig. 1.

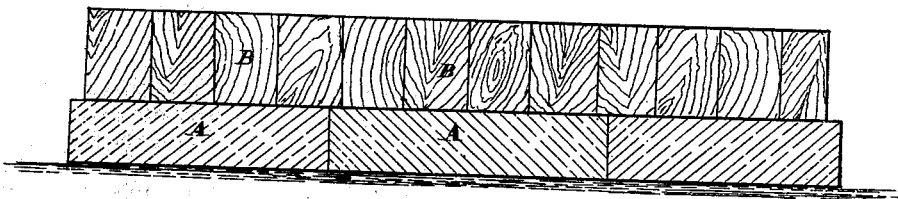
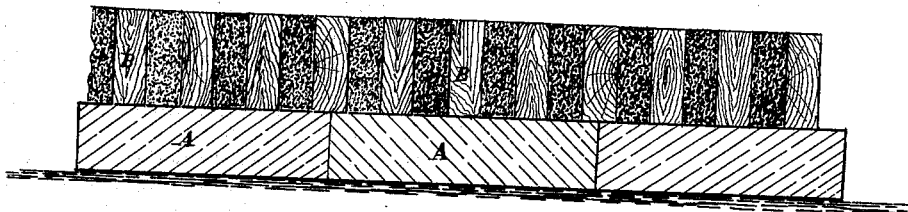


Fig. 2.



Witnesses

J. K. Conster
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UNITED STATES PATENT OFFICE.

SAMUEL E. GROSS, OF CHICAGO, ILLINOIS, ASSIGNOR TO EMILY GROSS, OF
SAME PLACE.

IMPROVEMENT IN PAVEMENTS.

Specification forming part of Letters Patent No. **198,606**, dated December 25, 1877; application filed
April 10, 1877.

To all whom it may concern:

Be it known that I, SAMUEL E. GROSS, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Pavements, which is fully set forth in the following specification and accompanying drawings.

Figure 1 is a longitudinal vertical section of one form of my pavement; and Fig. 2 is a longitudinal vertical section of a modification of the same.

Referring to the drawings, A designates in all the figures natural stone slabs or flag-stones, on which the wood, stone, brick, or composite blocks B are placed, as shown in Figs. 1 and 2.

The object of my invention is to furnish a durable and substantial pavement; and it consists in a foundation of natural stone slabs or flag-stones, which are laid on a properly-prepared foundation, and on which wood, stone, brick, or composite blocks are placed as a top layer or wearing-surface, as shown in Fig. 1, or as shown in Fig. 2, with interstices between the blocks, which may be filled with any suitable material or materials.

I prefer to cause the blocks B to lie snugly together in parallel rows across the street or roadway; but I do not limit myself to the form, size, and order of arrangement of the blocks B, as shown in Figs. 1 and 2.

The foundation-stone may be of any desirable thickness. I, however, prefer those between two and four inches; but the thickness required depends upon the quality of the stone, the character of the sub-bed, and the burden of travel. They may be sawed, cut, planed, or made smooth, or allowed to retain their natural surfaces, as may be most desirable.

In the construction of my improved pavement I prefer to lay the flag-stones in courses of about three feet in width, running either across or lengthwise to the street, and upon a sub-bed of sand. Under the flag-stones, and along where the courses break joints, I also place boards lengthwise, adapted to the desired curvature or inclination of the road-bed. The boards enable the flag-stones to settle uniformly, and, besides, they can be so varied in thickness as to enable courses of different thicknesses of stone to preserve an even sur-

face with each other. The flag-stones in each course should be as nearly of the same thickness as practicable. Upon the flag-stones I place asphaltum, sand, cinders, cement, or other suitable material in sufficient quantity to remedy any defects of the sub-bed or any inequalities on the surfaces of the flag-stones, and to obtain a more even and smooth bed for the blocks. The blocks forming the top layer should be oblong rectangles, preferably about four inches thick, six inches high, and ten inches long, set in parallel rows, with interstices of about one inch between each row, filled with sand, gravel, or other suitable material; or they may be round or split wood blocks—in this form preferably of cedar—set edgewise to the grain, and the interstices filled with any desirable material.

The blocks B may be dipped or impregnated in coal-tar, pitch, or liquid asphaltum prior to laying, so that they will be cemented together, and the joints made water-proof; or the liquid bitumen may be poured in the crevices after the blocks are laid.

By my method of constructing a pavement the natural stone slabs or flag-stones which form the foundation will afford a permanent, substantial, and dry base, on which the top layer or wearing-course is placed, and will last for ages, affording a foundation for new wearing-surfaces as the old ones decay or are worn out.

Another advantage in my construction is that the pavement can be readily repaired or removed in sections, to allow excavations for water and gas mains.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination of the natural plain stone slabs or flag-stones with the blocks B, the whole constructed substantially as described, and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 7th day of April, A. D. 1877.

SAMUEL E. GROSS.

Witnesses:

J. R. CUSTER,
WM. J. MANNING.