

F. F. BOUDRYE.

Pavements.

No. 149,828.

Patented April 21, 1874.

Fig. 1.



Fig. 2.



Fig. 3.

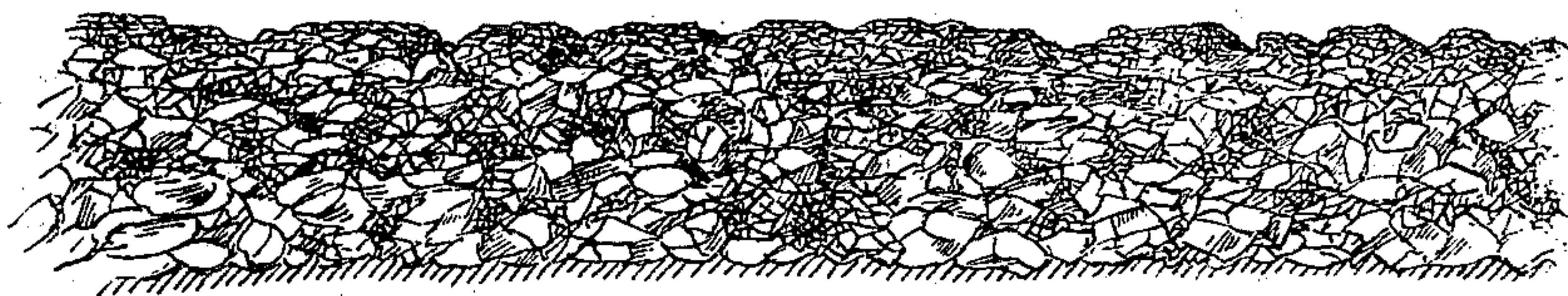
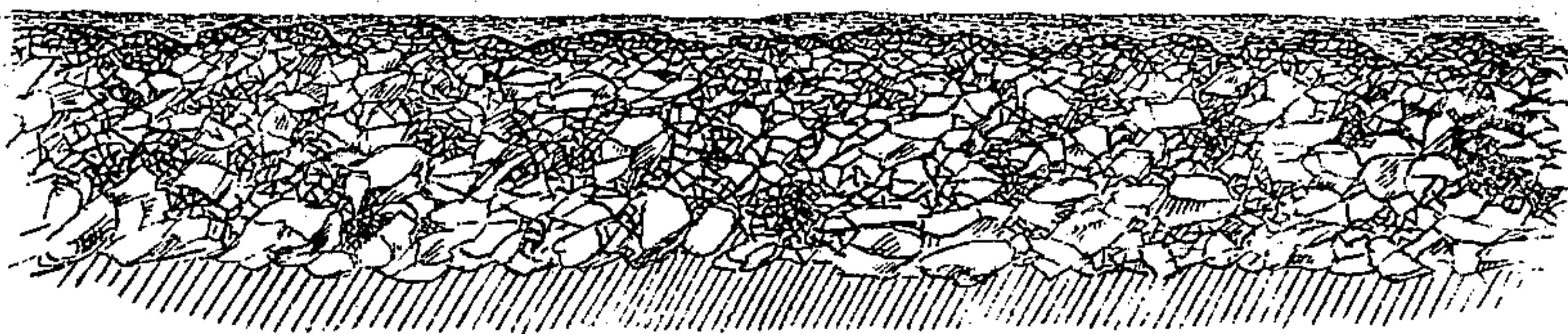


Fig. 4.



Witnesses :

John H. Pitt.
Henry de Veuve

Inventor :

Francis F. Boudrye
Per Atty Lionel Vaninas.

UNITED STATES PATENT OFFICE.

FRANCIS F. BOUDRYE, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO LUCIEN HERMANN, OF SAME PLACE.

IMPROVEMENT IN PAVEMENTS.

Specification forming part of Letters Patent No. **149,828**, dated April 21, 1874; application filed December 8, 1873.

To all whom it may concern:

Be it known that I, FRANCIS F. BOUDRYE, of the city and county of San Francisco, State of California, have invented a certain Composition for Pavements, of which the following is a specification:

My invention relates to the formation of a pavement by spreading on a street or sidewalk a layer of pieces of partially-calcined hydraulic-cement rock, consisting of argillaceous limestone containing silicate of alumina; then watering and ramming the same down, and leveling the whole with a finishing layer of small stones, gravel, or sand; the object of my invention being to form a solid and yet elastic roadway or pavement by the partial calcining and subsequent treatment of this hydraulic-cement rock.

Figure 1 is a section of a street with layer of hydraulic-cement rock, partially calcined, loosely laid down to the required depth. Fig. 2 is a section of the same, as represented in Fig. 1, after having been well drenched with water. Fig. 3 is a section of a street paved with this calcined rock after having been wetted and rammed down. Fig. 4 is a section of part of a completed pavement prepared with this partially-calcined rock after having received its finishing layer of small stones, sand, or gravel.

In order to prepare this pavement, ordinary hydraulic-cement rock is roasted till it has undergone about four-fifths of the roasting usually

adopted in the manufacture of cement in general. Pieces of such rock are then taken and laid evenly on a street or pavement to a depth of six or seven inches, and then sprinkled with water, so as to bind the partly-roasted lumps and pieces of hydraulic-cement rock together. The road or pavement thus formed has ruts, cracks, and inequalities in its composition, and in order to remedy this and complete its solidification a street-rammer is employed to ram the whole down together, and form as nearly as possible an even surface. On top of the road thus formed small stones are carefully thrown, so as to fill up all such inequalities, and, finally, fine or coarse sand is thrown on the whole, so as to complete the pavement.

This hydraulic-cement rock, partly roasted, may also be placed in forms and blocks made, which may be placed together and sprinkled in the same manner, so as to unite the whole. In the first case a macadamized kind of pavement or roadway is formed, and in the latter a block pavement.

I claim as my invention—

A pavement composed of hydraulic-cement rock, treated in the manner described, with top layer of small stones and sand, substantially as and for the purposes specified.

FRANCIS F. BOUDRYE.

Witnesses:

ALFRED C. CRANE,
LIONEL VARICAS.