(No Model.)

C. BEUTTEL.

SELF SUPPORTING COMBINATION PAVEMENT.

No. 347,557. Patented Aug. 17, 1886.

Fig. 1.

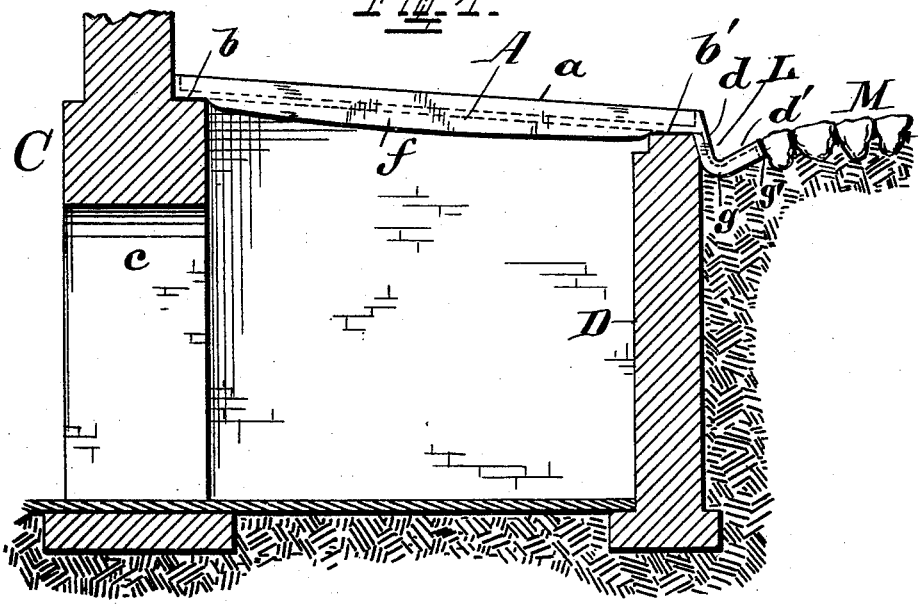


Fig. 2.

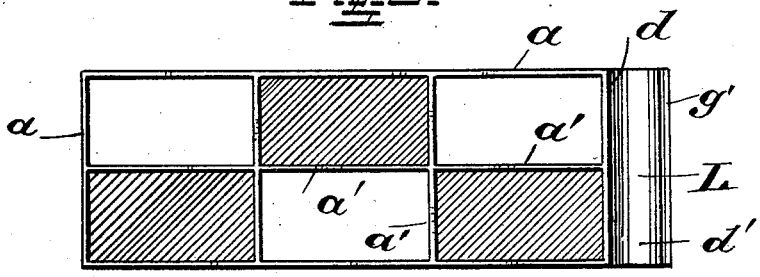


Fig. 3.

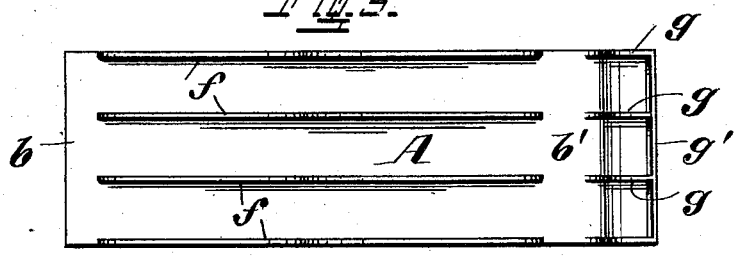
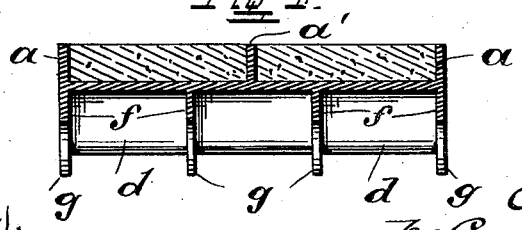


Fig. 4.



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UNITED STATES PATENT OFFICE.

CARL BEUTTEL, OF CINCINNATI, OHIO.

SELF-SUPPORTING COMBINATION-PAVEMENT.

SPECIFICATION forming part of Letters Patent No. 347,557, dated August 17, 1886.

Application filed March 25, 1886. Serial No. 196,590. (No model.)

To all whom it may concern:

Be it known that I, CARL BEUTTEL, a citizen of the United States, residing at Cincinnati, Hamilton county, State of Ohio, have invented a new and useful Self-Supporting Combination Pavement, of which the following is a specification.

My invention relates to such pavements which not only serve as such, but also as a cover or ceiling for parts of the cellars where they extend out under the pavement, as is very often the case.

The object of my invention is to provide a cheap, light, and durable pavement so constructed as to allow of the employment of a large variety of ornamental patterns for the upper or walking surface. I attain these objects by the construction described in the following specification and illustrated in the accompanying drawings, in which—

Figure 1 is a side view of my pavement in position, showing the supporting-walls in section. Fig. 2 is a top view of a section of the pavement. Fig. 3 is an under side view of the same. Fig. 4 shows at an enlarged scale a cross-section of the pavement, looking toward the gutter.

A is a rectangular flat casting, having an upturned flange, *a*, of even height all round. The space between said flange may be divided by any number of cross-ribs *a'*, suitably arranged so as to present a symmetrical appearance when a large number of the sections are laid side by side. On the under side of said casting, at each end of it, are two flat bearing-surfaces, *b b'*, by which the section rests on its supporting-walls, of which C is the main wall of the building, and D the outer wall, which does not rise above the surface of the street.

Portion *c* of wall C represents the cellar-wall, and, being thicker than the wall above the pavement, forms an offset, on which the upper or higher end of the latter rests. Those flat bearing-surfaces *b b'* are so arranged that they rest horizontally or level on their supports, while the section itself is slightly inclining toward the gutter. Between those bearing or resting surfaces any suitable number of strengthening and supporting ribs, *f*, may traverse the under side of the casting longitudinally.

To the outer and lower end of the pavement the gutter L is attached, and may either be an integral part thereof or bolted or otherwise secured thereto. The iron next extends downwardly to sufficient depth, as shown at *d*, and then is bent out and upwardly, as shown at *d'*, so as to shape the gutter, to the outer edge of which the pavement M of the street joins. Strengthening-ribs *g* are also provided below, one of which, *g'*, runs crosswise at the extreme edge of the gutter, so as to provide an abutment for the paving-stones of the street, to prevent their slipping under the gutter on opening their joints. The divisions on the upper surface between the ribs *a' a'* are filled in to a level with said ribs and flanges *a* with cement or any other suitable well-wearing substance, as shown in Figs. 2 and 4.

A pavement of this sort presents an elegant appearance, and is not very costly. It is also easily kept in repair, as any section or division may be repaired by itself. The different arrangement and number of the divisional ribs *a' a'* admit the use of many different designs and patterns, which variety may be still increased by filling the adjoining divisions with differently-colored cement, as shown in Fig. 2, where the lined divisions are intended to indicate different colors.

I am aware that similar constructions have been used for similar purposes, and therefore I do not claim the combination of iron and cement, broadly; but

What I do claim, and want to secure by Letters Patent, is as follows:

1. In a combined pavement-section and cellar-cover supported at its two extreme ends only, the combination, as described, of cast-iron body A, having ornamental ribs *a'*, being filled in with cement or similar material, and marginal flange *a*, to hold said filling material and keep it from breaking out, the non-supported portions of the frame being provided with strengthening-ribs *f* below, and having bearing-surfaces *b b'*, so constructed as to be horizontal and lie level on their supports, one being so much lower as to give the pavement-section the proper inclination one way toward the gutter.

2. In a pavement-section, the combination of a cast-iron body, A, having a marginal

flange, a, ornamental ribs a' above, strengthening-ribs f and bearing-surfaces b b' below, and filled in on top or covered with a well-wearing and hardening material, with a gutter-section, L d d', at its lower or street end, having also strengthening-ribs g g', the latter, g', also serving as an abutment for the street-pavement.

In testimony of which invention I hereunto set my hand.

CARL BEUTTEL.

Witnesses:
CARL SPENGEL,
GEO. W. HARDING.