Jan. 14, 1941. A. HENDERSON 2,228,763

SIDEWALK CONSTRUCTION

Filed April 4, 1939

Fig. 1.

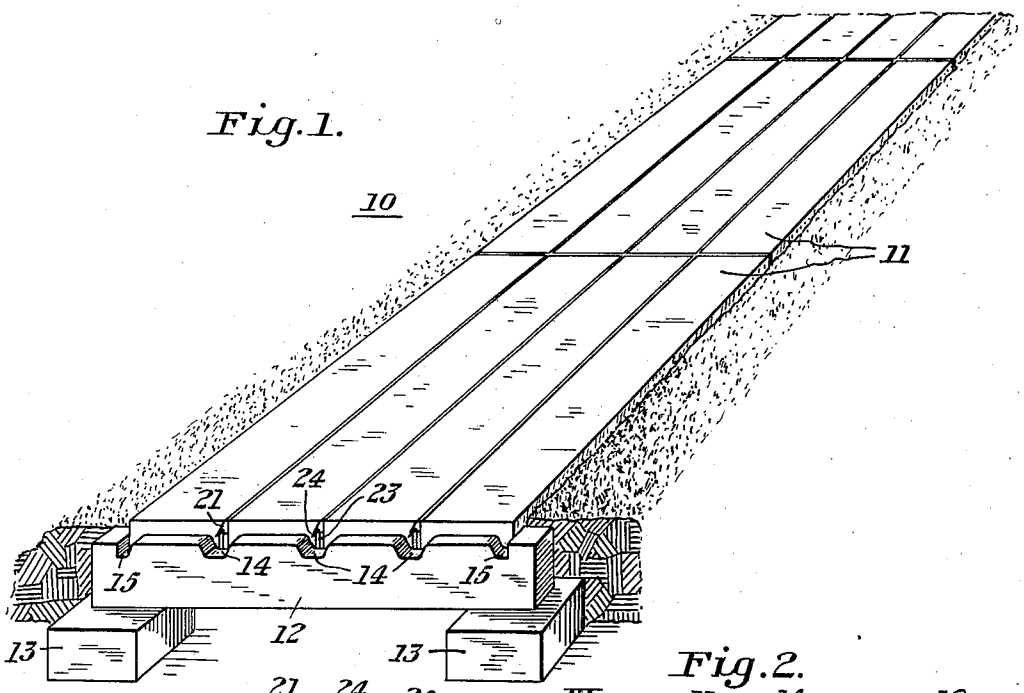


Fig. 2.

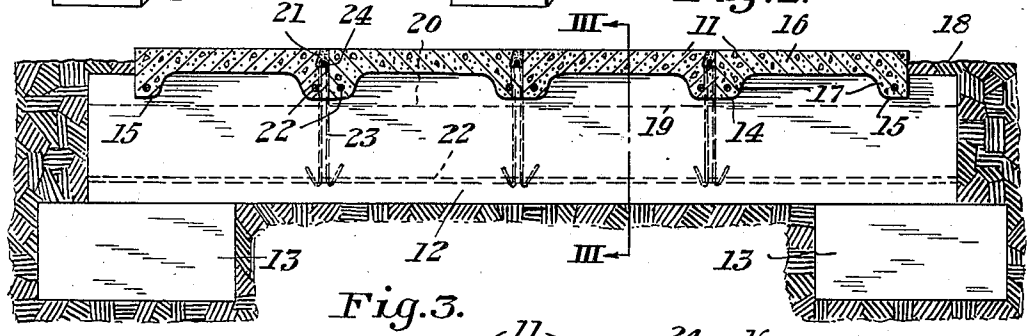


Fig. 3.

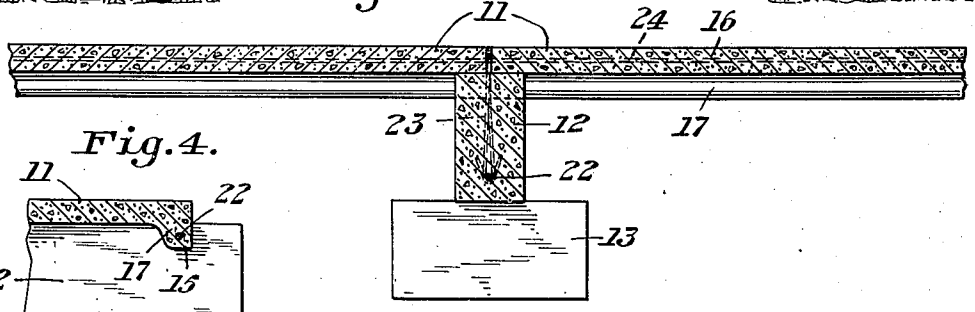
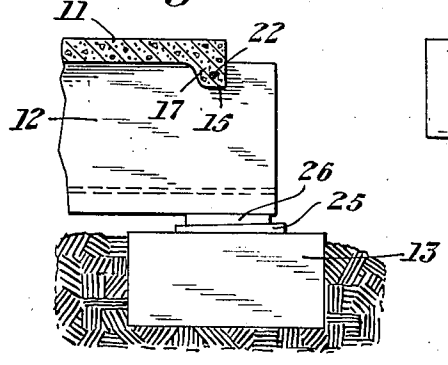


Fig. 4.



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SIDEWALK CONSTRUCTION

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Application April 4, 1939, Serial No. 265,872

1 Claim. (Cl. 94—2)

This invention relates to a sidewalk construction in particular, although the principles of the invention may be utilized in other types of structure such as floors, pavements, etc.

The principal object of the invention is to provide a sidewalk construction which is relatively inexpensive. Further objects are to provide a sidewalk which is weatherproof, wearproof and practically indestructible. A further object is to provide a construction which is capable of 100% salvaging in case of a change of location.

The preferred embodiment of the invention comprises precast sills disposed in spaced relation and supported on any suitable type of foundation which may conveniently be provided by laying precast blocks. The upper edges of the sills are notched and support precast surface slabs of channel shape in section, the flanges of the slabs fitting into the notches in the sills, thereby preventing displacement of the slabs relative to the sills. A complete understanding of the invention may be had by considering the following detailed description thereof in connection with the accompanying drawing illustrating a preferred embodiment. In the drawing

Fig. 1 is a perspective view of a section of sidewalk in accordance with the invention;

Fig. 2 is a sectional view taken along a vertical transverse plane;

Fig. 3 is a sectional view taken substantially along the plane of line III—III of Fig. 2; and

Fig. 4 is a partial section similar to Fig. 2 illustrating means for leveling the walk in case of settling of any of the foundations.

Referring now in detail to the drawing, the sidewalk of my invention indicated generally at 10 comprises precast surface slabs 11 resting on spaced precast sills 12. The sills 12 are supported on foundations 13 spaced along the length of the walk.

The foundations 13 may be of any suitable character but, for economy, I prefer to employ precast blocks. Such blocks may be cheaply made and transported to the point of installation, requiring merely a suitable excavation to receive them.

The sills 12 extend between adjacent foundations 13 and their upper edges are substantially plane but are provided with notches 14 and 15 spaced along the length thereof.

The slabs 11 provide the tread surface of the walk and extend between adjacent sills 12. The slabs, sills and foundations may be of any suitable dimensions and the width of the walk may be determined by the number of slabs 11 laid side by side in each section of the length. The length of the slabs 11, obviously, determines the spacing between adjacent sills 12.

The slabs 11 are of channel shape in section having web portions 16 and flange portions 17. The slabs are laid with their flange portions below and fitting closely into the notches 14 and 15 in the upper edges of the sills 12, and with their webs engaging said edges. In order that the tread surface of the slabs 11 be substantially flush with the ground level indicated at 18, it is desirable to excavate the entire area covered by the walk to about the level indicated by the line 19. Thus, when the walk is completed, spaces 20 are provided below the channels adapted to serve as temporary storage reservoirs for drainage from the surface of the walk, as in the case of a rain-storm or the like, thereby preventing accumulation of water on the walk or the ground adjacent thereto.

One edge of the slabs 11 is preferably rabbeted as at 21. Both the slabs and the sills have reinforcements embedded therein as indicated at 22. In addition, the sills 12 are provided with ties 23 in the form of a loop extending upwardly through substantially the mid-points of the notches 14, the ends of the tie wires being bent around the sill reinforcement. By reason of their location centrally of the slabs, the exposed portions of the ties 23 lie in the joint between abutting ends of the slabs in adjacent sections of the wall. Tie rods 24 may thus be inserted through the upper ends of the ties 23 after the slabs have been laid, to prevent the slabs from being raised from the sills. After insertion of the tie rods which may be long enough to extend only a few inches on either side of the joint, the grooves provided by the rabbeted edges of the slabs 21 may be filled with grout.

If settling of some of the foundations 13 should occur after the walk has been laid, the tread surface may easily be leveled by driving wedge members 25 and 26 between the foundations and the ends of the sills resting thereon.

It will be apparent from the foregoing description that the invention provides a sidewalk construction having numerous advantages over anything of the kind known heretofore. In the first place, the construction is preferably composed exclusively of precast members which can be manufactured at relatively low cost and assembled at the point of installation by unskilled labor. No expensive finishing operations are involved. As previously stated, the shape of the slabs in section being similar to that of a chan-

nel, provides unoccupied spaces therebelow for temporary storage of drainage until it can seep through the ground. The notches in the upper surfaces of the supporting sills prevent lateral displacement of the tread slabs. The walk may be installed quickly as the possibility of leveling makes it unnecessary that the foundations be placed with any high degree of accuracy.

While I have shown the supporting sills extending transversely of the walk and the tread slabs longitudinally thereof, it will be understood that the reverse relation may also be employed, by disposing the sills longitudinally and the slabs transversely.

It will be understood that changes such as the foregoing may be made in the preferred embodiment of the invention herein disclosed without departing from the spirit thereof or the scope of the appended claim.

I claim:

In a sidewalk or like construction, foundations arranged in spaced pairs, a beam extending between each pair of foundations, the beams having a substantially plane upper surface with transverse notches spaced therealong, and tread slabs of channel section having a web and flanges, extending between adjacent beams, the flanges of the slabs fitting closely in said notches and the webs of the slabs bearing on said upper, substantially plane surface of the beams between adjacent notches.

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