(No Model.)

J. C. HOYT.

EDGING AND JOINT PLATE FOR CONCRETE PAVEMENTS.

No. 368,398. Patented Aug. 16, 1887.

Fig. 1.

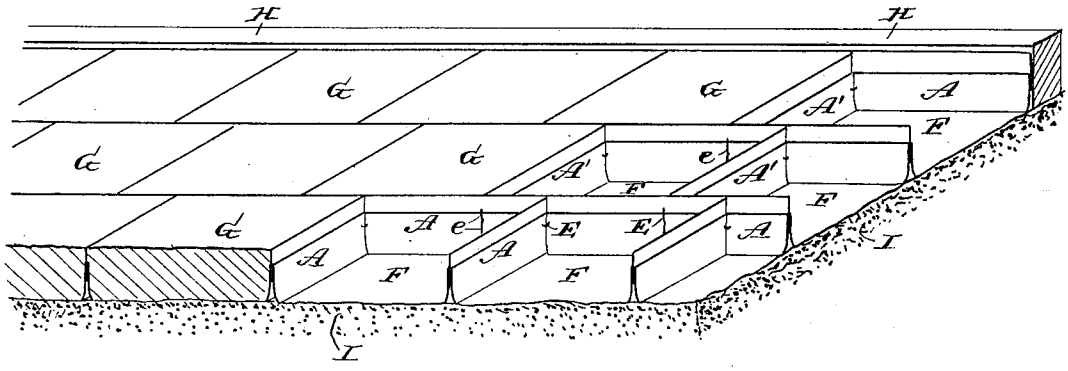

Fig. 2.

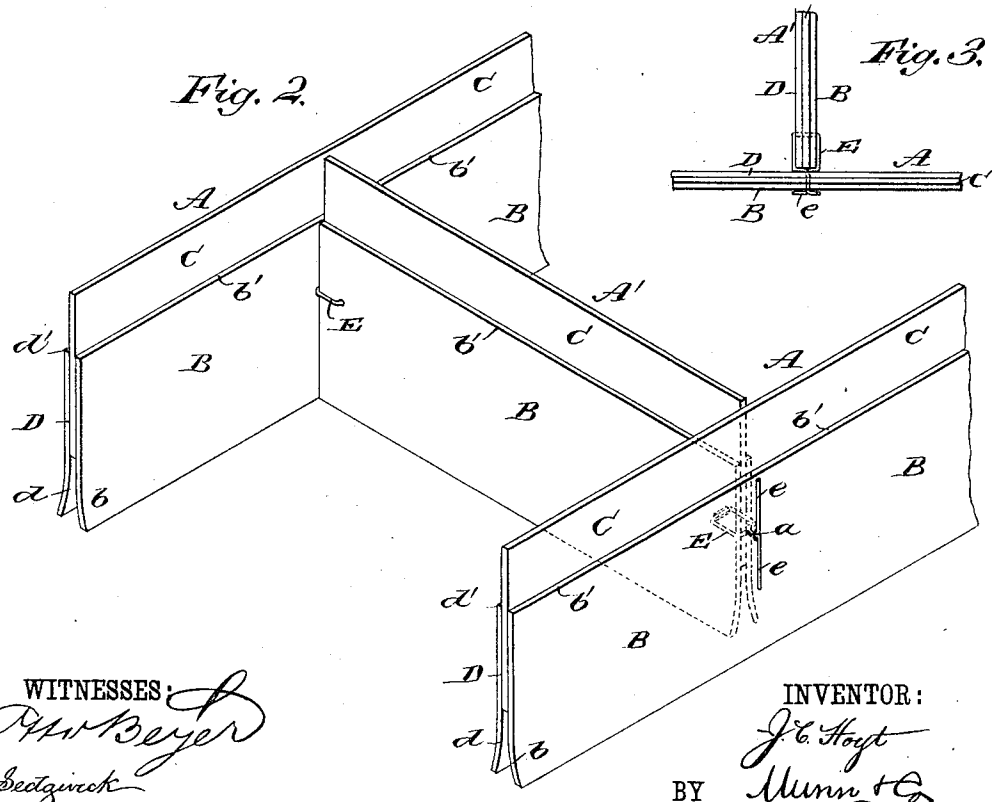

Fig. 3.

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JOHN C. HOYT, OF SEDALIA, MISSOURI.

EDGING AND JOINT PLATE FOR CONCRETE PAVEMENTS.

SPECIFICATION forming part of Letters Patent No. 368,398, dated August 16, 1887.

Application filed December 3, 1886. Serial No. 220,578. (No model.)

To all whom it may concern:

Be it known that I, JOHN C. HOYT, of Sedalia, in the county of Pettis and State of Missouri, have invented new and Improved Edging and Joint Plates for Concrete Pavements, of which the following is a full, clear, and exact description.

My invention relates to concrete pavements, and particularly to edging and joint plates of simple inexpensive construction, which, when intersected, form molds, into which concrete or cement is placed and hardens.

The invention includes the special construction of the joint-plates and their fastenings, and also the combination of the plates and concrete to form an easily-laid, cheap, and substantial walk adapted alike for private grounds or thoroughfares, all as hereinafter fully described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a part of a concrete-pavement walk in course of laying by the aid of my improved edging and joint plates. Fig. 2 is a perspective view, in larger size, of parts of two longitudinally-ranging edging-plates and a cross-plate connected thereto; and Fig. 3 is a plan view of parts of two of the edging-plates at the joint between them.

The edging and joint plates A are made of three pieces or strips, B C D, of pasteboard, which are glued or cemented or otherwise fastened together, so that the center strip, C, projects some little distance above the two outer strips, B D, and these outer strips project below the bottom edge of the center strip at *b d*, as clearly shown in Fig. 2 of the drawings.

In laying a cement pavement formed of square or rectangular blocks, as shown in Fig. 1 of the drawings, the longitudinally-ranging edging and joint plates A will be spaced apart a distance equaling the desired width of the concrete blocks, and the transversely-ranging joint-plates, which, for convenience of description, I designate by the letter A′, will be spaced apart between the plates A a distance equaling the desired length of the concrete blocks to be formed.

At the joints between the ends of the short plates A′ and the long plates A, I connect the plates by means of wire clips E, which are formed by passing a piece of wire through the plates A′ near its opposite ends and about at the vertical center of the overlapped portions of the parts B C D of the joint-plates, and the end parts of the clip-wires are then bent against the opposite faces of the plates, and are then twisted together at the ends of the plates, and after the ends of the wires are passed through holes *a* in the longitudinally-ranging joint-plates A said ends *e e* are bent over onto the outer faces of the plates A, as shown in Figs. 2 and 3 of the drawings. The clips E thus make substantial connections to hold the edging and joint plates together to form a skeleton frame or structure, providing spaces or molds F between them, and into which cement or concrete G will be poured or placed to form concrete blocks or flags, all as represented in Fig. 1 of the drawings, which shows a part of a walk, including the stone or wood border H along one edge of it.

In using these edging and joint plates a very shallow sand or cinder bed or foundation, I, is required—say not exceeding two inches in thickness—to give firm support to the hardened cement blocks G on soft or spongy soils. It will be noticed that the lower parts, *b d*, of the outer joint-plates, B D, may be diverged more or less from the lower edges of the center plates, C, and whereby a tapering form is given to the lower parts of the cement blocks, allowing the hardened blocks to be easily taken up and relaid when required. This divergence of the parts *b d* of the joint-plates may be accomplished by placing wedge-shaped blocks of wood or other suitable substance between the parts *b d*, or by forcing the joint-plates more or less into the sand or cinder bed I of the pavement as the plates are laid edgewise thereon. This divergence of the parts *b d* of the plates causes the hardened cement blocks to lock over the lower parts of the joint-plates, and, as the cement is filled into the molds F to the tops of the center piece, C, of the plates, the cement also locks over the top edges, *b′ d′*, of the parts B D of the plates; hence the joint-plates cannot rise between the cement blocks.

The paper-board of which the joint-plates are made absorbs water or moisture from the

liquid cement or the concrete filled into the molds; hence a trowel may be very easily and quickly run along the joints of the blocks to give them an edge-finish at the surface of the walk or pavement without the inconvenience and delays attending the application of water to the joints in finishing them, and this absorption and holding of the moisture of the cement of the joint-plates is also beneficial to the walk while the concrete blocks are drying out or hardening.

It is obvious that the edging and joint plates may be connected to each other to form concrete-block-pavement molds of any desired shape, such, for instance, as a diamond shape or curved or circular forms with intervening triangular or other shaped spaces, or in angular forms of any preferred design, and always with like good results, in producing with the cement or concrete a very cheap, easily-laid, and most satisfactory block pavement, especially adapted for walks in private grounds or for public highways.

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

1. Edging and joint plates for concrete pavements, made with two lower lips or parts, and said lips being adapted for divergence and to be overlocked by concrete filled in molds formed by the plates, substantially as herein set forth.

2. Edging and joint plates for concrete pavements, made with shoulders, as *b' d'*, below their upper edges, over which shoulders the concrete can lock, while the upper face of the concrete finishes about flush with tops of the joint-plates, substantially as herein set forth.

3. Edging and joint plates for concrete pavements, made with two lower lips or parts, and said plates provided also with shoulders below their top edges, over which lips and on which shoulders the concrete overlocks, substantially as herein set forth.

4. Edging and joint plates for concrete pavements, made of three strips, B C D, of pasteboard or other flexible material, and arranged to provide lower divergent lips, *b d*, and upper shoulders, *b' d'*, substantially as herein set forth.

5. The combination, with intersecting edging and joint plates of concrete pavements, of clips E, formed of wires passed through one plate and twisted at the edge thereof, and then passed through the other plate and bent or clinched at the back thereof, substantially as herein set forth.

6. A concrete pavement formed of intersecting edges and joint-plates A A', having divergent lower parts, *b d*, and upper shoulders, *b' d'*, and concrete filled into molds formed by the intersecting joint-plates, substantially as herein set forth.

7. A concrete pavement formed of a bed, I, and connected edging and joint plates A A', having divergent bases *b d* resting on or in the bed I, and also having shoulders *b' d'* and concrete filled into molds formed by the intersecting plates A A' and the bed I, substantially as herein set forth.

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Witnesses:
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