

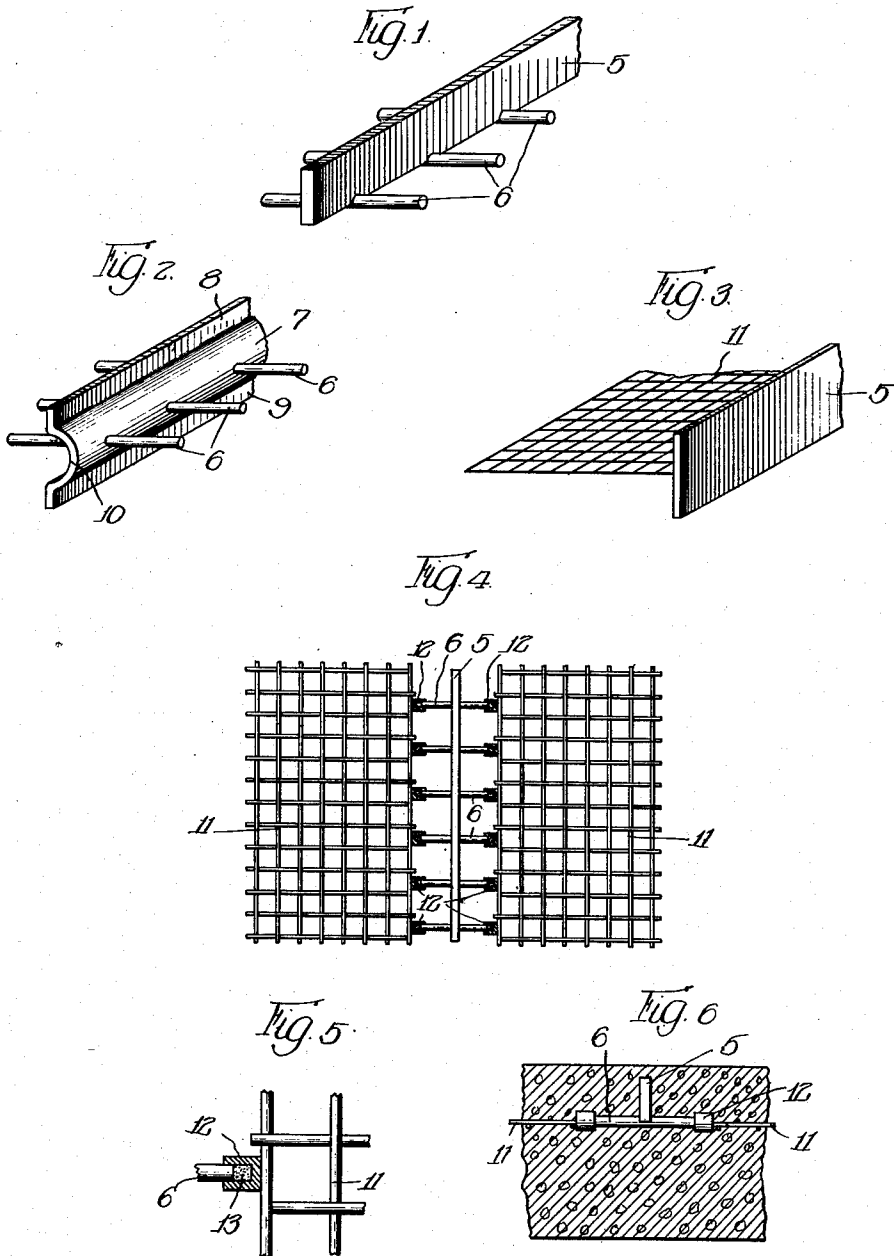
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A. C. FISCHER

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REINFORCED CONCRETE ROAD CONSTRUCTION

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Inventor:

Albert C. Fischer

By *Richard H. Knight*
att'y

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REENFORCED CONCRETE ROAD
CONSTRUCTION

Albert C. Fischer, Chicago, Ill., assignor to The
Philip Carey Manufacturing Company, a cor-
poration of Ohio

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REISSUED

10 Claims. (Cl. 94-18)

My invention relates in general to concrete or the like road construction, and has particular reference to the reinforcement of the concrete in such a construction, as well as the provision for contraction joints.

The primary object of my invention is to combine the reinforcing structure and the contraction joint structure in such a way that one will cooperate with the other to not only facilitate building of the roadway, but also to realize the best results from materials used.

In the accompanying drawing I have illustrated the salient features of the invention, and in which Figure 1 is a perspective view showing a combined arrangement between a separating strip for contraction purposes and the reinforcing rods.

Figure 2 is a similar view showing a modified form of separating strip.

Figure 3 is a perspective view of a portion of the reinforcing grill combined with a separating strip.

Figure 4 is a plan view showing the separating strip combined with the reinforcing grill and in combination with reinforcing rods.

Figure 5 is a detailed view in plan showing the connection between the grill and the supports for the reinforcing rods, and

Figure 6 is a detailed view in vertical section showing the separating strip and the grill as incorporated in the concrete structure of the roadway.

Referring now to the drawing in detail, I provide a separating strip 5, preferably of metal, which is vertically supported by and welded to the reinforcing bars 6. Or else in lieu of the strip 5 I may employ a tongue and groove structure 7, which is in the form of a strip, having upper and lower flat portions 8 and 9, yoked together by an intermediate tongue and groove 10. In this structure the reinforcing rod 6 would project thru the intermediate tongue and groove. Either of these forms may be used in combination with the grill work 11, by providing metal cup-like sockets 12 and welding the same to the grill so that the ends of the reinforcing rods 6 are received therein as a means of supporting and connecting the separating strip and the rods to the grill. To compensate for expansion and contraction the rods 6 are inserted only a limited extent in the sockets 12, so that the space remaining may be filled with yieldable, compressible material 13. With this construction the grill work 11 on opposite sides of the separating strip may function to its intended capacity, and the separating strip 5 will likewise operate to make a line of

weakness, so that upon expansion and contraction of the concrete any cracks tending to occur will be in alignment with the separating strip.

When the tongue and groove separating strip is used the tongue and groove structure of the same will interlock the concrete together on opposite sides of the strip, so that when the cracks occur in alignment with the separating strip the tongue and groove will prevent the divided sections thus formed from riding one upon the other.

As a modified form of the same principle the separating strip 5 may be used without the reinforcing rods 6, in which event it would be welded directly to the grill work 11, as shown in Figure 3.

I claim:

1. In a concrete road, sections of grill work embedded horizontally in the concrete and said grill sections being yoked together by reinforcing bars, and a separating strip having its bottom edge resting on said bars.

2. In a concrete road, sections of grill work embedded horizontally in the concrete and said grill sections being yoked together by reinforcing bars, and a separating strip vertically supported by said bars entirely above the grill work.

3. In a concrete road, sections of grill work embedded horizontally in the concrete, sockets projecting from the confronting ends of the grill work sections, reinforcing bars inserted in said sockets and bridging the space between the grill sections, and a separating strip supported by said bars substantially intermediate the ends thereof.

4. In a concrete road, sections of grill work embedded horizontally in the concrete, sockets projecting from the confronting ends of the grill work sections, reinforcing bars inserted in said sockets and bridging the space between the grill sections, and a separating strip supported by said bars substantially intermediate the ends thereof, the inserted ends of said bars terminating short of the attached ends of the sockets and leaving spaces in the sockets in which the rods may slide upon expansion and contraction of the concrete.

5. In a concrete road, sections of grill work embedded horizontally in the concrete, sockets projecting from the confronting ends of the grill work sections, reinforcing bars inserted in said sockets and bridging the space between the grill sections, and a separating strip supported by said bars substantially intermediate the ends thereof, the inserted ends of said bars terminating short of the attached ends of the sockets and leaving spaces in the sockets, said spaces being filled with compressible material, and the rods being adapt-

ed to slide in the sockets against said compressible material substantially as/and for the purpose described.

6. In a concrete road, sections of grill work 5 embedded horizontally in the concrete, rods attached to the grill sections, and a joint-defining strip secured in place entirely above said rods.

7. A concrete surfacing structure having reinforcement sections embedded therein, and a 10 joint defining strip extending over said reinforcement, the reinforcement including rods for holding the strip in place entirely above said reinforcement.

8. A concrete surfacing structure reinforcement 15 comprising grill sections, and a joint defining strip extending thereover, said reinforcement

including rods for holding the strip in place entirely above said reinforcement.

9. A concrete surfacing structure having joint means and reinforcement grill sections embedded 5 therein, said reinforcement including rods attached to said grill sections and engaging said joint means for holding same in position entirely above said reinforcement.

10. In a concrete road, grill sections embedded 10 horizontally in the concrete, reinforcing bars interposed between the grill sections, a separating strip supported by the grill sections, and a compression and expansion means associated with the reinforcing bars. 15

ALBERT C. FISCHER.