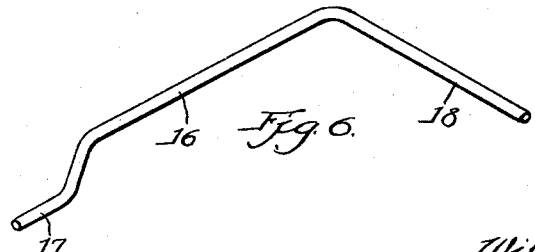
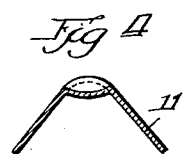
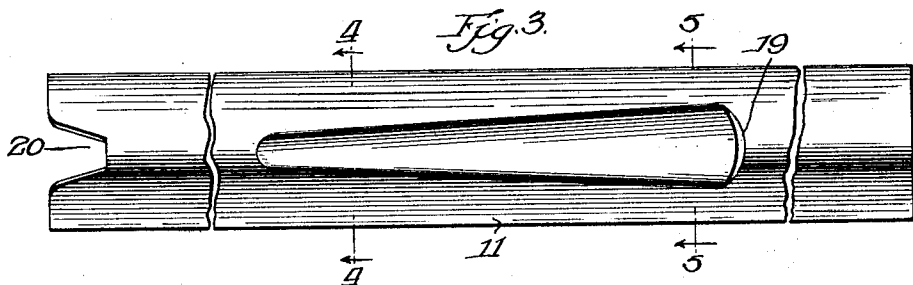
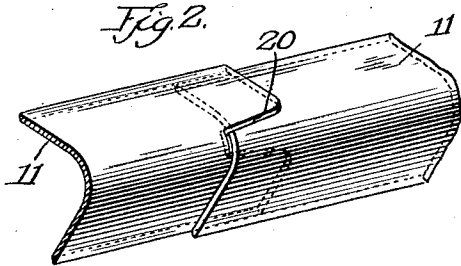
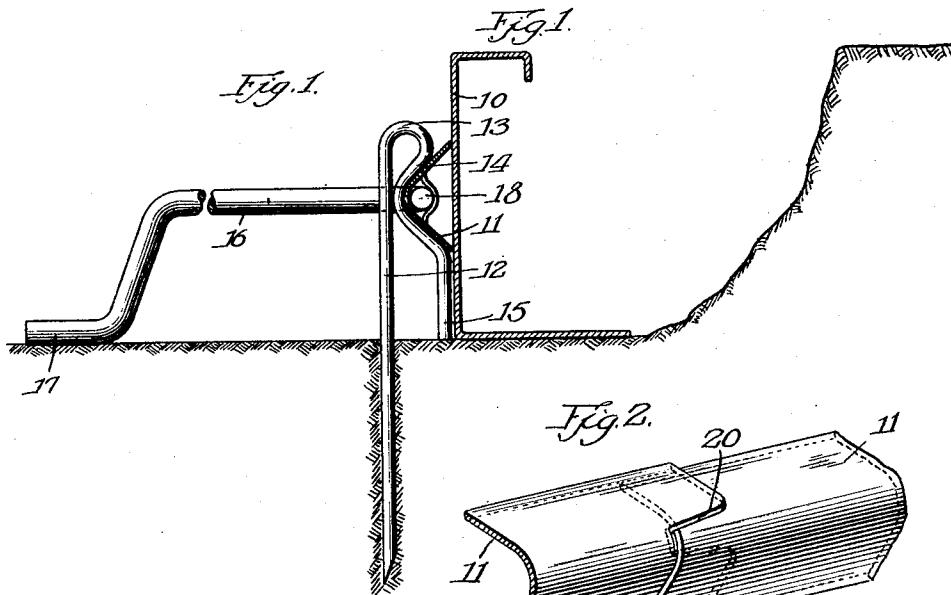


April 25, 1933.

W. E. WHITE
ROAD STRIP AND SUPPORT

1,905,023

Filed May 26, 1930



Witness
R. B. Davison.

Inventor:
William E. White.
By: Murray & Murray
Attys

UNITED STATES PATENT OFFICE

WILLIAM E. WHITE, OF CHICAGO, ILLINOIS, ASSIGNOR TO KALMAN STEEL COMPANY,
OF CHICAGO, ILLINOIS, A CORPORATION OF DELAWARE

ROAD STRIP AND SUPPORT

Application filed May 26, 1930. Serial No. 455,898.

My invention relates to roadways and particularly to novel means for positioning and holding a strip and dowel bar.

bar bent to be accommodated in the assembly.

In the drawing, I have illustrated the usual side channel 10 which serves to limit the lateral extent of the slab to be formed and which carries the concrete mixer.

The groove-forming element is, in this instance, a member 11 of generally V-shape in cross section, although it may be of other channel cross section. The problem is to provide means for supporting the strip in the proper relation and for admitting the dowel bar after the strip has been placed. According to my solution of the problem, the support of the strip is accomplished by providing a holding member consisting of a length of wire having a straight vertical portion or stake 12, a head 13 and a rebent portion 14 forming a suitably shaped recess to receive the V-shaped strip and terminating in a foot 15 that acts as a gauge for indicating the extent to which the stake shall be driven into the soil. In practice, the strip is laid alongside of the marginal member 10, the stakes driven in a position 90 degrees removed from that shown in Fig. 1; that is with the recess arranged at right angles to that shown, the strip is then raised and the stake rotated 90 degrees into the holding position shown in Fig. 1. Preferably the stake will be driven slightly closer to the strip than the final position indicates, the stake being necessarily deflected outwardly somewhat, as it is rotated in order to firmly hold the strip in position. The foot 15 not only serves as a gauge but also as an additional support for the weight of the concrete resting on the strip.

It frequently happens that roadways are constructed in sections, that is, one strip will be laid in contemplation of the laying of an adjacent strip at a later period. This occurs in cases where it is contemplated that the road will ultimately be widened, and also in cases where it is impossible to close the road, one half of the road being left open while the other half is being paved. It is necessary in such cases to provide a groove-forming element in the exposed edge of the concrete slab so that when the last section is laid, a tongue-and-groove member is formed for interlocking purposes and in order to permit expansion.

It is necessary also to provide means for projecting dowel bars between the adjacent slabs, this being accomplished by bending the dowel bar at right angles and fitting the bent end of the bar in the channel. Before the adjacent slab is poured, the bar is bent outward to extend across the joint. Much difficulty has been experienced in providing an opening in the channel or V-shaped groove-forming element to receive the bar, without providing so large an opening that much of the concrete will flow out of the opening.

My invention relates to a simplified construction in which the objections to the known practice are overcome.

The invention will be more clearly understood by reference to the accompanying drawing, in which

Fig. 1 is a side elevation partly in section of an assembly such as contemplated;

Fig. 2 is a perspective view of the manner of joining the parts of two V-shaped strips;

Fig. 3 is a side elevation of a strip;

Figs. 4 and 5 are sectional views on the lines 4-4 and 5-5 of Fig. 3; and

Fig. 6 is a perspective view of the dowel

bar, best shown in Figs. 1 and 6, consists of a straight portion 16, a foot 17 adapted to rest on the soil, and a right angularly bent portion 18 adapted to be fitted in the angle of the V-strip and ultimately to be straightened out to lie across the joint between two concrete slabs.

The opening in the nose of the V-strip is of peculiar shape in order to enable the easy insertion of the bent end 18 of the bar. The opening is formed by providing a slit 19 across the nose of the V and then progressively deflecting the metal away from the slit laterally to a lessened degree. At the point of the slit the opening will be substantially of the size of the bar as best shown in Fig. 1. The deflection is progressively lessened as shown by the cross sectional view of Figs. 4 and 5 until it disappears in the nose of the strip. This arrangement enables the insertion of the bent end of the bar after the strip is in place and when the bar is located as shown, the opening is substantially completely closed.

As a means for joining the ends of the strips I provide a notch 20 in the end of the strip and that interfits with the unnotched end of an adjacent strip, as best shown in Fig. 2.

A construction such as described may be very quickly installed and the only element required in the assembly is the wire member which is very cheaply constructed.

Obviously the exact form and arrangement may not exactly be followed in order to secure beneficial results and I do not wish to be limited except as indicated in the appended claims.

I claim:

1. In combination, a channel adapted to act as a groove-forming element in the edge of a concrete slab, said channel having a transverse cut, the metal at one side of said cut being progressively deflected inwardly to provide an inclined entrance passage for the right angularly bent end of a dowel bar.

2. In combination, a strip of generally V-shape in cross section, the nose of the V having a transverse slit, the metal at one side of said slit being deflected inwardly to provide a substantially round aperture that is open toward the end of the strip adapted to receive the bent end of a dowel bar.

3. In combination, a strip of generally V-shape in cross section, the nose of the V having a transverse slit, the metal at one side of said slit being deflected inwardly to provide a substantially round aperture that is open toward the end of the strip adapted to receive the bent end of a dowel bar, the deflection being progressively lessened for a substantial distance from the slit.

4. In combination, a strip of generally V-shape in cross section, the nose of the V having a transverse slit, the metal at one side of said slit being deflected inwardly to provide a substantially round aperture that is open toward the end of the strip adapted to receive the bent end of a dowel bar, and a right angularly bent dowel bar, the bent end of which is adapted to be inserted

through said aperture and to lie snugly in the V of the strip.

5. In combination, a channel adapted to act as a groove-forming element in the edge of a concrete slab, said channel having an opening adapted to receive an angularly bent dowel bar, and a stake adapted to be driven into the soil and to be rotated after being driven, said stake having a recess at one side of its center of rotation adapted to receive and hold said channel.

6. In combination, a channel adapted to act as a groove-forming element in the edge of a concrete slab, said channel providing means for receiving a dowel bar, and a channel holding member comprising a prong adapted to be driven into the soil and a portion above the soil shaped to receive said channel, said holding member being adapted to be rotated after being driven in order to bring the channel into cooperative relation with said holding member.

7. In combination, a channel groove-forming member for the edge of a concrete slab, and a wire holding member comprising a stake adapted to be driven into the soil, the upper portion of the member being rebent to provide a seat for the channel.

8. In combination, a channel groove-forming member for the edge of a concrete slab, a wire holding member comprising a stake adapted to be driven into the soil, the upper portion of the member being rebent to provide a seat for the channel, and a gauge for indicating the predetermined depth of seating of the stake.

In testimony whereof I have affixed my signature.

WILLIAM E. WHITE.