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ROAD FORM

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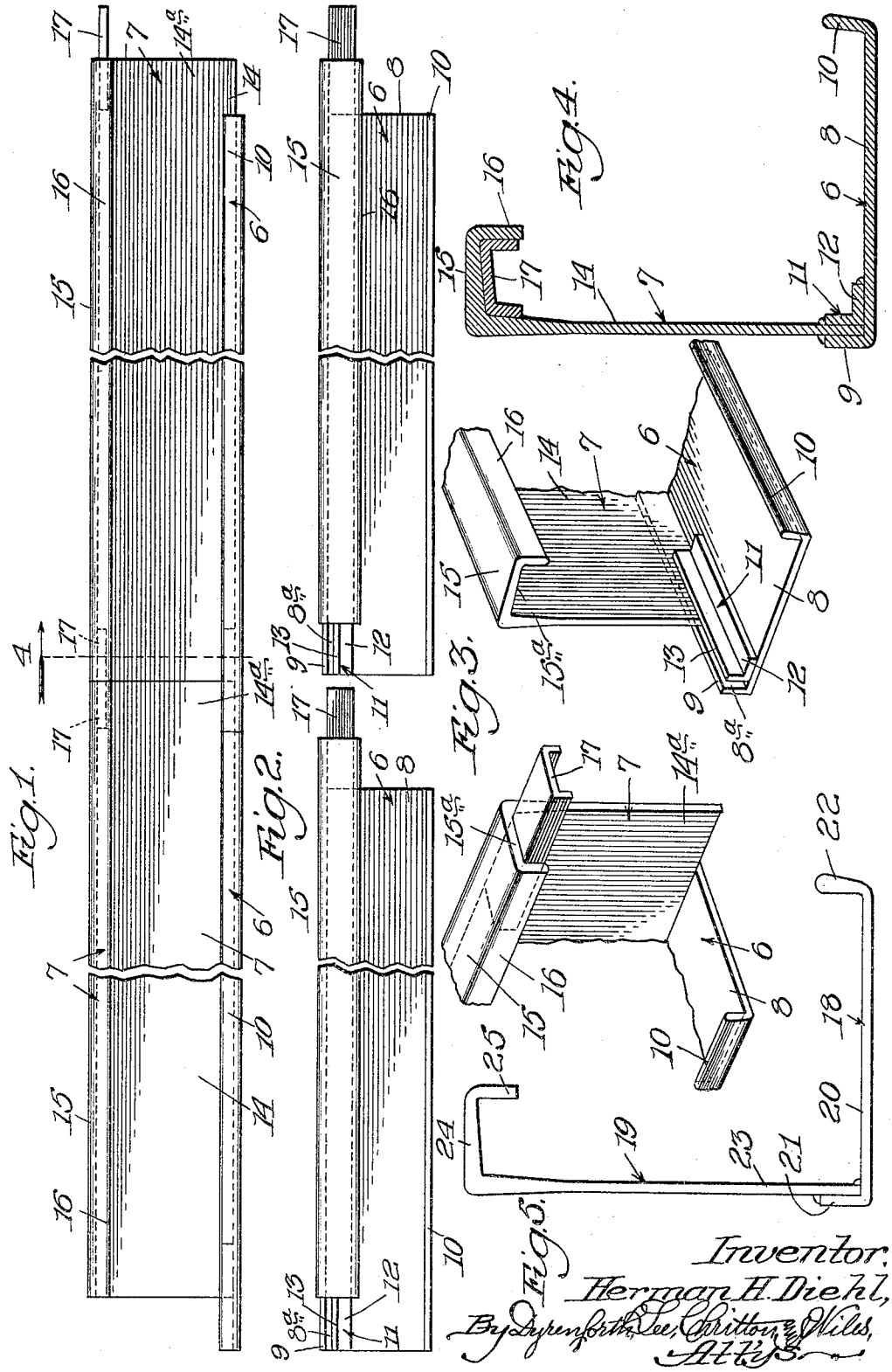


Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

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ROAD FORM

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My invention relates more particularly to forms which are used along the outer edges of concrete pavements to serve in the building of the pavements, as retainers for the concrete while the latter is setting, these forms in accordance with usual practice forming ways along which the concrete laying apparatus travels.

One phase of my invention relates to forms for the purpose above stated provided as ways for the concrete laying apparatus and provided with flanges at their upper and lower edges having downwardly directed and upwardly directed lips, respectively, to strengthen the forms, it being my object in this connection to provide such a construction of form that may be formed by a rolling operation.

Another object is to provide a rolled form with the metal of greater thickness at certain portions only thereof to afford the desired rigidity of the form at the minimum expense.

Another object is to provide a form which shall present the maximum strength at the minimum cost of construction.

Another phase of my invention relates to the connecting together of sections of the forms in end to end relation, it being my object in this connection to provide for connecting the sections together without requiring the use of bolts, rivets, or other similar fastening means, in such a way that the sections will be held in properly alined condition and may be readily disconnected and re-connected at will, and preferably to accomplish this with forms constructed of rolled shapes; and other objects as will be manifest from the following description.

Referring to the accompanying drawing:

Figure 1 is a view in side elevation, with certain intermediate portions cut away, of two form-sections embodying my invention, the sections being shown as connected together in accordance with my invention.

Figure 2 is a plan view of the structure of Fig. 1 showing the sections separated but in alining position.

Figure 3 shows, by a perspective view, the mating ends of the adjacent form-sections.

Figure 4 is an enlarged sectional view taken at the line 4 on Fig. 1 and viewed in the direction of the arrow; and

Figure 5, an end view of a modification of the form.

Referring to the construction of road form shown in Figs. 1, 2, 3 and 4, and which would be provided in form-sections of any suitable length to be alined in end to end relation alongside of the road to be built, two of such sections being shown in these figures, each section comprises a rolled base member 6 and a rolled upright member 7, the base member 6 being formed of a bottom plate portion 8 having upwardly extending flanges 9 and 10 along its opposite longitudinal edges and a separate angle bar 11 secured at its horizontal flange 12 to the upper surface of the plate portion 8 at one end only of the form-section in any suitable way as by welding it thereto, with its vertical flange 13 spaced from the flange 9 a distance substantially equal to the thickness of the vertical upright plate portion of the member 7 described as follows:

The member 7 comprises the upright plate portion above referred to and represented at 14, this plate portion being provided at its upper end with a substantially horizontal flange 15 extending directly above the plate portion 8 and terminating at its free edge in a depending lip 16.

The members 6 and 7 are slightly longitudinally offset in the illustrated assembled position of these members whereby the member 6 of the form-section extends at one end beyond the member 7 as shown of the construction at the right-hand side of Fig. 3 and the member 7 at the opposite end of the form-section beyond the member 6 as shown at the left-hand side of Fig. 3, the members 6 and 7 being rigidly secured together in these relative positions in any suitable way, as for example by welding them in place, the lower edge of the upright portion 14 fitting flatwise against the inner face of the flange 9 as shown.

In the assembling of the form-sections in alining end to end relation, the projecting end of the upright portion 14 and represented at 14^a in Fig. 3 is inserted into the channel

represented at 8ª and presented between the flange 9 and the angle iron 12 of the adjacent form-section to abut at the end of the portion 14ª against the inset end of the upright portion 14 of such adjacent form-section, the channel represented at 15ª and presented between the upright portion 14 and the lip 16 containing a short channel bar 17 nested therewith and secured thereto in any desirable way and projecting beyond the end 14ª of the upright portion 14, the outer end of the channel 17 entering the similar channel 15ª of the adjacent form-section in assembling these form-sections as stated, whereby the form-sections become so interfitted that they function substanially as a unitary structure in resisting stresses directed laterally against them. Furthermore, by connecting the form-sections together as stated they are admirably suited to resist the stresses directed downwardly against them at the joints by the cement-laying apparatus in traveling over the flanges 15 which thus form tracks or ways.

The construction shown in Fig. 5 constitutes an embodiment of the invention where the interfitting of the form-sections together as stated is not provided for. In this construction which, in a sense, is a simplification of the form shown in the preceding figures, the form comprises base and upright members 18 and 19, respectively, of the same general form as the members 6 and 7, the member 18 having the base plate portion 20 with the upwardly extending flanges 21 and 22 at its longitudinal edges and the member 19 having the upright plate portion 23 with the substantially horizontal flange 24 at its upper end provided with the depending lip 25. This form of construction is thus of substantially L shape as in the case of the structure of the preceding figures, the lower edge of the plate portion 23 fitting against the inner face of the flange 21 in which relative positions the members 18 and 19 are rigidly secured together, as for example by welding them as shown. The angle bar 11 of the form of the preceding figures is omitted in this construction as no provision is made therein for the connecting together of adjacent form-sections as in the construction shown in Figs. 1—4.

It will be understood from the foregoing that by constructing the form of a plurality of members such as the members 6 and 7 of Figs. 1—4, or 18 and 19 of Fig. 5, a structure of such form, namely, that shown, as to prohibit the production thereof as an integral structure by a rolling operation, may nevertheless be produced by such an operation; it being understood that it would not be possible to roll the forms of either Figs. 1—4 or 5, as one-piece structures because of the flange 10 and the lip 16 of the one construction, and the flange 22 and the lip 25 of the other construction. By making these forms in separate parts as described and connecting them together to produce the desired shape or form, these several parts may be provided as rolled shapes.

Certain of the advantages of making the forms of rolled shapes, in addition to those advantages manifest from the foregoing description, are that such forms are stronger than those made of plates bent to shape, and may be rolled with the metal thickened at those portions, subjected to the greater stress, as for example at the flanges 10 and 22 and at the junctures of the upper flanges of the upright member with the upwardly extending plate portions thereof as shown, while economizing in the use of metal at the portions thereof subjected to the less intense stresses.

While I have illustrated and described certain forms in which my invention may be embodied I do not wish to be understood as intending to limit it thereto as the invention may be embodied in other forms and those shown modified and altered without departing from the spirit of my invention.

What I claim as new, and desire to secure by Letters Patent, is:

1. A road-form comprising separately formed base and upright members of substantially equal length connected together with their ends offset, said base member being flanged and said upright member having a flange at its upper edge provided with a depending lip.

2. A road-form section comprising separately formed base and upright members of substantially equal length, connected together with their ends offset to provide complemental section ends, said base member having an upwardly extending flange, said upright member having a flange at its upper edge provided with a depending lip and means adjacent an end of one of said members to telescopically receive a portion of an end of the other member of a meeting like form section.

3. A road-form comprising separately formed base and upright roller metal members of substantially equal length connected together with their ends offset, said base member comprising a base plate-portion and spaced apart upwardly extending flanges and said upright member being located adjacent and secured to one of said flanges and having a flange at its upper edge provided with a depending lip, the other of said flanges on said base member being of greater thickness than said plate portion.

4. A road-form comprising separately formed base and upright rolled metal members connected together, said base member comprising a base plate-portion and spaced apart upwardly extending flanges and said upright member having an upwardly extending body portion having a flange at its upper

edge provided with a depending lip, the metal at the juncture of said flange with the body portion of said upright member being thickened.

5. A road-form comprising separately formed base and upright rolled metal members of substantially equal length connected together with their ends offset, said base member comprising a base plate-portion and spaced apart upwardly extending flanges and said upright member being located adjacent one of said flanges and having a flange at its upper edge provided with a depending lip, the other of said flanges on said base member being of greater thickness than said plate portion, the metal at the juncture of said flange with the body portion of said upright member being thickened.

6. A road-form comprising separately formed base and upright members of substantially equal length connected together, and disposed at an angle to each other, said base member at one end of the form extending beyond said upright member and said upright member at the opposite end of the form extending beyond said base member, one of said members at its projecting end presenting a channel to receive a portion of the projecting end the other member of a similar form alined in end-to-end relation thereto.

7. A road-form comprising separately formed base and upright members connected together and disposed at an angle to each other, said base member at one end of the form extending beyond said upright member and said upright member at the opposite end of the form extending beyond said base member, the projecting end of said base member presenting a channel to receive the projecting end of the upright member of a similar form alined in end-to-end relation thereto.

8. A road-form comprising separately formed base and upright members connected together and disposed at an angle to each other, said base member at one end of the form extending beyond said upright member and said upright member at the opposite end of the form extending beyond said base member, one of said members at its projecting end presenting a channel to receive the projecting end of a similar form alined in end-to-end relation thereto, said upright member having a flange at its upper end provided with a depending lip and forming a channel, and a channel member in one end of said last named channel and projecting beyond the adjacent end of said upright member.

9. A road-form comprising separately formed base and upright members connected together and disposed at an angle to each other, said base member at one end of the form extending beyond said upright member and said upright member at the opposite end of the form extending beyond said base member, the projecting end of said base member presenting a channel to receive the projecting end of the upright member of a similar form alined in end-to-end relation thereto, said upright member having a flange at its upper end provided with a depending lip and forming a channel, and a channel member in one end of said second-referred-to channel and projecting beyond the adjacent end of said upright member.

10. A road-form comprising separately formed base and upright members connected together and disposed at an angle to each other, said base member being formed of a base-plate portion and upwardly extending flanges at its longitudinal edges and said upright member being formed of an upwardly extending plate portion provided at its upper edge with a flange having a depending lip, said base member at one end of the form extending beyond said upright member and said upright member at the opposite end of the form extending beyond said base member, one of said members at its projecting end presenting a channel to receive the projecting end of a similar form alined in end-to-end relation thereto.

11. A road-form comprising separately formed base and upright members connected together and disposed at an angle to each other, said base member being formed of a base-plate portion and upwardly extending flanges at its longitudinal edges and said upright member being formed of an upwardly extending plate portion provided at its upper edge with a flange having a depending lip, said base member at one end of the form extending beyond said upright member and said upright member at the opposite end of the form extending beyond said base member, the projecting end of said base member presenting a channel to receive the projecting end of the upright member of a similar form alined in end-to-end relation thereto.

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