July 16, 1957 E. K. GRUNDY 2,799,072

ROAD FORMS OR LIKE SHUTTERING

Filed May 29, 1952

FIG. 1.

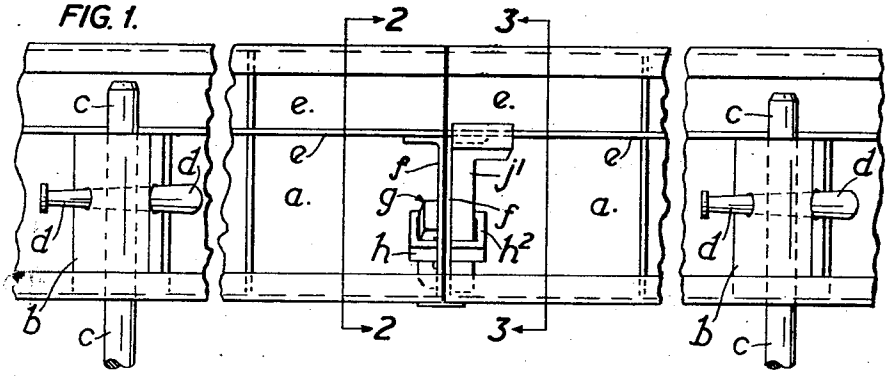


FIG. 2.

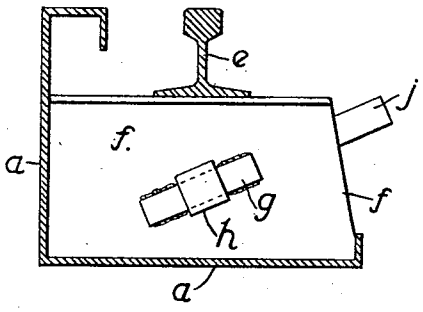


FIG. 3.

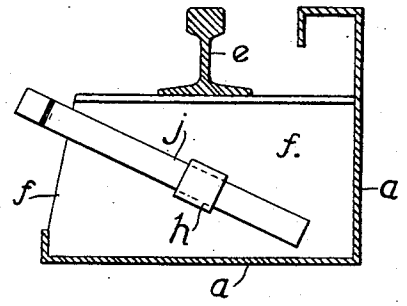
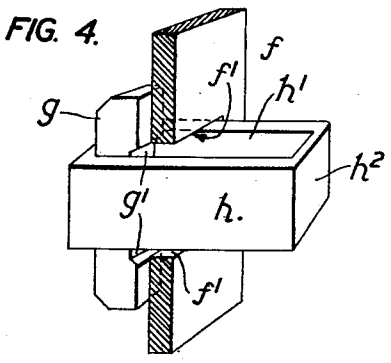


FIG. 4.



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ROAD FORMS OR LIKE SHUTTERING

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2 Claims. (Cl. 25—118)

This invention relates to road forms or like shuttering (all hereinafter, for convenience of description, referred to as "road forms," "forms," or "form") as used in the construction of roadways or their foundations, wherein said road forms are laid end to end, in lengths, and may serve to support rails on which tamping or other apparatus for the disposal and placement in position of concrete, or the like, may be transported—as on a wheeled truck—along a path provided by said forms, to lay an unbroken bed of concrete.

Heretofore, so far as I am aware, conventional methods of connecting adjacent road forms, such, for instance, as dowels and cotters, have possessed a disadvantage, amongst others, in that after use, dismantling of a line of laid road forms may only be effected from the ends of the line.

My invention, therefore, has for its object the provision of road forms having connecting means which are simple in construction, effective, and not liable to derangement in use, whereby said forms may be rigidly and securely connected one to another in accurate alignment, whilst permitting ready removal of any of the forms as and where required.

Road forms, according to my invention, are each provided with connecting means which comprise an apertured plate at each end of said form, and a connecting member anchored to one of said end plates adapted to be projected from the apertures thereof to engage within the end plate aperture of an adjacent form and to be secured therein by tapered key, or cotter, or the like. The connecting members may be constructed from material of rectangular, circular, or other desired section.

Said connecting member is in the form of a closed link, anchored to the end plate of the form by a securing bar threaded through said link and secured on the inner face of said end plate across the aperture wherethrough the link may be projected, and which bar is recessed to receive the outer end of said link so as to permit full retraction of same.

Said road forms are normally of hollow construction, being closed on three longitudinal sides, and, in order to facilitate the fastening of said connecting member, the securing bar is disposed at an inclination to the vertical, so that a tapered key or cotter may be easily introduced through the open side of the form.

I will further describe my invention with the aid of the accompanying sheet of explanatory drawings in which

Fig. 1 is a view showing in elevation the adjacent ends of two connected road forms.

Fig. 2 is a section—taken as on line 2—2, Fig. 1.

Fig. 3 is a section, taken as on line 3—3, Fig. 1.

Fig. 4 is a fragmentary perspective view showing a link connector.

Referring now to the drawings, *a*, *a*, denote the abutting ends of two conventional metal road forms, with V plates *b* welded thereto at intervals whereby said forms are secured to the ground by locating pegs *c* and tapered pins *d*, as indicated. Plates *b* also serve to support lengths of a light rail *e*.

Welded to each end of forms *a* are end plates *f* wherein are provided apertures f^1, and secured to the inner face of the end plate *f* at one end of each form *a* across

aperture f^1 is a securing bar *g* which is threaded through the slot h^1 of a closed link *h*, and therefore holds said link captive within aperture f^1.

Securing bar *g* has its underside recessed as at g^1 (Fig. 4) and thus link *h* may be projected through aperture f^1 to the position shown in Figs. 1 and 4, or be retracted when its end h^2 is flush with or below the outer surface of end plate *f*.

To associate adjacent ends of road forms *a* when laid in alignment, it is only requisite for links *h* to be projected, by hand, through the aligned apertures f^1 of the adjacent end plates *f*, and be secured by inserting therethrough a tapered key *j*, which is driven home by a hammer, mallet, or the like, so securely and rigidly connecting the adjacent forms.

It will be seen that, in addition to functioning as a coupler between adjacent forms *a*, the connecting link *h* serves as a dowel whereby said forms may be rapidly and accurately aligned. If desired, more than one connector link *h* may be utilised at each joint.

When it is required to remove a road form from a laid line of same, it is merely necessary for it to be dissociated from the adjacent forms by withdrawing the tapered keys *j* and retracting the connecting links *h*, when the form may be removed without disturbing the remaining forms.

It is, of course, to be noted that the connecting links may be formed from any suitable material and be of dimensions and configuration commensurate with the shape or configuration of the tapered key or keys to be employed.

What I claim as my invention and desire to secure by Letters Patent is:

1. In a road form of the type referred to, connecting means for adjacent pairs of forms comprising a plurality of end plates each fixedly mounted at one end of one of said forms with the end plates of adjacent forms having opposing faces abutting one another, said plates having corresponding openings therethrough of a rectangular configuration with the sides thereof extending on an inclination to the vertical, a closed link of a rectagular configuration similar to said plate openings slidably mounted through the openings of the abutting end plates of adjacent forms, said link having a rectangular slot, a securing bar of a rectangular cross sectional configuration fixedly mounted on a side of one of said abutting end plates opposite to said opposing face thereof and extending across said plate opening through said link slot for guiding and retaining said link to said plate, a tapered key of a substantially square cross-sectional configuration detachably and slidably extending through the portion of said slot of said link extending from the face of the other of said abutting end plates opposite to said opposing face thereof for drawing said link, its associated bar and end plates tightly together with the connected adjacent forms being in alignment.

2. In a road form of the type referred to having connecting means as claimed in claim 1, wherein said securing bar has a recessed inner side corresponding to said plates opening for permitting the retraction of said link from said end plates opening.

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