C. D. SHEPPARD.

ANCHOR AND SUPPORT FOR CONCRETE ROAD FORMS.

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1,348,060.

Patented July 27, 1920.

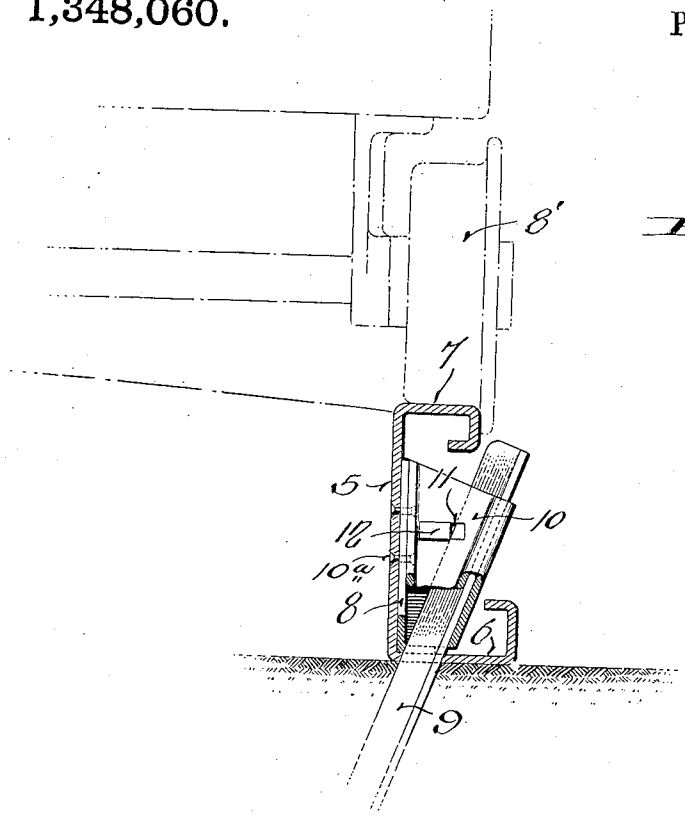

Fig. 1.

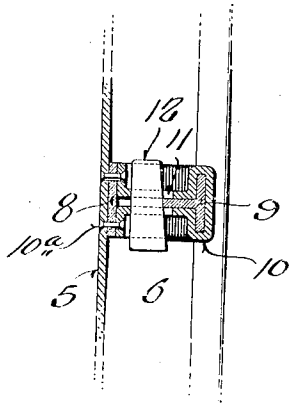

Fig. 2.

Witnesses:

Witnesses:

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ANCHOR AND SUPPORT FOR CONCRETE-ROAD FORMS.

1,348,060. Specification of Letters Patent. Patented July 27, 1920.

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To all whom it may concern:

Be it known that I, CLARENCE D. SHEPPARD, a citizen of the United States, and resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Anchors and Supports for Concrete-Road Forms; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to new and useful improvements in means for anchoring rails or like members directly to the ground, and is more particularly directed to the provision of means for supporting and anchoring concrete road forms which are of the relatively heavy type adapted to support the wheels of a tamping or other machine which it may be desired to propel over the forms incidental to the completion of said roadway.

It is in general the object of my invention to simplify and strengthen the structure and to increase the holding efficiency of devices of this character.

Concrete road forms which are in the form of sheet metal rails of sufficient height to hold the proper amount of concrete for the roadway, are liable to tilt and settle upon the application of wheeled load thereon, and it is more particularly my object to provide an arrangement whereby the stake member of the anchoring and supporting device engages the form in such manner as to obtain a maximum holding action against tilting and settling stresses exerted on the form.

It is further my object to provide a comparatively simple arrangement for locking the stake member to the form when said stake member has been driven into the ground to its proper position.

With the above and other objects and advantages in view, which will be apparent as the description proceeds, my invention resides in the novel features of construction, combination and arrangement of the parts as hereinafter described and defined by the appended claims.

Figure 1 is a vertical sectional view through a concrete road form showing my improved anchoring and supporting device associated therewith and having parts broken away to more clearly disclose the structure.

Fig. 2 is a horizontal sectional view through the device.

Referring now more particularly to the drawings, there is shown a form or rail for the side portion of a concrete roadway, said form being shaped in the usual manner from an elongated plate of metal having one side portion bent to provide a ground engaging foot flange 6 whereby the intermediate portion of the plate may be disposed vertically on edge, and having its other side portion bent laterally to provide a top flange 7 on which the conventionally shown wheels 8′ of a tamping machine are adapted to travel. The flange portions of the plate are directed outwardly from the road bed, and the concrete material is adapted to engage against and be held by the intermediate portion 5 of the form plate.

In associating my improved anchoring and supporting device with the structure described, I preferably secure a reinforcing plate 8 to the vertical intermediate portion of the form plate, the lower end of this reinforcing plate being bent to lie over the foot flange 6, and said flange and end portion are provided with registering apertures for the reception of a stake member 9, said apertures being located approximately at the juncture of the foot flange and body portion of the form. A channel member is provided for guiding and holding the stake and this channel member is formed in the present instance of a plate of metal 10 bent intermediately upon itself with its side portions extending in parallel spaced relation and then turned outwardly and secured by rivets 10^a passed therethrough and through the reinforcing plate 8 and through the vertical side of the form. Inasmuch as the stake 9 is T-shaped in cross section, the channel plate is shaped to afford a corresponding T-shaped cross section, and the head of the channel is inclined inwardly toward its lower end whereby the stake upon being inserted therein is guided so as to enter the ground at a definite inclination. This oblique inclination of the stake provides clearance thereof with respect to the top flange 7 of the concrete form, and also serves to procure a more effective anchoring and supporting action since the tendency of the form is to tilt outwardly under road strain of the concrete roadway.

For positively locking the stake 9 in po-

sition, after the same has been driven into the ground, the side portions of the plate 10 are provided with slots 11 communicating with the channelway of the plate and adapted to receive a wedge key 12 for engagement with the adjacent portion of the stake. Said slots and the wedge key extend horizontally, and thus by reason of the oblique extension of the stake member, one corner of the wedge key exerts a positive biting action on the stake which insures the rigid holding thereof.

I have thus provided an exceedingly simple anchoring and supporting device for concrete road forms and like objects which may be most readily manipulated to procure a firm and permanent support and anchorage effective particularly to overcome the settling and tilting stresses to which a concrete road form would be subjected when used as the supporting rail for a machine traveling over the form.

While I have shown and described a preferred embodiment of my invention, it will be appreciated that various changes and modifications of structure may be employed to meet differing conditions of use and manufacture, without departing in any manner from the spirit of my invention.

What is claimed is:

1. The combination with a road form having a lateral support foot, of a channel member secured to the form and inclined downwardly and inwardly toward the juncture of said lateral foot with the body of the form and a stake member insertible in said channel.

2. The combination with a road form having a lateral support foot, of a channel member secured to the form and inclined downwardly and inwardly toward the juncture of said lateral foot with the body of the form, a stake member insertible in said channel and means for locking the stake member in the channel.

3. The combination with a road form of a channel member secured thereto and provided with a slot intersecting its channel, a stake member insertible in the channel and a wedge key insertible in the slot for engagement with the stake member within the channel to lock said stake member against movement.

4. The combination with a road form having a lateral support foot of a channel member formed of a sheet of metal intermediately bent to provide a channel adjacent its bent portion, said channel being inclined downwardly and inwardly toward the juncture of the lateral foot with the body of the form, the edge portions of said sheet of metal being secured to the body of the form and a stake member insertible in the channel.

5. The combination with a road form having a lateral support foot of a channel member formed of a sheet of metal intermediately bent to define a channel, T-shaped in cross section, the edge portion of the plate being secured to the body of the form and a stake member of T-shaped cross section insertible in said channel.

6. The combination with a road form having a lateral support foot of a channel member formed of a sheet of metal intermediately bent to define a channel, T-shaped in cross section, the edge portion of the plate being secured to the body of the form the head portion of said channel being inclined downwardly and inwardly toward the juncture of the lateral foot with the body of the form, opposed portions of said sheet being provided with slots, a stake member T-shaped in cross section and insertible in the channel, and a wedge key member insertible in said slots for biting engagement with the stake member.

In testimony that I claim the foregoing I have hereunto set my hand at Milwaukee, in the county of Milwaukee and State of Wisconsin.

CLARENCE D. SHEPPARD.