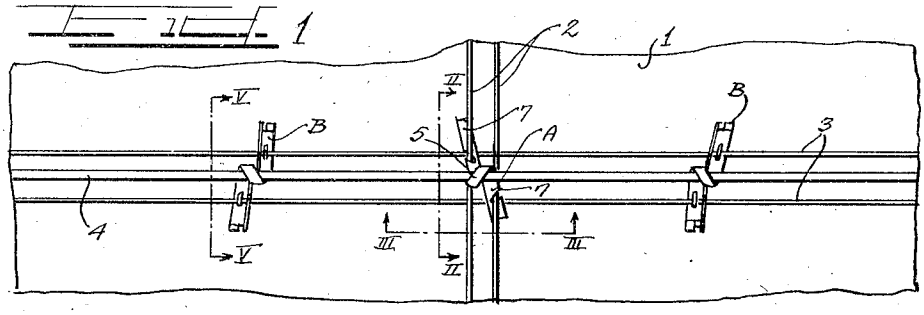
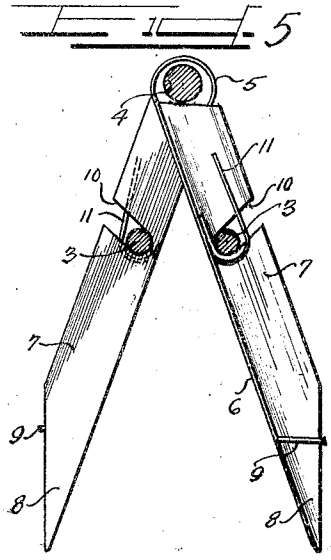
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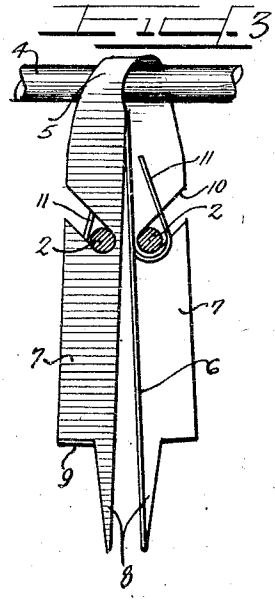
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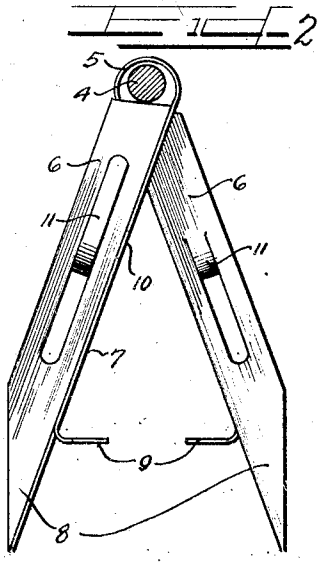
BAR SUPPORT

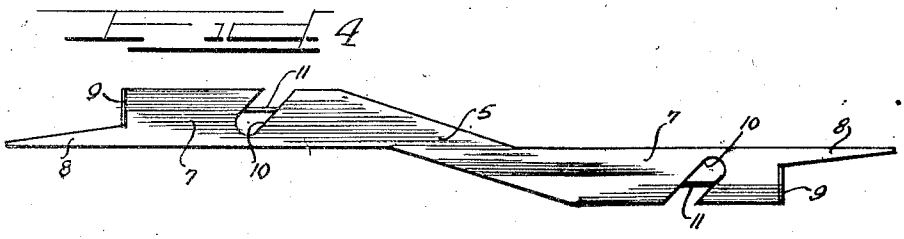
Filed March 23, 1927











INVENTOR

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BY Charles W. Hills

ATTYS

Patented Dec. 6, 1927. 1,651,946

UNITED STATES PATENT OFFICE.

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BAR SUPPORT.

Application filed March 23, 1927. Serial No. 177,748.

This invention relates to bar supports, and more particularly to supports which are adapted to be used in connection with the construction of concrete roads for the purpose of holding reniforcing bars or rods supported in place at right angles to one another to serve as a reinforcing means for the concrete after the same has been poured around the reinforcing bars.

It is an object of this invention to provide an improved support for holding a plurality of concrete road reinforcing bars in spaced relation.

It is also an object of this invention to provide bar supports of substantially the same construction, one of said supports adapted to support a plurality of bars in parallel relation, while the other support is arranged to permit the same to support bars positioned at right angles to one another.

It is furthermore an object of this invention to provide a bar support for use in connection with concrete road construction work, said bar support is constructed of metal and has pins or spiked ends adapted to be driven into the sub-grade a predetermined distance to support a plurality of reinforcing bars or rods in proper spaced relation above the sub-grade to serve as a reinforcing framework for the concrete forming the road.

It is an important object of this invention to provide an improved and simplified form of metal bar support adapted for use in concrete road construction work, said support adapted to hold a plurality of reinforcing rods in parallel relation and at right angles to one another at a predetermined distance above the upper surface of the sub-grade, said distance being determined by feet integrally formed near the lower spiked ends of the support.

Other and further important objects of this invention will be apparent from the disclosures in the specification and the accompanying drawings.

This invention (in a preferred form) is illustrated in the drawings and hereinafter more fully described.

On the drawings:

Figure 1 is a fragmentary portion of the sub-grade of a road under construction having reinforcing bars positioned thereabove and held in a predetermined relation by means of improved bar supports embodying the principles of this invention.

Figure 2 is an enlarged sectional view taken on line II—II of Figure 1, and illustrating the side elevation of one of the bar supports, which is adapted to hold bars positioned at right angles to one another.

Figure 3 is an enlarged sectional view taken on line III—III of Figure 1 showing another elevational view of the bar support illustrated in Figure 2.

Figure 4 is a developed plan view of the bar support illustrated in Figures 2 and 3.

Figure 5 is an enlarged sectional view taken on line V—V of Figure 1 illustrating an enlarged elevational view of a second form of bar support adapted to support bars in parallel relation only.

As shown on the drawings:

The reference numeral 1 indicates the sub-grade of a concrete road having a reinforcing framework supported in position thereon. The reinforcing framework comprises a pair of parallel bars or rods 2 which are positioned to run longitudinally of the road, and a pair of parallel bars or rods 3 positioned transversely of the road and at right angles to the bars 2. Also positioned transversely of the road between and above the transverse bars 3 is a major reinforcing bar 4 of greater diameter than the diameter of the minor reinforcing bars 2 and 3.

For the purpose of properly supporting the reinforcing bars 2, 3 and 4 in proper spaced relation above the upper surface of the sub-grade 1 with the reinforcing bars 2 positioned at right angles to the bars 3 and 4, improved bar supports embodying the principles of this invention are used. As illustrated in Figure 1 two types of bar supports A and B are used. They are of substantially the same construction with the exception that the support A is adapted to hold bars positioned at right angles to one another, while the support B is adapted to hold bars in parallel relation only.

Referring now to Figures 2, 3 and 4 the bar support A comprises a spiral bight or looped middle portion 5 through which the major or large reinforcing bar 4 is adapted to be projected. Integrally formed on each end of the bight 5 is a leg of angle construc-

tion comprising flanges 6 and 7. The lower end of each leg is tapered to afford a spike 8 of angle construction formed by cutting the material forming the lower ends of the leg flanges 6 and 7. Integrally formed on each leg flange 7 is a stop or foot 9, which is bent inwardly, as clearly illustrated in Figure 2. The two feet 9 of each of the bar supports are adapted to act as stops for limiting the extent to which the spikes 8 are to be driven into the sub-grade 1. Each of the leg flanges 7 is provided with an inclined notch or pocket 10 through which the reinforcing bars 2 are adapted to project in parallel relation substantially at right angles and below the major reinforcing bar 4. Struck from each of the leg flanges 6 is a retaining strap or hook 11 which is adapted to be directed upwardly and bent around one of the rods 2 to hold the same locked in position in the lower end of its respective notch or pocket 10.

The bar support B illustrated in Figure 5, and shown in position in Figure 1, is constructed substantially the same as the bar support A with the exception that the feet or stops 9 are directed outwardly instead of inwardly. Attention is also called to the fact that the bar support B has the middle portion 5 thereof bent in the form of a loop that will receive the major reinforcing bar 4 above and parallel to the minor reinforcing bars 3.

It will thus be noted that the bar support of the type A is adapted to support reinforcing bars in spaced relation at right angles to one another, while the bar support of the type B is used for supporting reinforcing bars in spaced parallel relation only.

The improved bar supports of the types A and B are adapted to be used, as illustrated in Figure 1, with the spiked portions 8 of said supports adapted to be driven into the foundation or sub-grade a distance determined by the feet or stops 9. With the bar supports secured in place the reinforcing bars 2, 3 and 4 may be inserted in their spaced relation, as illustrated in the drawings, with the major or larger reinforcing bar projecting through the looped or bight portions 5 of the bar supports, while the smaller or minor reinforcing bars 2 and 3 are positioned at right angles to one another and project through the respective notches or pockets 10 of the bar supports. After the bar supports and the reinforcing bars are properly positioned, as illustrated and described, to form a reinforcing framework above the subgrade or foundation of the road, the concrete is poured around the reinforcing framework to completely imbed the same.

I am aware that many changes may be made, and numerous details of construction may be varied through a wide range without departing from the principles of this invention, and I therefore do not purpose limiting the patent granted hereon, otherwise than necessitated by the prior art.

I claim as my invention:

1. A concrete road reinforcing bar support comprising a bight portion, angle legs integrally formed thereon and diverging from one another with the lower ends of said legs tapered to form spikes and having inclined bar supporting notches therein, and retaining straps struck from said legs and adapted to be bent in the form of hooks to serve as retaining means for holding reinforcing bars in said notches.

2. A bar support comprising a pair of diverging angle legs having the lower ends thereof tapered to afford spikes, stop members struck from said legs, said legs having rod receiving notches formed therein, retaining straps struck from said legs for holding reinforcing bars in said notches, and a looped portion connecting the converging ends of said legs to afford a support for another reinforcing bar.

3. A bar support for use in concrete construction work, said support comprising a pair of diverging legs having bar supporting notches formed therein, retaining straps struck from said legs adapted to be bent to hold reinforcing bars locked in said notches, a looped portion connecting the converging ends of said legs and adapted to serve as a support for another reinforcing bar, and feet integrally formed on said legs at a distance from the lower ends thereof to afford stop means for limiting the distance said legs are to be driven into the ground.

4. A concrete road bar support comprising a spiral loop, angle legs integrally formed on the ends of said loop and projecting outwardly away from one another, each of said legs having a bar supporting notch formed in one of the flanges thereof, a retaining strap integrally struck from the other flange of each of said legs and adapted to be bent to serve as a retaining means for holding a bar in said notch, spikes integrally formed on the lower ends of said legs and adapted to be driven into the ground, and stop members struck from said legs for limiting the distance said legs are to be driven into the ground.

5. A bar support comprising a pair of legs having bar supporting notches formed therein, retaining members struck from said legs and adapted to be engaged around reinforcing bars for holding the same seated in said notches, and a spiral bight portion connecting said legs and affording a support for another reinforcing bar.

6. A bar support comprising a pair of diverging legs the outer ends of which are tapered to permit the same to be easily

driven into the ground, a bight portion integrally connecting the converging ends of said legs and affording a bar support, and means formed on said legs for holding additional bars supported in spaced relation with respect to the bar supported by said bight portion.

7. A bar support comprising a pair of diverging legs, means formed thereon for supporting a pair of reinforcing bars in parallel relation, and a bight portion connecting the converging ends of said legs and adapted to afford a support for an additional reinforcing bar in spaced relation with respect to said parallel reinforcing bars.

8. A bar support comprising a spiral bight, an angle leg integrally formed on each end of said bight with the lower end of said leg tapered to afford a spike, each of said legs having one of the flanges thereof provided with a bar supporting notch, and a stop member and a retaining member integrally formed on the other flange of each of said legs with said retaining member adapted to hold a bar locked in said notch, while the stop member serves as a means for limiting the distance the leg is to be driven into the earth.

9. A bar support comprising a pair of leg members, means formed thereon for holding a pair of reinforcing bars in spaced relation, and means resiliently connecting said legs to afford a support for holding an additional reinforcing bar in spaced relation to said first mentioned reinforcing bars.

10. A bar support comprising a pair of tapered angle legs, means thereon for supporting a pair of reinforcing bars in spaced relation, and spiral means connecting said legs in offset relation and adapted to afford a support for an additional reinforcing bar.

In testimony whereof I have hereunto subscribed my name.

WILLIAM C. BURRELL.