

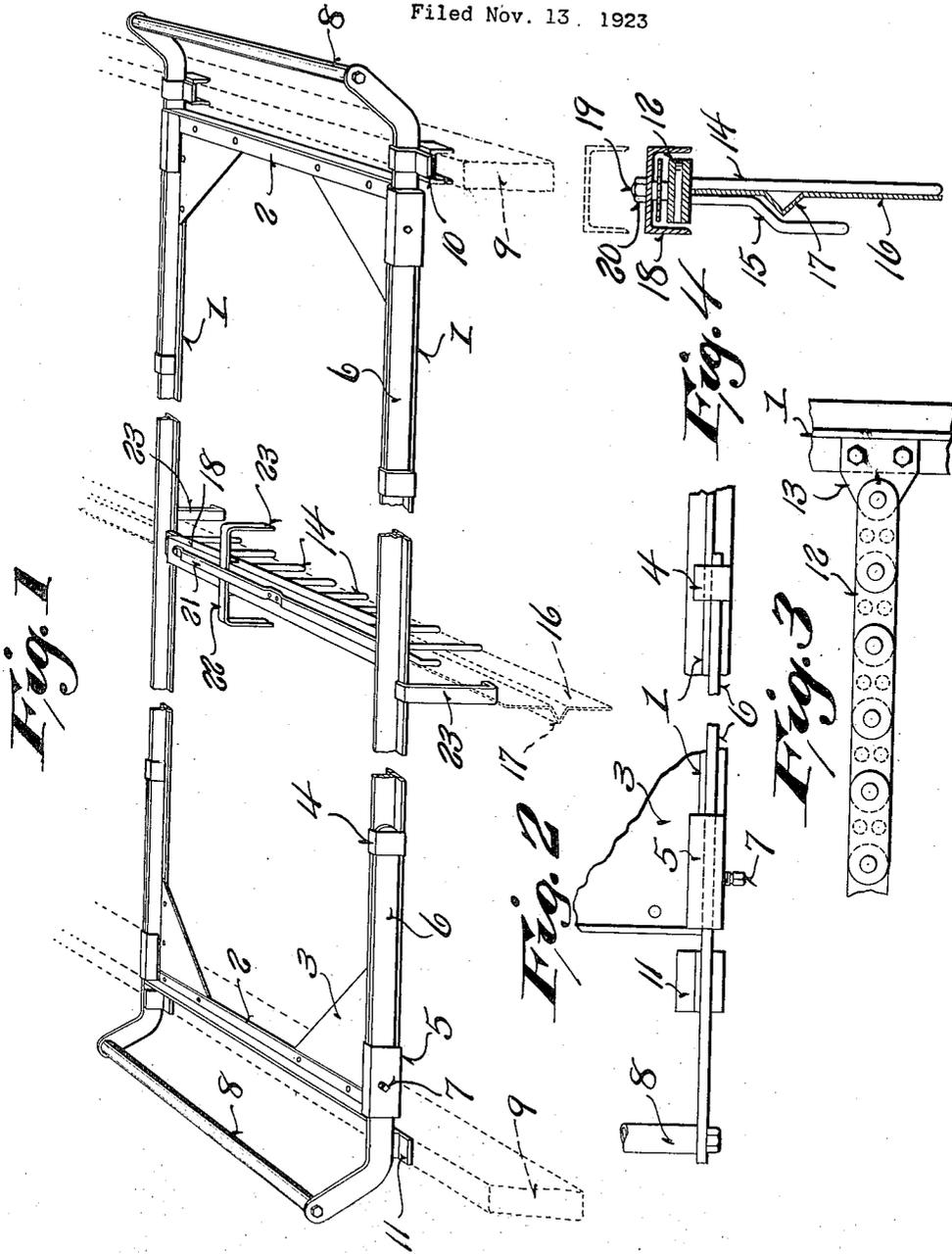
Nov. 18, 1924.

W. H. HUBBARD

1,516,100

INSTALLING BAR

Filed Nov. 13, 1923



INVENTOR.  
*William A. Hubbard*  
BY  
*[Signature]*  
ATTORNEYS

## UNITED STATES PATENT OFFICE.

WILLIAM H. HUBBARD, OF OSHKOSH, WISCONSIN.

## INSTALLING BAR.

Application filed November 13, 1923. Serial No. 674,515.

*To all whom it may concern:*

Be it known that I, WILLIAM H. HUBBARD, a citizen of the United States, and resident of Oshkosh, in the county of Winnebago and State of Wisconsin, have invented certain new and useful Improvements in Installing Bars; and I do hereby declare that the following is a full, clear, and exact description thereof.

This invention relates to installing device for concrete pavements.

Objects of this invention are to provide an installing device for concrete pavements which will accurately maintain the correct proportions of the pavement, which will temporarily hold the center strip of the pavement in correct position, and which may be adjusted to accommodate a curved center strip as, for instance, in forming a curve in the pavement.

Further objects are to provide an installing device for pavements which is adapted to rest upon the side boards used in installing the pavement and to correctly space the center strip, which is provided with extensible outwardly projecting portions to adapt the device for pavements having different widths, and which is provided with means for correctly holding the center portion of the device at the correct spacing from the subgrade or bottom of the channel in which the concrete is positioned, and which is so constructed that it will prevent undesirable projecting of the center strip above the surface of the finished pavement.

An embodiment of the invention is shown in the accompanying drawings, in which:—

Figure 1 shows the device in position.

Figure 2 is a plan view of a corner of the frame.

Figure 3 is a plan view of the jointed centrally located member with the retaining channel iron removed.

Figure 4 is an enlarged transverse sectional view through the central member.

The device comprises a pair of side frame members 1, which may be conveniently formed of T-shaped iron, if desired. These side members are joined adjacent their ends by means of angle iron end strips 2. Corner braces 3 are provided for maintaining the correct relation of parts and are preferably formed of sheet iron riveted to the flanges of the angle iron end members and the T-shaped side members, thus providing a very rigid structure.

The side members are provided with spaced guides 4 and 5 within which side bars 6 are adjustably carried. These side bars 6 may be locked in any desired position of adjustment relative to the side members 1 by any suitable means as, for instance, the set screws 7 which are threaded through the outer guides 5. These extensible bars 6 are upturned adjacent their ends and are provided with handles 8 by means of which the entire apparatus may be bodily lifted or may be adjusted. These bars 6 are provided with means for engaging side boards 9 used in forming the pavement. In other words, they are provided with means for aligning with the marginal edges of the pavement and thus are adapted to maintain the proper width of pavement. As shown in Figure 1, one of the pairs of side bars 6 may be provided with channel shaped members 10 which straddle the corresponding side board 9. The other member may be provided with feet 11 which rest upon the corresponding side board. A centrally located jointed member is provided and secured to the side frame members 1. This jointed member, as illustrated in Figure 3, may be formed of a plurality of links 12 which are joined to inwardly projecting lugs 13 secured to the side frame members 1. These links carry downwardly projecting spaced rods or fingers 14 and 15,—the fingers being offset from each other and adapted to temporarily receive and position the center strip 16. If desired one of the fingers, for instance 15, may be provided with an offset portion to accommodate the rib or channel 17 formed in the center strip if this type of center strip is employed.

In forming straight concrete pavements, it is desirable to maintain the jointed member 12 in a straight condition. This is readily secured by providing a channel member 18 which is adapted to be positioned over the jointed member 12, as shown in Figures 1 and 4 and to thus hold such jointed member straight. If desired, certain of the pivot pins of the links may be provided with threaded or bolt-like upwardly extending projections 19 (see Figure 4) upon which nuts 20 are screwed to thus hold the member 18 in position.

When a curved concrete pavement is formed, the member 18 is removed and the jointed member 12 is flexed to conform to the curvature of the center strip 16. It is

readily appreciated that a slight inward bowing of the side frame members 1 will accommodate this flexing of the central member 12.

5 If desired, the channel member 18 may be provided with spaced straps 21, and a transversely extending U-shaped member 22 may be located between such straps and the channel member 18. This transverse member 22 may be provided in its downwardly projecting arms with slots 23 adapted to hold spacer strips if such strips are to be employed.

Supporting feet 23 are carried by the side members 1 and are adapted to engage the subgrade, or in other words, the bottom of the channel in which the concrete is poured to thus properly space the central portion of the device from the bottom of the concrete receiving channel and to prevent downward bowing of such central portions.

It will thus be seen that an installing device for concrete pavements has been provided which is extremely simple and easily operated, which is of rugged construction, which will maintain the correct positioning of the center strip both with regard to the marginal edges of the roadway, and also with regard to the depth of seating of such central strip. It will further be seen that the device may be readily moved along as the roadway is formed and may be most easily manipulated.

Although the invention has been described in considerable detail, it is to be understood that the invention may be variously embodied and is, therefore, to be limited only as claimed.

I claim:

40 1. An installing device for concrete pavements having a center strip comprising a rigid frame, a pair of extensible supports projecting from the ends of said frame and having portions adapted to align with the marginal edges of the pavement, and a centrally located member for temporarily holding said center strip.

45 2. An installing device for concrete pavements having a center strip comprising a

rigid rectangular frame, extension members 50 carried by said frame and adapted to project outwardly from the ends thereof and having portions aligning with the margins of said pavement, a centrally located member carried by said frame, and a plurality of 55 downwardly projecting spaced fingers carried by said member for temporarily holding said center strip in position.

3. An installing device for concrete pavements having a center strip comprising a 60 rigid rectangular frame having outwardly projecting portions adapted to align with the margins of said pavement, and a jointed centrally located member having downwardly projecting means for temporarily 65 holding said center strip, whereby said central member may be curved when it is desired to fit a curved center strip.

4. An installing device for concrete pavements comprising a rigid rectangular frame, 70 guides carried by the side of said frame, bars slidably carried in said guides and adapted to project from the ends of said frame and having means adapted to align with the marginal edges of said pavement, 75 means for locking said bars in adjusted position, a centrally located jointed member having a plurality of fingers for temporarily holding said strip in position, and removable means for holding said jointed 80 member straight.

5. An installing device for concrete pavements having a center strip comprising a rigid rectangular frame, a pair of side bars 85 adjustably carried by each end of the frame and adapted to project from such frame and having portions adapted to align with the marginal edges of the pavement, a centrally located member for temporarily holding said center strip, and supporting feet 90 carried by said side members and adapted to support said side members intermediate their ends.

In testimony that I claim the foregoing I have hereunto set my hand at Oshkosh, in 95 the county of Winnebago and State of Wisconsin.

WILLIAM H. HUBBARD.