

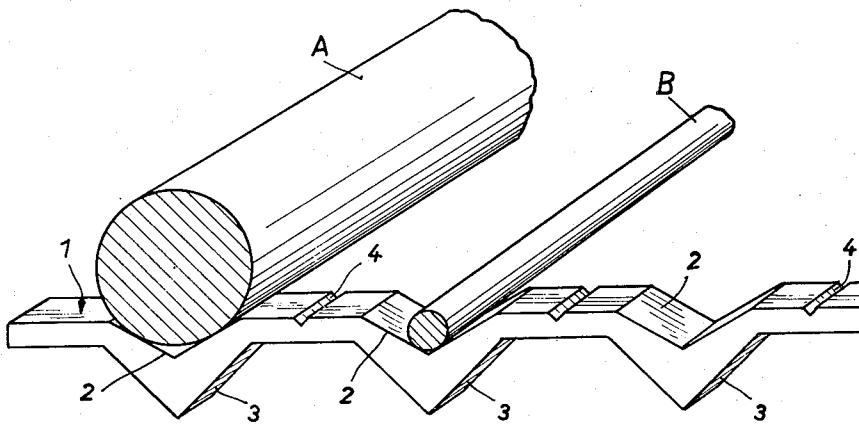
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SPACING SUPPORT FOR REINFORCING BARS

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SPACING SUPPORT FOR REINFORCING BARS

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1 Claim. (Cl. 52—687)

The present invention relates to a spacing support for reinforcing bars in concrete constructions. Such spacing supports serve to maintain the reinforcing bars at the correct position and distance with respect to the sheathing or casing in the production of reinforced concrete.

Spacing supports for this purpose are known in a large variety of different constructions.

One of these known support constructions is formed from a wire in such manner that two feet are horizontally supported on the casing while two legs are connected with each other by a supporting web for the reinforcing bars. Thus for each reinforcing bar several of such supports are required and such supports may be used for only one particular spacing of the reinforcing bars from the casing and they do not provide for the correct relative distance between the parallel reinforcing bars.

A further substantial drawback of this and of all other known spacing supports made of metal consists in the fact that in the finished concrete constructions the feet of the spacing support originally resting on the casing, appear directly at the surface of the finished concrete element where they are rapidly attacked by rust and thereby produce unsightly rust spots.

This last-mentioned drawback is prevented by another known construction of a spacing support, which is formed as a disc and has a recess for receiving a reinforcing bar. This disc is made of concrete, of porcelain or other non oxidizable material that does not have any other properties that may cause damage to the concrete. However, this known embodiment also can only maintain the reinforcing bar at a determined distance from the casing and does not provide for a correct positioning of the bars in the direction perpendicular thereto, and thereby failing to provide for a correct spacing of the bars which lie parallel to one another side by side.

This last-mentioned aim is obtained while simultaneously all other drawbacks of known spacing supports are avoided by the spacing support of the present invention which consists of a narrow strip of non-metallic material comprising means capable of simultaneously maintaining several parallel reinforcing bars at a determined distance from each other and from a reference plane.

In a particular embodiment of the spacing support of the present invention the strip may be provided on one side with recesses arranged in spaced relationship from each other at distances that correspond to the usual distances separating reinforcing bars in concrete constructions, said recesses being so formed as to be adapted to receive reinforcing bars of different diameters, the other side of the strip being provided with projections adapted to rest with an approximately punctiform area on the casing, the height of such projections being such that the reinforcing bars are maintained at the desired distance from the casing.

Other features and advantages of the invention will become apparent from the description now to follow, of a preferred embodiment thereof, given by way of example only and in which reference will be made to the accompanying drawing showing, in its sole figure, a perspective view of the embodiment.

In the drawing reference numeral 1 designates a strip of non-metallic material, for example of Eternit concrete, wood cement, ceramic material or of polyninylochloride. This strip 1 is provided throughout its length and regularly spaced on one side with recesses 2 so formed that they may receive reinforcing bars A or B respectively, of different diameters. On the side opposite these recesses the strip has projections 3 forming a punctiform seating for the strip 1 on a casing. Such a seating is virtually undetectable in the finished concrete element. In the represented embodiment the strip a zig-zag shape whereby the teeth simultaneously form on the one side the recesses 2 for the reinforcing bars and on the other side the projections 3 have apexes forming the punctiform seating of the strip on the casing. Between adjacent recesses and projections the strip is provided with small cuts 4 facilitating a shortening of the strip to the desired length by breaking the strip at these places.

Since usually the reinforcing bars are laid in one plane which extends about 15 mm. above the casing the projections preferably are made this height. Furthermore, since the usual distances between adjacent parallel bars is either 5, 10, 15, 20, 25 or 30 cm. the optimum distance between two subsequent recesses 2 will be 5 cm. The thickness of the strip is advantageously not more than 1 cm.

As seen in the figure, the included angle of the projections 3 is less than the included angle of the recesses 2 whereby there is obtained maximum thickness of the strip in a vertical plane containing the apexes of the recesses and the apexes of the corresponding projections. Thus, maximum rigidity is provided in the strip at precisely the location where the weight of the rods is resisted.

Of course it is also possible to select the zig-zag form of the strip 1 such that it may be used on the one or on the other side for receiving the reinforcing bars or for forming the seating on the casing. Further means may be provided at the strip for securing connecting wires serving to secure the reinforcing bars. Finally borings could be provided in the strip through which the spacing support may be secured to the casing by means of nails.

I claim:

A spacing support for concrete reinforcing bars adapted to simultaneously maintain a plurality of reinforcing bars at a determined spacing from one another as well as from a planar surface of a form in which concrete is to be poured, said support comprising an elongated narrow strip of non-metallic material having spaced smooth V-shaped recesses in one surface thereof for receiving reinforcing bars in spaced relation, said V-shaped recesses being adapted for centrally accommodating the reinforcing bars which are of generally circular section, said strip including a plurality of smooth V-shaped projections each having an apex located directly beneath the apex of a corresponding V-shaped recess and in alignment therewith, the apexes of said projections lying in a common plane so that the strip can be supported on a planar surface of the form and the reinforcing bars which are accommodated in the recesses will be maintained in desired spaced relation therefrom, said recesses by virtue of the V-shape thereof being adapted to support bars of various diameter therein always in the same vertical plane by contact of said bars with said recesses along lines of contact in opposite surfaces of the recesses whereby said strip alone is able to retain the bars in stable supported relation in the recesses, the recesses and projections re-

spectively defining included angles, the projections defining smaller angles whereby the support has maximum thickness in the plane of the apexes.

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