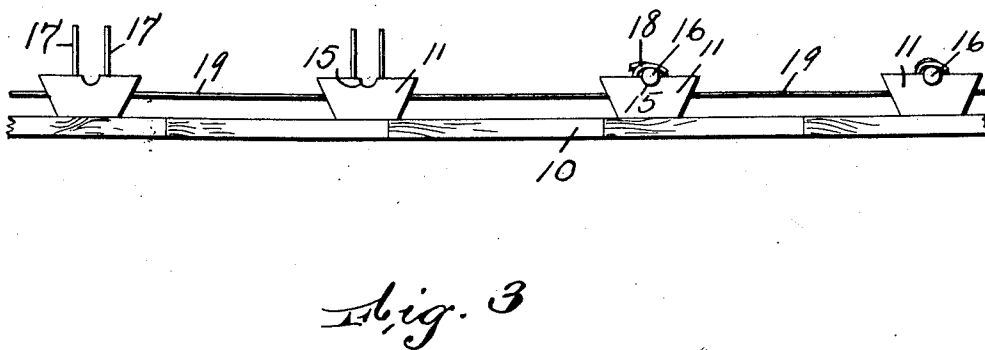
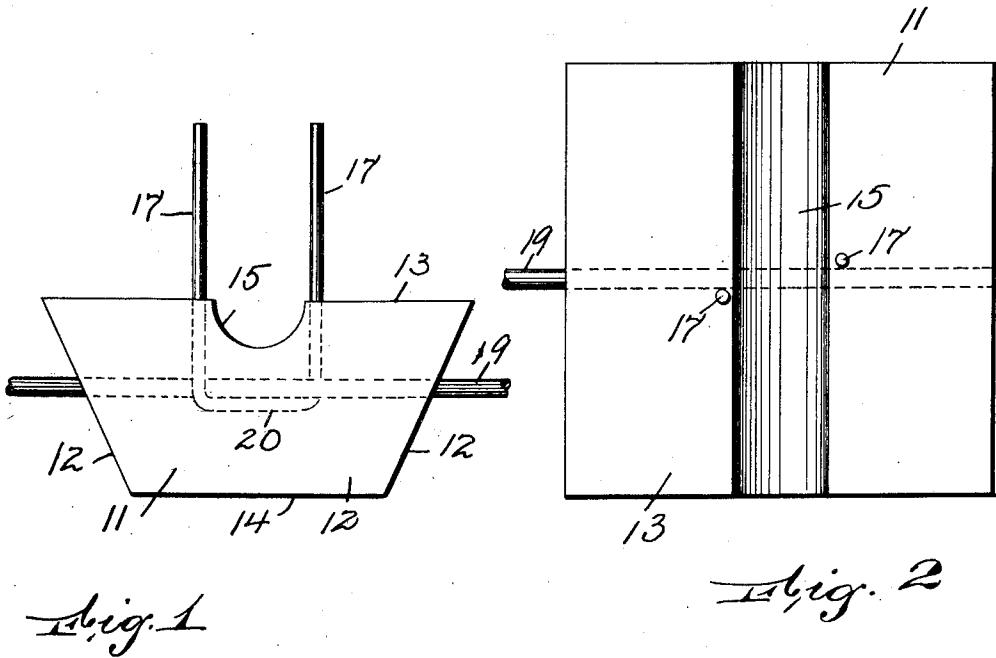


G. H. REED.
SUPPORT FOR REINFORCING RODS.
APPLICATION FILED APR. 23, 1920.

1,350,385.

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SUPPORT FOR REINFORCING-RODS.

1,350,335.

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To all whom it may concern:

Be it known that I, GEORGE H. REED, a citizen of the United States, and a resident of Newark, county of Essex, and State of New Jersey, have invented certain new and useful Improvements in Supports for Reinforcing-Rods, of which the following is a specification.

This invention relates to a support in which blocks or holders for reinforcing rods are held in position during the building of concrete structures, and is used particularly for holding the reinforcing rods in concrete floors.

The invention relates to a device of this kind which presents on the outer surface of the finished structure no metallic or other elements which can be attacked by oxidation or other disintegrating processes, thus insuring no exposure of the reinforcing rods, which are usually of iron or steel, to any disintegration.

The invention is further designed to provide a support which can be arranged in series, that is, the supporting clips or blocks connected by a strand so as to insure the proper spacing of the rods and also holding them parallel, thus cutting down the time consumed in alining such rods, preventing a realinement due to any accidental disalignment, and thus economizing very much in the time and labor necessary for the building of such concrete structures.

The invention is illustrated in the accompanying drawing, in which Figure 1 is a side view of a support made according to my improved invention. Fig. 2 is a top view of the support shown in Fig. 1, and Fig. 3 shows a row of the supports in position on centering, two of the supports being shown as supporting reinforcing rods.

It is essential, in complying with the specifications in the building of structures, to space the rods a fixed distance apart, depending on the type of structure and the strains to which it is to be subjected, these rods being kept in place until the concrete has been poured around them and over them and allowed to set, after which they are firmly incased.

I preferably provide a block of cementitious material, preferably made of cement or concrete, and which is designed to be supported by suitable means. In the drawing, in Fig. 3, I show such blocks supported on

centering represented by the reference numeral 10. The blocks are constructed so that they are anchored in the concrete after it has been completed, so that they can not be withdrawn or become loosened, one form of block to bring this securing about being shown in the accompanying illustration, in which the support or block 11 is provided with tapered sides 12, two or more of the sides being tapered. As the top face 13 and the bottom face 14 are usually made flat, the block has the appearance of an inverted truncated pyramid. The bottom face 14 is adapted to be laid on a support, such as the centering 10, and the top face is provided with means for positioning a reinforcing rod on it. This is usually done by placing a groove 15 in the top face of the block to receive a reinforcing rod 16.

If desired, an additional securing means can be provided by the wire or wires 17, these being usually made in the form of a staple, that is, it is placed in the block when the block is manufactured, and its ends project, and, being easily bendable, can be folded over by hand or by tapping it with a tool to assume the position shown at 18 in Fig. 3, and when so bent over the reinforcing rod 16 is held against movement.

The proper number of these supports are placed along the length of a rod so that it is supported at spaced intervals; in other words, it is relatively straight from end to end.

I prefer to make these blocks in series, that is, I connect all the blocks in the series by a strand 19, which is usually made of wire about $\frac{3}{16}$ ths of an inch thick, around which the blocks are molded at intervals, the blocks on the same strand usually being spaced the same distance apart, so that when a row of the blocks is put down and another row is placed in alinement therewith, the reinforcing rods 16 are not only supported along their lengths, but are positively spaced, and when pulled by the positioning means do not get out of alinement relative to one another or relative to what will be the bottom face of the floor or other structure.

To prevent the wires 17 from pulling out I prefer to embed them so that the cross arm or connecting strip 20 is underneath the strand 19 and the two ends project up on opposite sides of the strand, this being par-

ticularly evident from Fig. 2. This wire can not then be pulled out and is securely fastened so as to withstand the bending of it over the reinforcing rod and the bending is localized to that part of the wire that projects above the block. The wire 17 can be held in place on the strand 19 by other agencies than the block 11, for instance, the loop or part 20 can be welded to the strand 19 before the block is molded around them, or other fastening means between the wire and strand can be used.

It will be evident that this form of support can be coiled or rolled and can then be straightened out when necessary to use it on a building, and furthermore, the space between the blocks 11 in any one series can be varied so that different intervals between reinforcing rods can be provided, according to the kind of support used.

After the concrete has been placed around the reinforcing rods and the centering is removed, the bottom faces 14 of the blocks are substantially flush with the bottom face of the floor and an even non-corrosive substance is presented at all places in the surface.

It will be evident that the details of construction can be changed without departing from the scope of the invention.

I claim:

1. A reinforcing rod support comprising a series of blocks of cementitious material, a continuous strand around which the blocks are molded at spaced intervals, and means on each block for holding a reinforcing rod.

2. A reinforcing rod support comprising a series of blocks of cementitious material, a strand passing through said blocks so that they are held in spaced relation when the strand is extended, the inner face of each block having a groove therein extending from side to side of the block, and means for holding a rod in the groove.

3. A reinforcing rod support comprising a series of blocks of cementitious material, a strand passing through said blocks so that they are held in spaced relation when the strand is extended, the inner face of each block having a groove therein extending from side to side of the block, a staple in each block, the loop of the staple passing under the strand, the ends of the staple projecting from the face of the block so that the ends of the wire can be bent to hold a rod placed on the face of the block.

In testimony that I claim the foregoing, I have hereto set my hand, this 20th day of April, 1920.

GEO. H. REED.