R. ANDERSON.

BEAM FORM AND JOIST FOR CONCRETE STRUCTURES.

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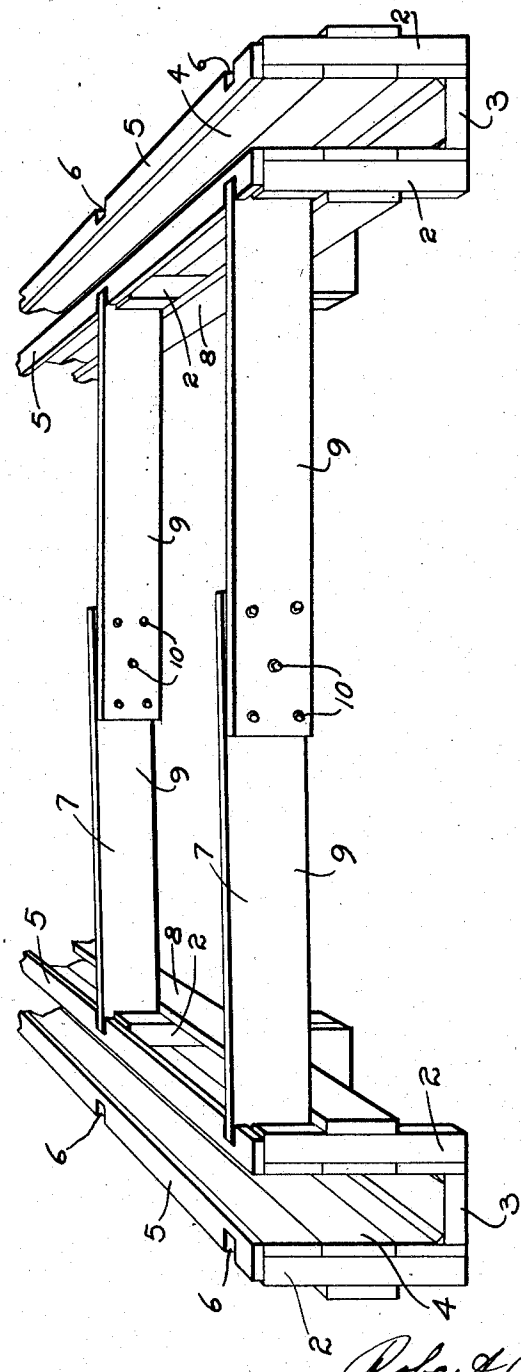

Witnesses

W. Thornton Bogert

E. W. McCallister.

Inventor

Robert Anderson

By Walter F. Murray

Attorney

UNITED STATES PATENT OFFICE.

ROBERT ANDERSON, OF CINCINNATI, OHIO.

BEAM-FORM AND JOIST FOR CONCRETE STRUCTURES.

1,015,279. Specification of Letters Patent. Patented Jan. 23, 1912.

Application filed December 27, 1910. Serial No. 599,599.

To all whom it may concern:

Be it known that I, ROBERT ANDERSON, a citizen of the United States of America, and resident of Cincinnati, county of Hamilton, and State of Ohio, have invented certain new and useful Improvements in Beam-Forms and Joists for Concrete Structures, of which the following is a specification.

This invention relates to concrete construction, and particularly the construction of beam forms and the arrangements of joist for supporting the floor panel forms.

In concrete construction, it is desirable to so construct the separate forms, that each form will coöperate with the other forms in the assembled form work, and will perform its function in supporting the other forms and securing them in place. It is also desirable to produce separate forms, which may be assembled into, and be removed from, an organized form work, without being damaged.

An object of this invention is to produce a form for molding concrete beams, which is provided with means for supporting joist forming a part of the organized form work.

A further object is to produce an extensible joist for supporting the floor panels of the assembled form work.

These and other objects, I attain by means of apparatus embodying the features herein described, and illustrated in the drawings accompanying this application and forming a part of it.

In the drawings, I have illustrated in a perspective view portions of beam forms embodying my invention, in connection with extensible joists for supporting the floor panel forms.

Referring to the drawings:—Each beam form illustrated consists of a channel-shaped mold, formed of vertical battens 2, cross battens 3, extending between the lower ends of the battens 2 and molding boards 4, which are mounted on the inner faces of the battens 2 and on the outer faces of the battens 3. The vertical battens 2, and, consequently the cross battens 3 are spaced along the length of each beam form, and the coping 5 is mounted on each side of the mold and is secured to the upper ends of the battens 5, so that its inner end is located flush with the molding face of the adjacent molding boards. The overhanging portion of each coping 5 is provided with notches 6, which are located at points immediately adjacent to and on one side of each batten 2. Each notch 6 is adapted to receive an end of a joist 7, and is so located that the joist may bear against and be held in place by the adjacent batten 2. A longitudinally extending supporting strip 8 is secured to the battens 2, and is so located on them, that the upper edges of the joist 7, supported by it, will be flush with the upper face of the coping 5. After the beam forms are in place in the assembled form work, the joists 7 are located between adjacent beam forms, by inserting their ends into the notches 6 and by supporting them on the strips 8. If desired the joist may be temporarily secured to the battens 2 by means of double-headed or removable nails.

Any suitable form of joist may be employed, but in the drawings, I have illustrated extensible joist formed of two overlapping pieces 9, which are secured together at their overlapping ends by means of removable or double-headed nails. The pieces are arranged to provide a slight camber in each joist. I have found by actual experiment that joist formed as illustrated, are as strong and more rigid than joist formed of a single piece of timber. The joist may be varied in length by withdrawing the double-headed nails 10 and varying the relative position of the pieces, so as to increase or decrease the length of the overlapping joint. This may be accomplished by using the double-headed nails, without materially injuring the joist, and their length may be changed, so that they can be used over and over again in the construction of different concrete structures.

What I claim is:—

1. A form for concrete members provided with vertically extending battens, spaced along the form, a coping secured to the battens and provided with joist-receiving notches, located immediately adjacent to and on one side of the battens, and joist-supporting means secured to the battens.

2. A form for concrete members provided with vertically extending battens spaced along the form, a coping secured to the battens and provided with a joist-receiving notch, located immediately adjacent to and on one side of each batten, and joist-supporting strips extending longitudinally of the form and secured to the battens.

3. In combination in a form work, beam forms provided with vertically extending

battens spaced longitudinally of the form, coping mounted on the form and provided with a joist-receiving notch, located immediately adjacent to and on one side of each batten, and a joist-supporting strip mounted on the battens and joist located on said strips with their ends projecting into said notches.

4. A form for concrete members provided with vertically extending battens spaced along the form, a coping secured to the battens and provided with joist-receiving notches, located immediately adjacent to and on one side of each batten, joist-supporting strips extending longitudinally of the form and secured to the battens, and extensible joists whose ends engage the notches in adjacent copings.

ROBERT ANDERSON.

Witnesses:
WALTER F. MURRAY,
E. W. MCCALLISTER.