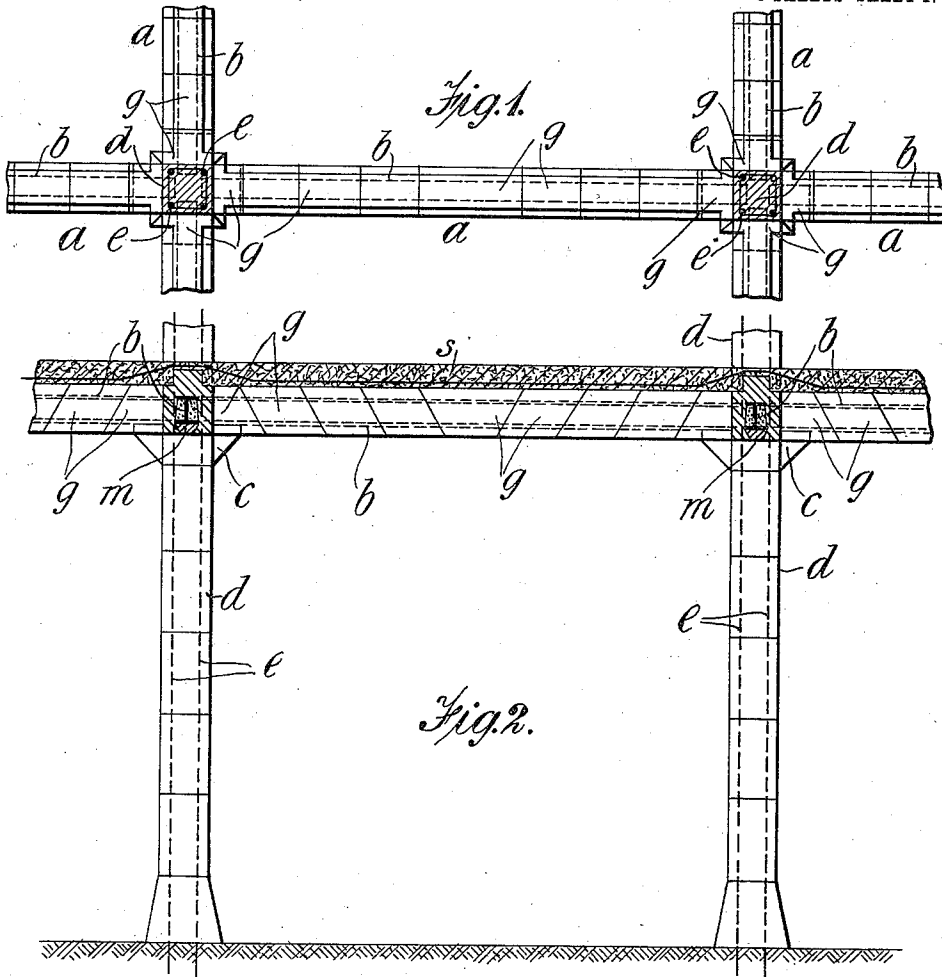


F. D. HUNTINGTON.
 REINFORCED CONCRETE STRUCTURE.
 APPLICATION FILED NOV. 17, 1910.

1,045,292.

Patented Nov. 26, 1912.

3 SHEETS—SHEET 1.



WITNESSES

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 Emory L. Groff.

INVENTOR

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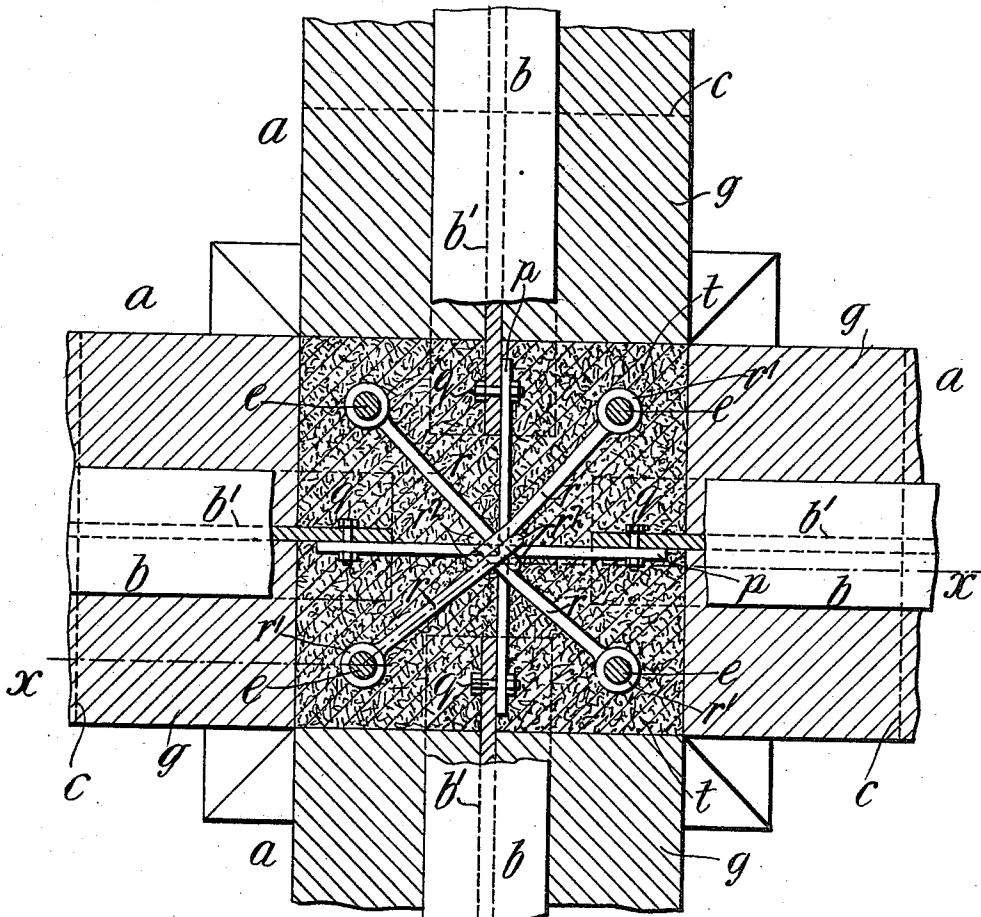


Fig. 3.

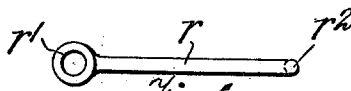


Fig. 5.

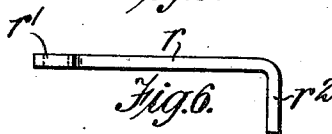


Fig. 6.

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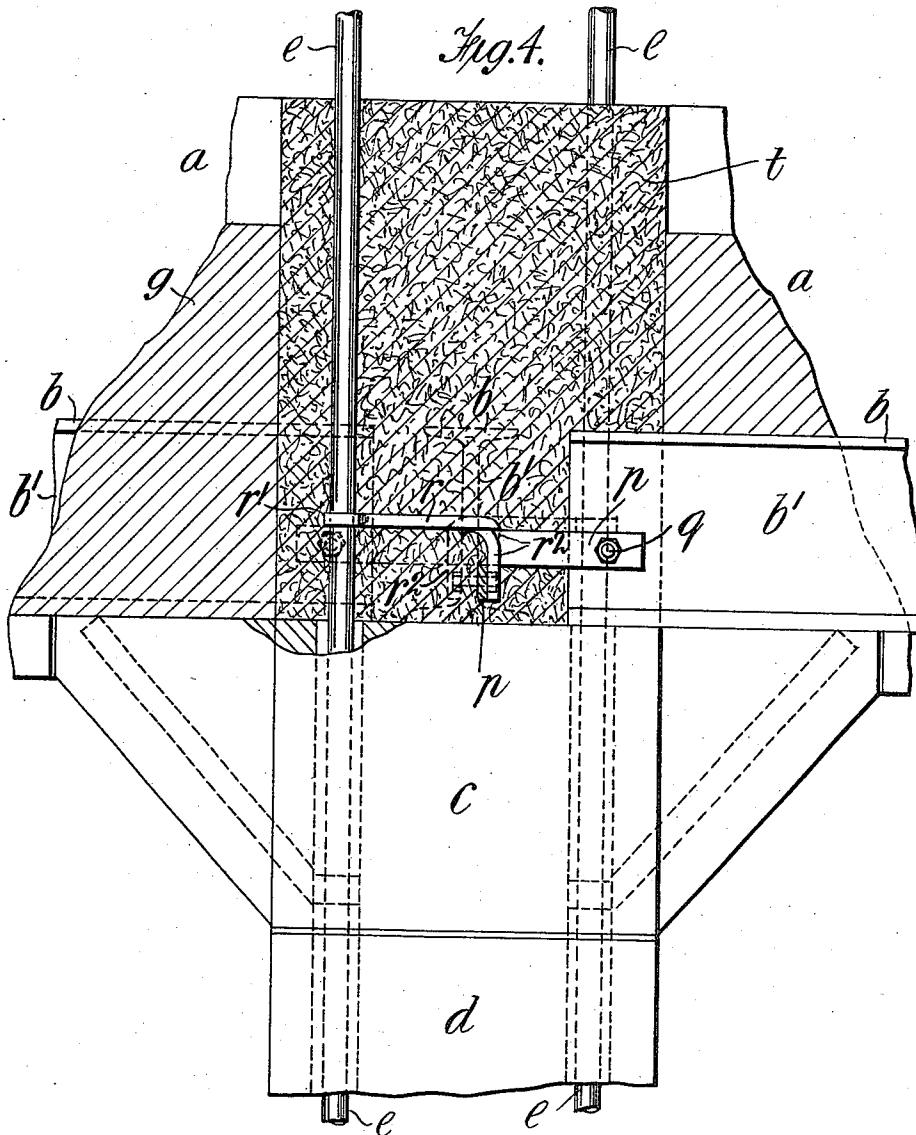
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3 SHEETS—SHEET 3.



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UNITED STATES PATENT OFFICE.

FREDERIC DAN HUNTINGTON, OF LONDON, ENGLAND.

REINFORCED CONCRETE STRUCTURE.

1,045,292.

Specification of Letters Patent.

Patented Nov. 26, 1912.

Application filed November 17, 1910. Serial No. 592,916.

To all whom it may concern:

Be it known that I, FREDERIC DAN HUNTINGTON, a citizen of the United States of America, and resident of London, England, have invented certain new and useful Improvements in Reinforced Concrete Structures, of which the following is a specification.

This invention, which relates to reinforced concrete structures, has for its objects the improved construction and arrangement of reinforced beams and the manner and means by which the ends of the beams resting upon the column caps are connected together in the concrete junction blocks formed *in situ*.

The invention is illustrated by the accompanying sheets of drawings in which:—

Figure 1 is a part sectional plan view, but with flooring removed. Fig. 2 is a part sectional elevation of a structure constructed in accordance with the present invention. Fig. 3 is a sectional plan view illustrating the method of connecting the metal joists to a reinforced beam. Fig. 4 is a vertical section on line *x, x*—Fig. 3. Figs. 5 and 6 are respectively plan and side views of one of the eyed connecting hooks.

Like letters of reference indicate corresponding parts in the several figures.

In carrying the invention into effect the beams indicated by *a* as a whole in Figs. 1 and 2 are built up of metal joists *b* which rest upon the cruciform shaped column caps *c* of the columns *d* which are formed of previously made concrete blocks of known construction and reinforced by bonding rods *e*.

Referring now to Figs. 3 to 6 which are illustrative of the method of connecting four beams *a* resting upon a column cap *c*, the ends of the two opposite joists *b* are connected together by tie-bars *p* secured by bolts and nut *q* to the webs *b'* of said joists *b*, and

these tie-bars *p* which cross one another are in turn connected by hooked and eyed connections *r* which are strung by their eyes *r'* on to the vertical bonding rods *e* and above the column cap, the ends *r²* of said connections being bent downward so that when in position they engage with the crossed ties *p* as shown in Figs. 3 and 4. The space formed by the backs of the skewbacks is then filled with cement *t* to the level of the top of said skewbacks and when set forms with the ties and hooks a firm consolidated junction block. A reinforced concrete slab floor *s* is shown in Fig. 1 but any form of floor construction may be employed.

Having now described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:—

1. A reinforced concrete structure comprising vertical supporting columns having embedded in each corner portion thereof vertical reinforcing rods, horizontal beams having their ends embedded in said columns, caps on each of the said supporting columns providing seats for the beams, tie bars for connecting the ends of the oppositely disposed beams, and connecting hooks engaging the central meeting portion of the tie bars mounted on the vertical rods.

2. A reinforced concrete structure comprising supporting columns provided with reinforcing rods, beams having their ends embedded therein, tie bars connecting the ends of oppositely disposed beams, and hooks pivotally mounted on said rods and engaging the tie bars.

In testimony whereof I affix my signature in presence of two witnesses.

FREDERIC DAN HUNTINGTON.

Witnesses:

ROBT. HUNTER,
E. CHAS. AXE.