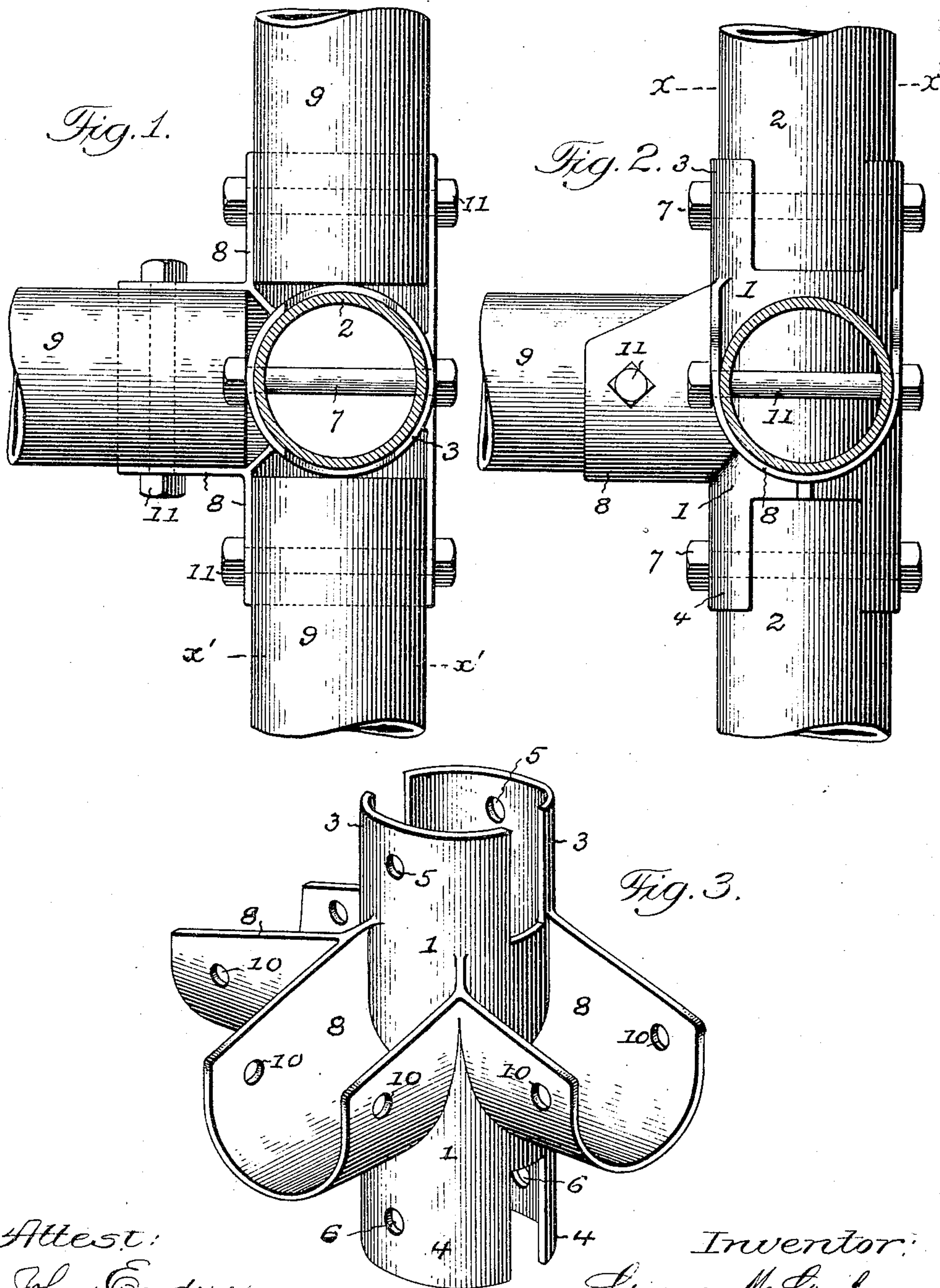


No. 885,992.

PATENTED APR. 28, 1908.

G. M. GRAHAM.
FITTING FOR REINFORCED CONCRETE STRUCTURES.
APPLICATION FILED DEC. 10, 1907.



Attest:
John Enders.
Henry Woz.

Inventor:
George M. Graham,
by Robert Burns
Attorney.

UNITED STATES PATENT OFFICE.

GEORGE M. GRAHAM, OF CHICAGO, ILLINOIS, ASSIGNOR TO G. A. EDWARD KOHLER, OF CHICAGO, ILLINOIS.

FITTING FOR REINFORCED CONCRETE STRUCTURES.

No. 885,992.

Specification of Letters Patent.

Patented April 23, 1908.

Application filed December 10, 1907. Serial No. 465,391.

To all whom it may concern:

Be it known that I, GEORGE M. GRAHAM, a citizen of the United States of America, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Fittings for Reinforced Concrete Structures, of which the following is a specification.

This invention relates to the type of fittings for uniting the tubular members of the skeleton reinforcing frames of concrete structures set forth in my prior patent No. 865,489 of Sept. 10, 1907; and the present improvement has for its object to provide an effective and economical formation and combination of the fitting or coupling parts adapted to afford an easy and economical assemblage of the skeleton reinforcing frame members, and with which a strong and substantial connection of said frame members is provided, all as will hereinafter more fully appear.

In the accompanying drawings illustrative of the present invention:—Figure 1, is a horizontal sectional view on line $x-x$ Fig. 2. Fig. 2, is a vertical sectional view on line $x'-x'$ Fig. 1. Fig. 3, is a detached perspective view of the coupling or fitting.

Similar numerals of reference indicate like parts in the different views.

Referring to the drawings, 1 represents the main vertical shell or body of the fitting having a hollow cylindrical shape adapted to fit the periphery of a cylindrical column or post 2, of the skeleton reinforcing frame for concrete structures set forth in my prior Letters Patent No. 865,490, of Sept. 10, 1907. In the present improvement such body is cut away at top and bottom to form pairs 3 and 4 of opposed segmental and semi-flexible jaws or tongues adapted to be clamped upon the exterior surface of the aforesaid column 2, and to such end said jaws are provided with diametric orifices 5 and 6 for the passage of the clamping bolts 7, by which such clamping effect is produced. With such arrangement, orifices will be formed in the column 2 corresponding with the orifices 5 and 6 aforesaid, for the passage of said bolts.

8 are a series of lateral branches formed on the main body or shell 1, midway the height of the same, and in angular relation to each other to afford support and attachment for the adjacent ends of the horizontal tubular girders 9 of the reinforcing frame aforesaid.

As in my former patented construction

No. 865,489 of Sept. 10, 1907, the lateral branches 8 are of a U or stirrup shape, with their side walls extending above a horizontal plane which intersects the longitudinal axis of said branches, and as shown in Figs. 2 and 3 of the drawings; such side walls are formed with transverse bolt holes 10, on such horizontal plane for the passage of clamping bolts 11 which pass through said side walls and through diametric orifices in the tubular girders 9 aforesaid to secure the parts together.

In the present construction the coupling or fitting is adapted for ready adjustment to any required vertical position on the post or column 2, and for substantial attachment at the point to which it is adjusted; while the open top branches are adapted for the ready reception of the girder ends, and a substantial attachment of the same in place in said branches.

Having thus fully described my said invention what I claim as new and desire to secure by Letters Patent, is:—

1. A fitting for connecting together the tubular members of a reinforcing frame for concrete structures, comprising a tubular main shell having at one end a pair of semi-flexible tongues in opposed relation, and laterally disposed stirrup branches, on its sides, said branches being open at top and extending above a transverse plane intersecting the longitudinal axis of the branches, and means for drawing said tongues together, substantially as set forth.

2. A fitting for connecting together the tubular members of a reinforcing frame for concrete structures, comprising a tubular main shell having at each end a pair of semi-flexible tongues in opposed relation and laterally disposed stirrup branches on its sides, said branches being open at top and extending above a transverse plane intersecting the longitudinal axis of the branches, and means for drawing said tongues together, substantially as set forth.

3. A fitting for connecting together the cylindrical members of a reinforcing frame for concrete structures, comprising a cylindrical main shell having at one end a pair of segmental tongues in opposed relation, and laterally disposed U shaped branches on its sides, said branches being open at top and extending above a transverse plane intersecting the longitudinal axis of the branches, and means

for drawing said tongues together, substantially as set forth.

4. A fitting for connecting together the cylindrical members of a reinforcing frame for concrete structures, comprising a cylindrical main shell having at each end a pair of segmental tongues in opposed relation, and laterally disposed U shaped branches on its sides, said branches being open at top and extending above a transverse plane intersecting the longitudinal axis of the branches, and means for drawing said tongues together, substantially as set forth.

5. The combination with the vertical column and horizontal girders of a reinforcing frame for concrete structures, of a fitting consisting of a tubular main shell having at one end a pair of semi-flexible tongues in opposed relation, and laterally disposed stirrup branches on its sides, said branches being open at top and extending above a transverse plane intersecting the longitudinal axis of the branches, and bolts passing through said tongues and column and through said branches and girders to secure the parts in position, substantially as set forth.

6. The combination with the vertical column and horizontal girders of a reinforcing frame for concrete structures, of a fitting consisting of a tubular main shell having at each end a pair of semi-flexible tongues in opposed relation, and laterally disposed stirrup branches on its sides, said branches being open at top and extending above a transverse plane intersecting the longitudinal axis of the branches, and bolts passing through

said tongues and column and through said branches and girders to secure the parts in position, substantially as set forth.

7. The combination with the cylindrical column and girders of a reinforcing frame for concrete structures, of a fitting consisting of a cylindrical main shell having at one end a pair of segmental tongues in opposed relation, and laterally disposed U shaped branches on its sides, said branches being open at top and extending above a transverse plane intersecting the longitudinal axis of the branches, and bolts passing through said tongues and column and through said branches and girders to secure the parts in position, substantially as set forth.

8. The combination with the cylindrical column and girders of a reinforcing frame for concrete structures, of a fitting consisting of a cylindrical main shell having at each end a pair of segmental tongues in opposed relation, and laterally disposed U shaped branches on its sides, said branches being open at top and extending above a transverse plane intersecting the longitudinal axis of the branches, and bolts passing through said tongues and column and through said branches and girders to secure the parts in position, substantially as set forth.

Signed at Chicago, Illinois, this 29th day of November, 1907.

G. GEORGE M. GRAHAM.

Witnesses:

ROBERT BURNS,
HENRY MOE.