

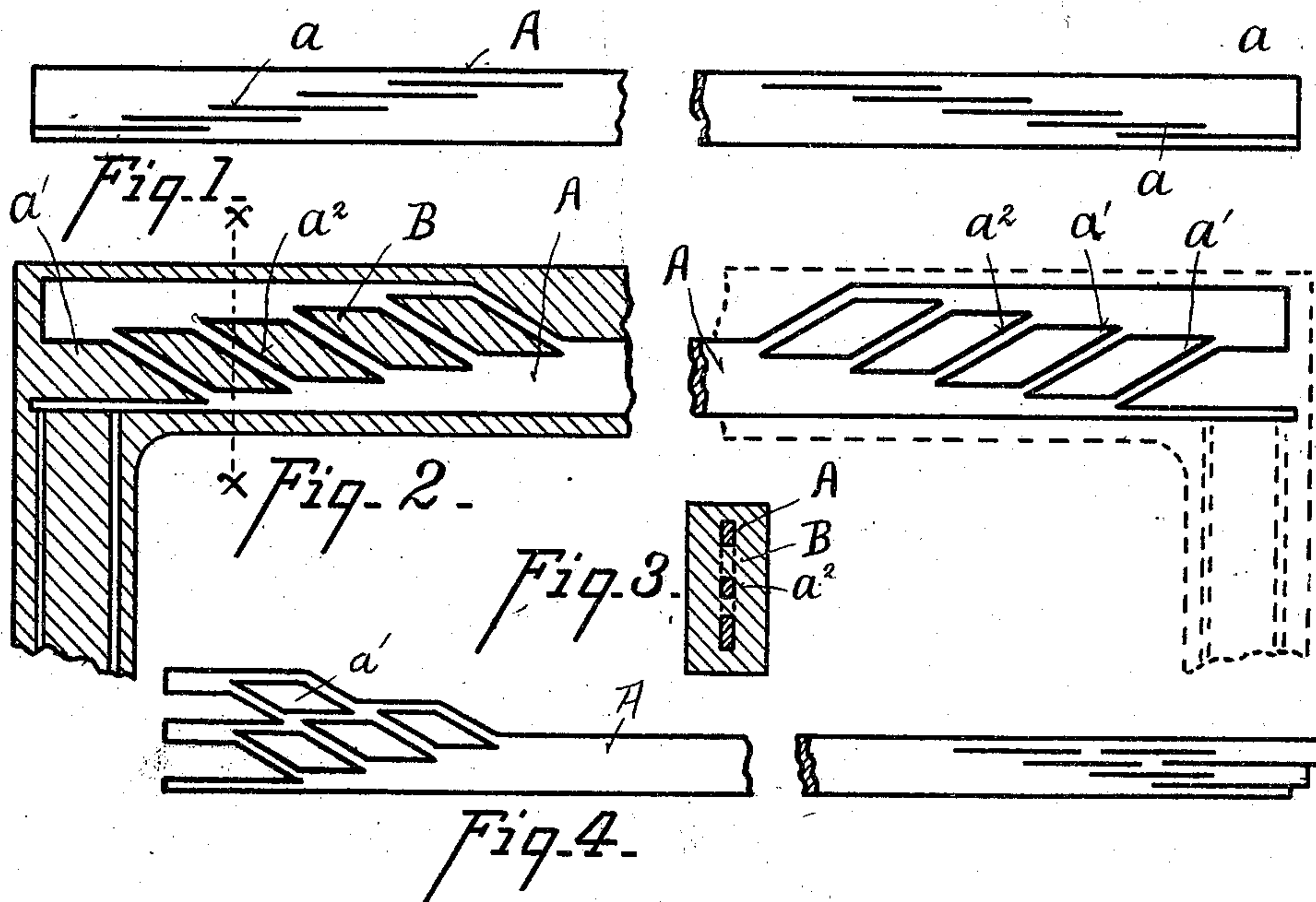
No. 848,105.

PATENTED MAR. 26, 1907.

J. A. JONES.

STRUCTURAL REINFORCED CONCRETE.

APPLICATION FILED JUNE 22, 1905.



Witnesses
C. W. Miles.
A. McCormack.

Inventor
John A. Jones
By Walter J. Murray
Attorney

UNITED STATES PATENT OFFICE.

JOHN A. JONES, OF CINCINNATI, OHIO.

STRUCTURAL REINFORCED CONCRETE.

No. 848,105.

Specification of Letters Patent.

Patented March 26, 1907.

Application filed June 22, 1905. Serial No. 266,386.

To all whom it may concern:

Be it known that I, JOHN A. JONES, a citizen of the United States of America, and a resident of Cincinnati, county of Hamilton, State of Ohio, have invented certain new and useful Improvements in Structural Reinforced Concrete, of which the following is a specification.

The object of my invention is to provide a means for reinforcing concrete against both tensile and shearing stresses which secure an increased efficiency and are made at an economical price. This object I attain by the means illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a strip of metal slitted prior to expanding it to form the metal truss of a reinforced concrete beam. Fig. 2 is a view, partially in section, of a reinforced concrete beam and partially in side elevation of the metal reinforce with the concrete removed therefrom. Fig. 3 is a cross-section taken upon line xx of Fig. 2. Fig. 4 is a side elevation of a modified form, showing one end of a bar slitted and the other expanded to form one of the ends of a truss member.

Referring to Figs. 1 to 3, the truss member is made from a strip A of metal, near each end of which a series of longitudinal slits a are made, each successive slit, counting from the bottom, being made at a greater distance

from the end than the one below it. After the member has been so slitted it is laterally expanded, which causes the slits to take the form of quadrilateral openings a' and the material between the slits to form inclined truss members a^2 . This metal reinforce is inserted in the concrete B, so that its greater width is in the direction of the strain to which it is subject in use, the concrete filling in the openings a' . The members a^2 then take the tensile and shearing strains and convey them to the upper and lower portion of the truss much as the inclined members of a truss of a bridge convey the strain to the horizontal members thereof. The concrete filling in the openings a' prevents any slipping of the truss relatively to the concrete and increases the compressive resistance of the beam.

What I claim is—

A truss member consisting of a strip of metal having had longitudinal slits cut in its ends, the slits being cut at increasing distances from the ends and the lower edges of the strip and being then expanded to draw the slits into quadrilateral openings and concrete surrounding the strip and filling in the openings.

JOHN A. JONES.

Witnesses:

WALTER F. MURRAY,
AGNES McCORMACK.