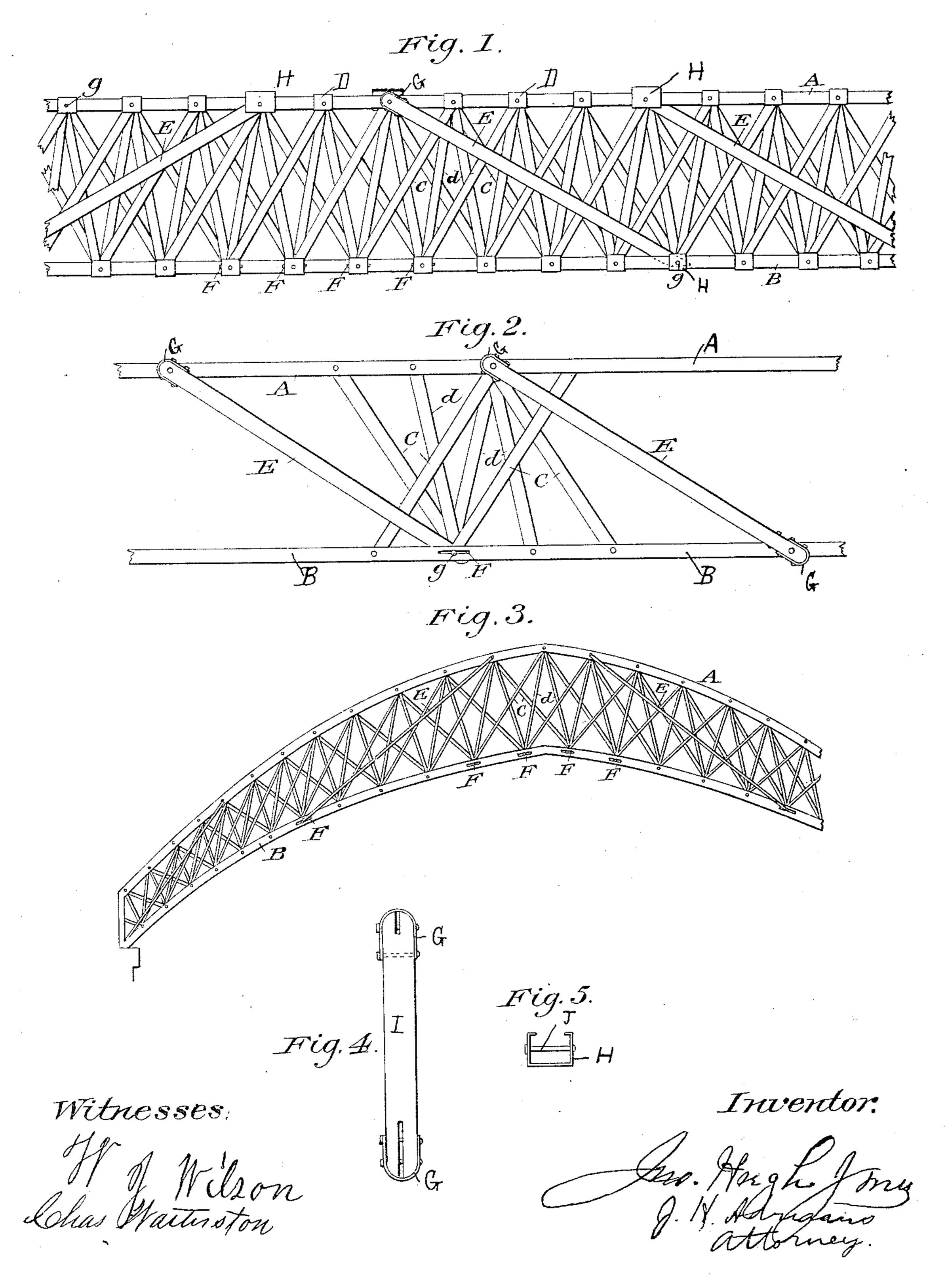
J. H. JONES.

TRUSS FOR ROOFS OR BRIDGES.

No. 318,626.

Patented May 26, 1885.



United States Patent Office.

JOHN HUGH JONES, OF CLIO, LOUISIANA.

TRUSS FOR ROOFS OR BRIDGES.

SPECIFICATION forming part of Letters Patent No. 318,626, dated May 26, 1885.

Application filed April 24, 1884. (No model.)

To all whom it may concern:

Be it known that I, John Hugh Jones, a citizen of the United States, residing at Clio, in the parish of Livingston and State of Louisiana, have invented a new and useful Truss for Roofs or Bridges, of which the following is a specification.

My invention relates to improvements in trusses for roofs or bridges; and its objects will

to hereinafter more clearly appear.

I attain the ends sought by the means illustrated in the accompanying drawings, in which Figure 1 is a vertical section of a bridge embodying the principles of my invention. Fig. 2 is a detail view of that figure. Fig. 3 shows an elliptic truss suitable for building structures generally. Fig. 4 is a separate brace, to be substituted, if the need arise, for a defective one. Fig. 5 shows a saddle or cap by which the contiguous ends of adjacent braces and counter-braces are united.

Similar designations indicate corresponding

parts.

A and B are respectively the upper and lower chords, to which the braces are fastened movably.

CCrepresent a series of braces forming obtuse angles with the chord B.

DD represent a series of caps or nests, each 30 retaining five braces, CC d d E, in position on the chords.

E E are a series of large braces by which a pressure exerted at one point is transmitted for a considerable distance to a fixed support or pier mediately.

G G represent terminal caps on the braces to counteract wear and decay of the material.

H H are saddles which connect the ends of five coterminous braces, wherein they are held 40 by bolts J J movable in the slots F F in the chord B, or rigidly, according to location.

I represents a duplicate brace so constructed as to permit its ready substitution for any defective or worn brace.

d are a series of braces forming acute an- 45 gles with the chord A.

g g are bolts uniting adjoining ends of braces

terminating at the same place.

It will be understood that the braces E E come into staying action only when the nor- 50 mal degree of deflection of the truss under a load has been reached, and so takes off the braces and counterbraces the excess of strain, and by reason of their length they serve to transmit the pressure for a long distance on 55 either side of the cause.

The purpose of the slots F F is to permit oscillation therein of the bolts g g by reason of the action of the approaching weight on the braces d d E E, which relieve the upper chord. 60

The saddles H are so constructed as to hook on each side of chords A B, and after placing the coterminous ends of adjacent braces in position therein they are secured together with the saddles by a king-bolt, J. Washers are 65 interposed between adjacent ends of braces to minimize wear and permit ventilation.

Having thus fully described my invention,

what I claim is—

1. The braces C C d d, in combination with 70 the braces E E and chord B, having slots F, for the purpose set forth.

2. The braces E E, in combination with the

saddles H and chords B, having slots F.

3. The braces C C d d, in combination with 75 the braces E E, saddles H, and chord B, provided with slots F.

4. The braces C C d d, in combination with the caps D D, approximately flush with the chords, and chords A B.

5. The chord B, having slots F, in combination with the braces C C E E d d, caps D D, and pins g g.

JOHN HUGH JONES.

Witnesses:

JESSE H. MASSIE, RIVERS M. FREEMAN.