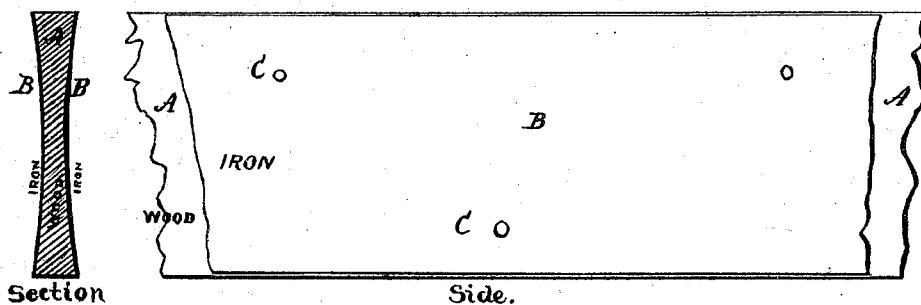


W. W. LUMMUS.
Beams for Floors.

No. 139,903.

Patented June 17, 1873.



WITNESSES.

J. Dennis Jr.
Edw. F. Brown

INVENTOR.

Wm W Lummus

UNITED STATES PATENT OFFICE.

WILLIAM W. LUMMUS, OF LYNN, MASSACHUSETTS.

IMPROVEMENT IN BEAMS FOR FLOORS.

Specification forming part of Letters Patent No. **139,903**, dated June 17, 1873; application filed November 18, 1872.

To all whom it may concern:

Be it known that I, WILLIAM W. LUMMUS, of Lynn, Essex county, in the State of Massachusetts, have invented certain new and useful Improvements in Beams, Floor-Joist, and Rafters; and I hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings forming part of this specification.

The nature or essence of my invention consists in a wooden beam having its vertical sides slightly hollowed or concave, and strengthened and protected by metal plates arched or curved to correspond with the sides of the beam, and connected by bolts or rivets through the beam.

In the accompanying drawings, Figure 1 is the elevation of the side of a beam with my improvements, and Fig. 2 is a cross-section of the same.

In the above-mentioned drawings, A is a beam of wood with its vertical sides slightly hollowed or concave to fit the curved or arched metal plates B B applied to its sides to strengthen and protect it, and prevent it from burning with the facility it would do if not protected by the iron. These iron plates B B

may be connected or fastened together and to the beam of wood by bolts or rivets C C passing through them and through the beam of wood.

The advantages of this invention are as follows, viz: Simplicity of construction and adaptation to service, economy in the use of iron, getting the greatest strength from a given thickness of iron with the least danger of bending, buckling, or collapsing, furnishing wood for nailing boards, laths, furrings, roofing, flooring or ceiling materials, which wooden nailing is protected from fire by the iron plates.

What I claim as my invention and improvement is—

A wooden beam having its vertical sides slightly hollowed or concave, and strengthened and protected by metal plates arched or curved to correspond with the sides of the beam, and connected by bolts or rivets through the beam, substantially as described.

WILLIAM W. LUMMUS.

Witnesses:

J. DENNIS, Jr.,
EDM. F. BROWN.