

(No Model.)

G. A. HOBSON.
METAL FLOORING OR ROOFING.

No. 469,804.

Patented Mar. 1, 1892.

Fig. 1.

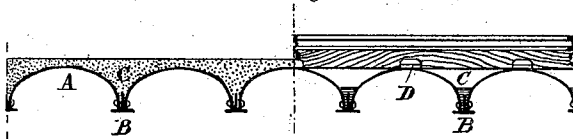


Fig. 2.

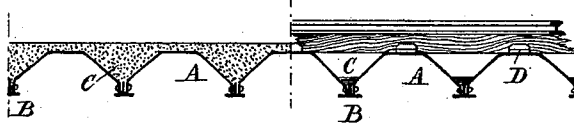


Fig. 3.

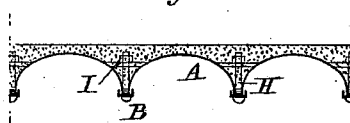
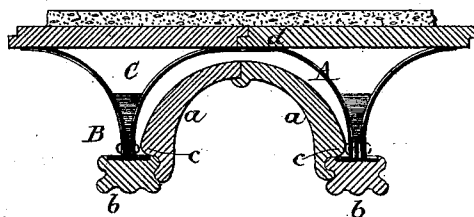


Fig. 4.



Witnesses

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per
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UNITED STATES PATENT OFFICE.

GEORGE ANDREW HOBSON, OF RICHMOND, ENGLAND.

METAL FLOORING OR ROOFING.

SPECIFICATION forming part of Letters Patent No. 469,804, dated March 1, 1892.

Application filed June 16, 1891. Serial No. 396,422. (No model.) Patented in England June 29, 1889, No. 10,565.

To all whom it may concern:

Be it known that I, GEORGE ANDREW HOBSON, a subject of the Queen of Great Britain and Ireland, residing at Coverdale Lodge, King's Road, Richmond, in the county of Surrey, in England, have invented certain new and useful Improvements in the Construction of Metal Floorings or Roofings for Bridges and other Structures; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

A patent for this invention has been obtained in England, No. 10,565, dated June 29, 1889.

My invention relates to improvements in the construction of metal floorings or roofings, whereby I obtain great strength and facility of construction, as every part is easily accessible to a hydraulic riveter or rivets are dispensed with.

In the accompanying drawings, Figures 1 and 2 show one construction of such metal flooring or roofing, which consists of curved or bent plates A, secured together on the under side by iron or steel bars B of T or other section riveted between the lower ends of each plate. When this construction is used for longitudinal railway-sleepers, as shown at the right-hand side of the two figures, they are held by brackets D, riveted to the crown of the plates, and they can be made water-tight by filling in the space C with a small quantity of asphalt. When used for a flooring, the troughs are filled in with concrete or other suitable material to a uniform level and a little above the top of the plates, as shown at the left-hand side of the two figures. By preference the width of the T-iron employed is such that the gap of even small hydraulic riveters will pass over it.

In the construction shown in Fig. 3 the curved or bent plates A are secured together by placing the edges of the two adjacent plates in iron or steel bars B of channel-section, in which they are retained by the bolts H, connecting the channel-bars with stay-plates I, resting on the curved or bent plates.

In the construction shown in Fig. 4 I use the iron work, as described, and according to another of my improvements I provide it with a fire and sound proof covering, consisting of the symmetrical segments *a a*, so shaped at their lower ends as to hold the bars *b b* and bear upon the iron work, as at *c*, both the segments and bars being of any suitable composition and molded or ornamented, as desired. Above the metal structure the flooring may be formed of a layer of fire and sound proof composition *d*, over which a covering of cement or concrete may be laid.

An important advantage of these constructions of floorings or roofings is that ordinary plates and trade-sections of iron can be used which are easily obtainable.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

A metal flooring or roofing consisting of a series of arched plates and a series of inverted bars of T-section, the tables of the said bars being arranged below the edges of the plates, and the vertical webs of the bars being interposed between the ends of the plates and riveted to them, substantially as set forth.

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

GEORGE ANDREW HOBSON.

Witnesses:

WALTER ERNEST KAYES,
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