J. Dunseith's Fire Proof Floor.

Fig: 1.

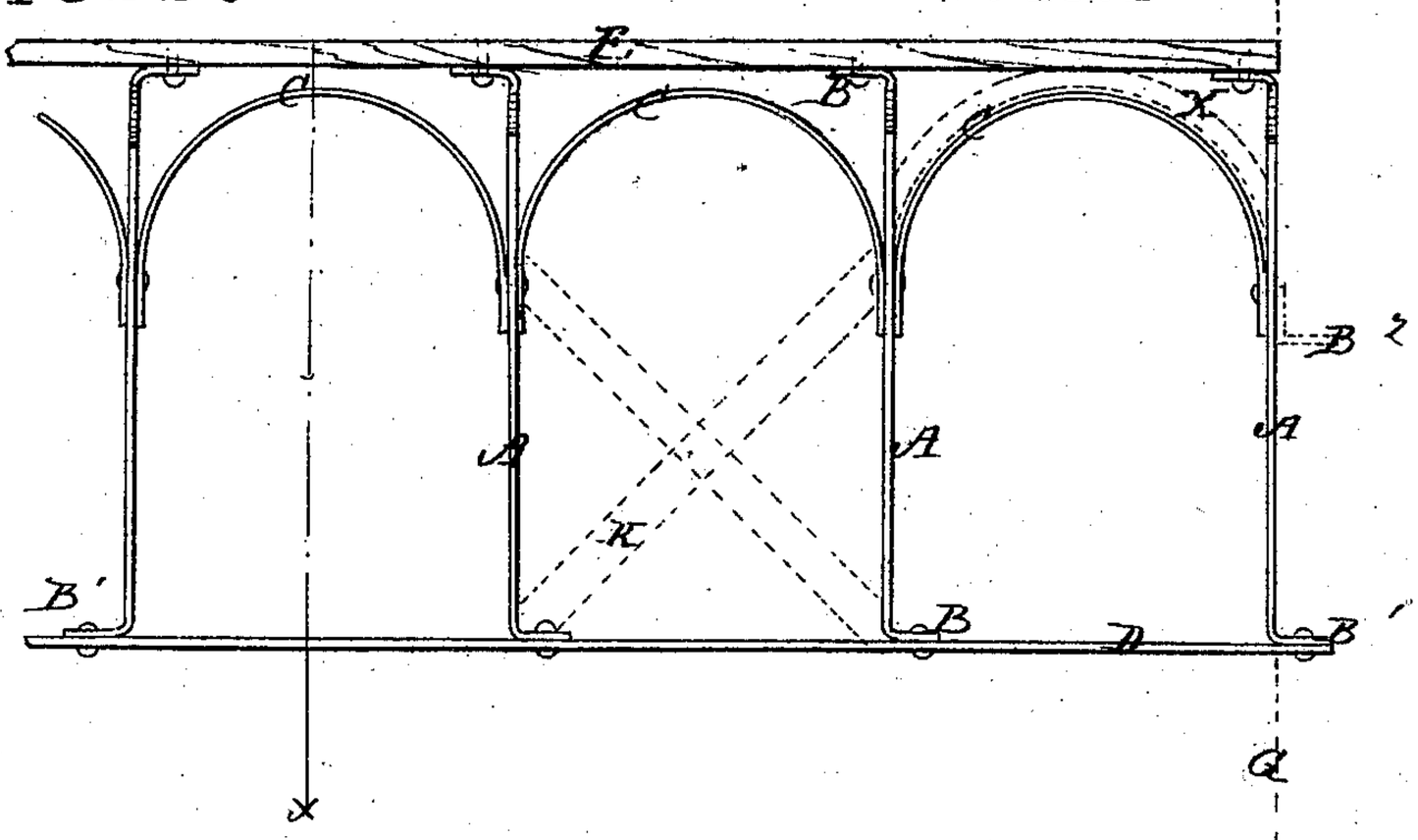

Fig: 2.

118220 PATENTED AUG 22 1871

Witnesses:

Chas Neide
Wm. H. C. Smith

Inventor:

J. Dunseith.

PER Munn & Co

Attorneys.

UNITED STATES PATENT OFFICE.

JAMES DUNSEITH, OF NEW YORK, N. Y.

IMPROVEMENT IN FIRE-PROOF FLOORS.

Specification forming part of Letters Patent No. 118,220, dated August 22, 1871.

To all whom it may concern:

Be it known that I, JAMES DUNSEITH, of the city, county, and State of New York, have invented a new and Improved Fire-Proof Floor; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to improvements in the construction of fire-proof floors; and it consists in the hereinafter-described arrangement of flat and curved sheet-metal bars or strips for the support of a top of concrete and a wood or tile covering, all substantially as specified.

Figure 1 is an end elevation of the improved arrangement of metal bars and strips, and Fig. 2 is a section on the line *x x* of Fig. 1.

Similar letters of reference indicate corresponding parts.

A represents long flat bars of thin sheet metal, with a perpendicular flange, B, turned on each edge. C represents other long thin bars, which are curved or arched, and riveted at or near their edges to the strips A, which are placed edgewise vertically, one between each two, the connection being so arranged that the tops of the arches do not rise quite as high as the tops of the bars A. The bars A have narrower strips D arranged across and riveted to the lower flanges B at suitable intervals apart, to serve as laths for holding the ceiling plastering to be applied to them, as well as to brace them laterally. Other similar strips J are arranged across and riveted to the upper flanges, or wood pieces E may be bolted on to receive and support the floor-board, shown dotted at F. The outside flanges B^1 will be built into and rest in the wall, the face of which is indicated by the dotted line G. Other flanges B^2 may be applied to the outside strips A above B^1, for letting into the wall. The ends of the strips B and C will be let into the wall perpendicular to wall G, or the strips B only may rest on the top or on beams. For a floor of great length the bars A may be lapped and riveted at H, and, if preferred, the bars C may be lapped also. The width may be regulated by the number of bars A and C connected together. Diagonal braces K may be employed if preferred. Of course the width of the bars A and C may be varied to suit the circumstances of the case, but for ordinary floors I propose to make them from about ten to fourteen inches, and believe that with bars of this width stronger floors can be made with a given weight of material than can be made by any other arrangement. I may sometimes prefer to brace the arched plates by angle-wire bars X bent over and riveted to them.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of the flanged flat bars A, arched bars C, narrow transverse strips D and J, or wood pieces E, all arranged substantially as specified.

JAMES DUNSEITH.

Witnesses:
GEO. W. MABEE,
T. B. MOSHER.