R. B. HIGGINS.

TEMPORARY SUPPORT FOR THE FILLING OF FIREPROOF STRUCTURES.

APPLICATION FILED APR. 23, 1908.

953,014. Patented Mar. 22, 1910.

2 SHEETS—SHEET 1.

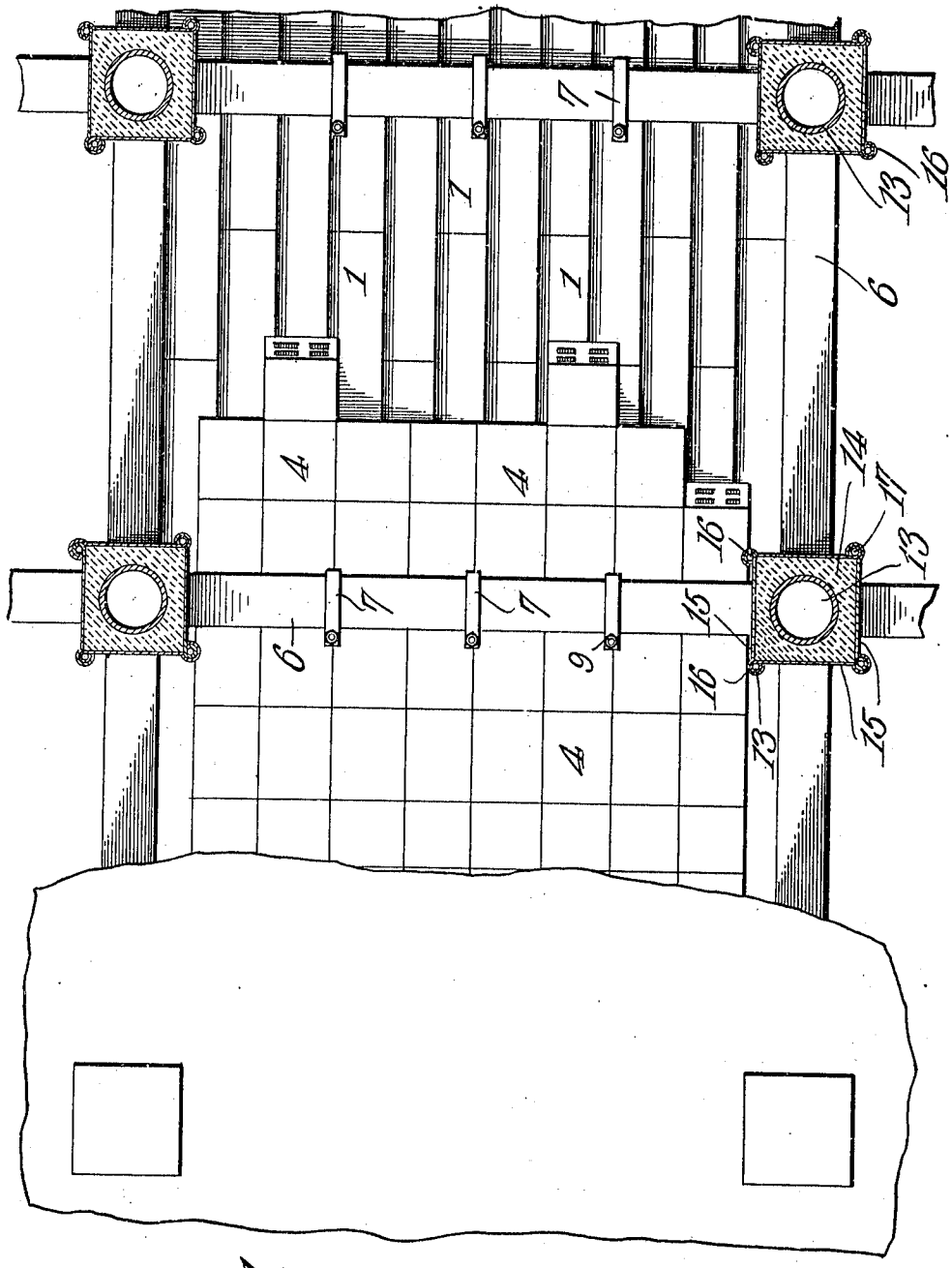


Fig. 1.

Witnesses

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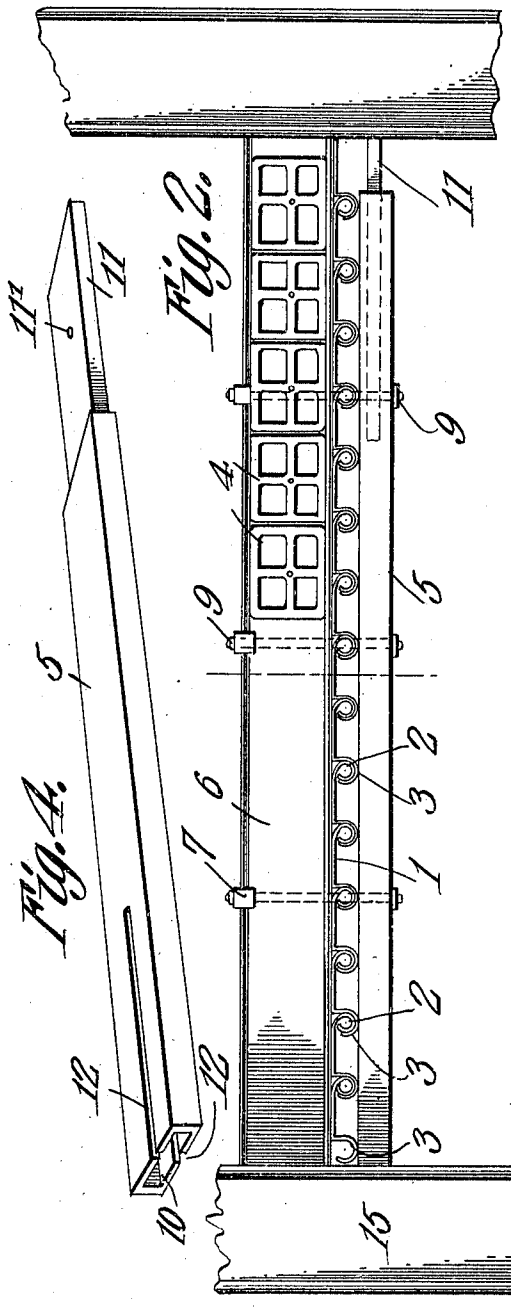


Fig. 2.

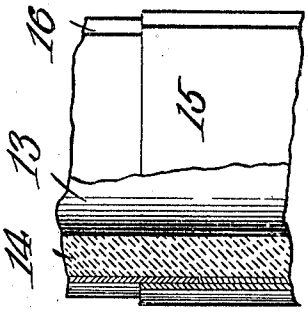


Fig. 5.

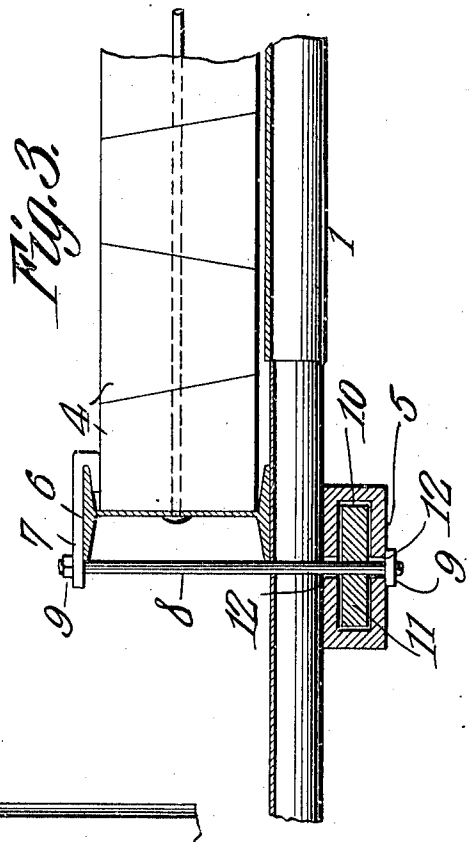


Fig. 3.

Fig. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

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TEMPORARY SUPPORT FOR THE FILLING OF FIREPROOF STRUCTURES.

953,014. Specification of Letters Patent. Patented Mar. 22, 1910.

Application filed April 23, 1908. Serial No. 428,869.

To all whom it may concern:

Be it known that I, ROBERT B. HIGGINS, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented a new and useful Temporary Support for the Filling of Fireproof Structures, of which the following is a specification.

This invention relates to fire proof buildings, and has especial reference to the temporary supports for holding tiling, concrete, and other filling material, during the construction of fire-proof floors, and other parts of fire proof steel structures.

The invention has for its object to provide an improved temporary portable support of this character, which can be easily and quickly put in position for use, and removed, and which will be strong and durable.

The invention consists of a portable, and adjustable temporary support for the tiling, concrete, and other filling material in the construction of fire proof floors, and other parts of fire proof structures said support being constructed and arranged as hereinafter set forth and claimed.

Referring to the drawings:—Figure 1 is a plan view of a fire proof flooring, showing the tiling partly laid, and the temporary support, for the tiling in position. Fig. 2, is a side view of a fire proof floor in the process of construction and the temporary support in position for use. Fig. 3, is an enlarged detail view, endwise of a girder, showing a portion of the tiling, and the temporary support. Fig. 4 is a perspective view of one of the adjustable beams of the temporary support. Fig. 5 is a detail view of a portion of a fire proof column showing the means for temporarily supporting the concrete.

In the construction of this invention, a number of sections 1 preferably of pressed galvanized iron are employed. The sections 1 are formed with a rolled portion 2, on one side, and with a curved hook portion 3 on the other, adapted to fit over and engage the rolled portion 2, on an adjacent section. The sections 1 may be made of suitable width, and length, and are connected together by the rolled portions 2, and the hooked portions 3. The sections 1, may be adjusted lengthwise in overlapping position as shown, to adapt them to the extent of surface required beneath the tiling.

The sections 1, connected together as set forth, are supported beneath the tiling 4, by metallic beams or bars 5 suspended at intervals from steel girders 6, by L shaped hooks 7 engaging the top of the girders, and bolts 8 secured at their opposite ends to the hooks 7 and beam 5, respectively by nuts 9. The beams 5, are adjustable, as well as the sections 1, to accommodate them to the space required, each beam 5 being formed with the longitudinal channel 10, in which is located an adjustable slidable bar 11, with bolt hole 11′ whereby the said bar and beam may be telescoped in order to vary the effective length of the same. The bars 5 are provided with the end slots 12, through which extend the bolts 8 and which permit the bars 5 to be moved lengthwise thereon.

It will be seen from the foregoing description that a flooring or platform is thus provided, composed of a number of metal sheets, or plates, connected together so as to be quickly lengthened or shortened to adjust them in position for the required space beneath a fire proof floor or other fire proof structure, and which with the adjustable beams, supporting said flooring and suspended from the floor beams or girders, makes a support for the tiling and concrete sufficiently strong to sustain the weight thereof. This structure being employed in place of the wooden temporary flooring heretofore used, is more easily put in position and removed, than the wooden flooring which takes more time and labor to put together and take apart, and which is more expensive as it requires skilled labor to do so.

By means of a structure such as hereinbefore described, a temporary portable support for tiling, and concrete, is provided during the construction of fire proof floors, which may be readily put up and removed without requiring skilled labor, and which will be economical, strong, and durable.

In Fig. 5, is shown a section of a fire proof column consisting of a steel column 13 inclosed in concrete 14. The concrete, during the building of the column being held in place by pressed galvanized sections 15, connected together by a rolled portion 16, on one side and a curved hooked portion 17 on the other side engaging the rolled portion 16, of the adjacent section 15. The sections 15, overlap each other lengthwise, and are adjustable lengthwise upon each other by means of the jointed connections, as

many sections being so used as are required for the length of the column.

Having described the invention, I claim:—

1. A support of the class described including a plurality of sections detachably connected together, each section comprising a plate having one side thereof provided with a rolled edge and having its opposite side provided with a curved hooked shaped edge for engagement with the rolled edge of an adjacent plate, the plates of all of the sections being adjustable simultaneously or independently to alter the length of the support.

2. A support of the class described including a plurality of sections connected together to present a substantially flat upper bearing surface, each section comprising a plate having one side thereof provided with a rolled edge and the opposite side provided with a curved hooked shaped edge for engagement with the rolled edge of an adjacent plate.

3. A support of the class described including a plurality of sections having detachable hooks, each section being formed of a plate having one side thereof provided with a rolled edge and the opposite side provided with a curved hooked shaped edge for engagement with the rolled edge of an adjacent plate, and a sectional supporting bar formed of a plurality of telescopically fitting members adjustable in accordance with the width of the support.

4. In a temporary support for fire-proof structures a number of over-lapped adjustable metallic sections, each provided on one side with a rolled edge and on the opposite side with a curved hooked shaped edge, said sections being adjustably connected by the hooked edge of one section engaging the rolled edge of an adjacent section.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ROBERT BARNEY HIGGINS.

Witnesses:

JOHN A. McKAIN,

FRANK J. WEBER.