

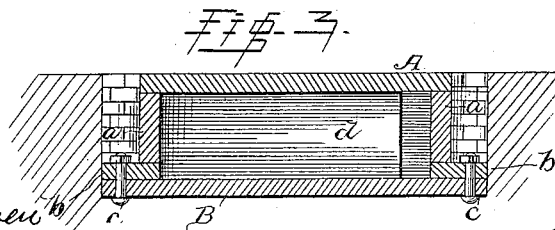
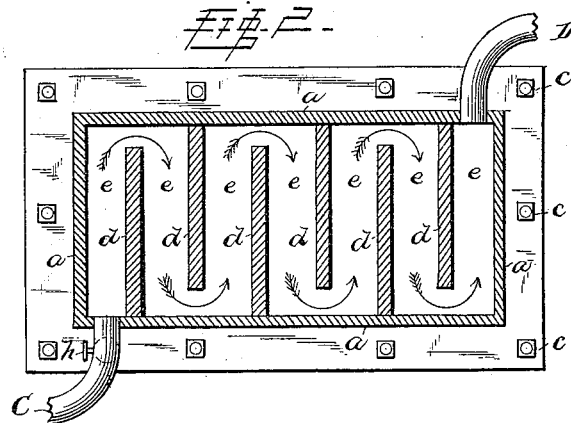
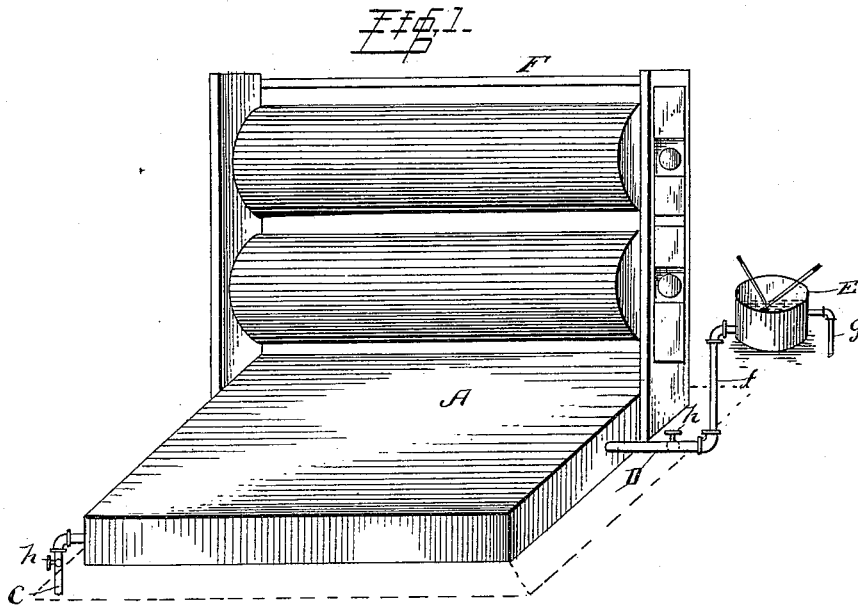
(No Model.)

W. ROW & R. BAUER.

FLOOR FOR ROLLING MILLS.

No. 346,610.

Patented Aug. 3, 1886.



Witnesses

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# UNITED STATES PATENT OFFICE.

WILLIAM ROW AND RAYMUND BAUER, OF WHEELING, WEST VIRGINIA.

## FLOOR FOR ROLLING-MILLS.

SPECIFICATION forming part of Letters Patent No. 346,610, dated August 3, 1886.

Application filed May 11, 1886. Serial No. 201,894. (No model.)

*To all whom it may concern:*

Be it known that we, WILLIAM ROW and RAYMUND BAUER, residents of Wheeling, in the county of Ohio and State of West Virginia, have invented certain new and useful Improvements in Floors for Rolling-Mills, Glass-Houses, &c.; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

In rolling-mills, steel-works, glass-houses, and like places the floors, platforms, and passage-ways are usually made of metal or iron plates, and these become so hot from the heat radiated from the furnaces or from contact with the hot material dragged over their surface as to be almost unbearable to the workmen, who have to walk or stand upon these platforms or floors to perform their work; and the object of our invention is to provide a means of keeping said floors and platforms cool and pleasant to the touch, so the workmen may stand upon them without serious inconvenience from the heat.

To this end our invention consists of constructing the floors and platforms with a series of connecting compartments or conduits, for the purpose of holding water in the manner of an underground reservoir, which, by contact with the walls of the conduits and compartments, operates to reduce the temperature of the surface-plate and keep it cool, all of which will be hereinafter fully described in detail, and set forth in the claims.

In the drawings, Figure 1 is a perspective view showing our improved floor in connection with a pair of rolls; Fig. 2, a horizontal section of a single platform; Fig. 3, a vertical cross-section.

For convenience of reference the description will be limited to one section of flooring used in front of a train of rolls; but it will be understood that the invention is applicable to all the floors, platforms, and passage-ways about the mill or factory.

In the drawings like letters of reference refer to like parts.

The letter A designates a water-tight box or platform, made preferably of metal, upon which the workmen stand.

*a a* are the sides and end pieces of the frame.

B is the bottom, secured to a flange, *b*, extending around the lower edge of the frame by means of bolts *c c*, placed at suitable distances around the same.

*d d* are vertical partitions extending nearly across the box, dividing the space into compartments or conduits CC. The alternate end of each partition stops short of connecting with the side wall to permit of the water with which the box is to be filled to pass through it, as indicated by arrows on the drawings, from one end of it to the other. These partitions serve a twofold purpose—that of supporting the top of the platform, as well as imparting to it additional coldness from contact with the water passing through.

C is a supply-pipe.

D is an outlet-pipe, to which a pipe, *f*, is connected to convey the water to a tub or vessel, E.

*g* is an overflow-pipe.

*h h* are cocks to regulate the supply of water.

F is a train of rolls.

The water is supplied to the floors and platforms from the street-main or other available source, and passes through the various compartments and conduits as a running stream, and out of the same through a discharge-pipe into the "bosh," where it is utilized to cool the tongs and other tools used by the workmen about the furnaces. The floors or platforms being hollow and filled with cool running water, the walls absorb the moisture and impart a degree of coolness to the upper plate or surface of the floor, which makes it possible for the workmen to move about upon it with some comfort, and assists them materially in resisting the intense heat attending all operations connected with rolling iron or furnace-work.

The size and number of compartments to a prescribed area of floor-surface would depend largely upon the location and the material of

which the floor is built. Therefore we do not wish to confine ourselves to the exact construction herein shown, as it is obvious that various modifications can be made within the scope of our invention.

Having described our invention, what we claim, and desire to secure by Letters Patent of the United States, is—

1. A floor for rolling-mills and like places, consisting of a series of compartments or conduits connected with the floor-surface, adapted to being filled with water for the purpose of keeping the surface cool, substantially as herein shown.

2. A floor or platform for rolling-mills and like places, consisting of a water-tight box or

frame having the interior space divided into a number of connecting compartments adapted for the free passage of water, substantially as herein shown.

3. In a floor for rolling-mills, the combination, with the water-tight box A, having partitions *d d*, of the supply-pipe C and outlet-pipe D, substantially as herein shown.

In testimony that we do claim the foregoing as our own we hereby affix our signatures in presence of two witnesses.

WILLIAM ROW.  
RAYMUND BAUER.

Witnesses:

MERTON SEPBOLLER,  
HARDY HENRY.