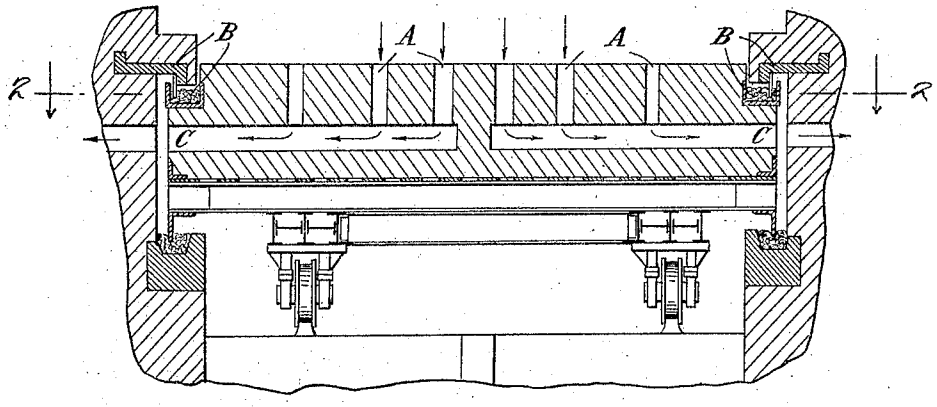
A. F. DELACOURT.

HEATING FURNACE WITH REMOVABLE HEARTH.

APPLICATION FILED APR. 23, 1918.

1,401,054. Patented Dec. 20, 1921.

Fig. 1.



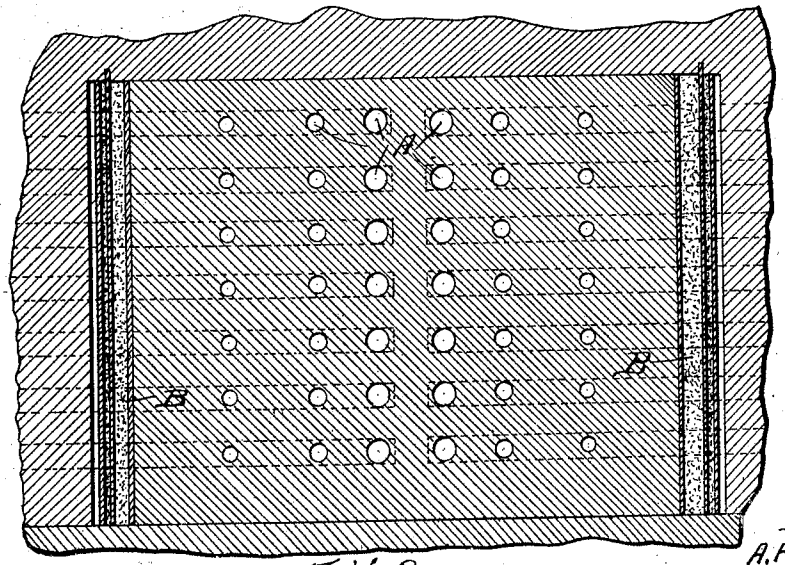


Fig. 2.

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HEATING-FURNACE WITH REMOVABLE HEARTH.

1,401,054. Specification of Letters Patent. Patented Dec. 20, 1921.

Application filed April 23, 1918. Serial No. 230,226.

To all whom it may concern:

Be it known that I, ALBERTO FRANCESCO DELACOURT, engineer, a subject of the King of Italy, and residing at Genoa, Italy, (whose post-office address is Scalinata Osservatorio No. 1, Genoa,) have invented certain new and useful Improvements in or Relating to Heating-Furnaces with Removable Hearths, of which the following is a specification.

This invention relates to improvements in heating furnaces with removable hearth or bottom, in which the draft is obtained through the hearth itself, the object in view being that of having a uniform temperature within the furnace.

This object is attained by the construction illustrated in the accompanying drawing, in which Figure 1 is a vertical section of the lower part of a furnace with removable hearth. Fig. 2 is a horizontal sectional view taken on line 2—2 of Fig. 1.

In the ordinary furnaces of the general type the temperature within the furnace cannot be completely uniform, since the source of heat is placed at one side only, the opposite side being used to exhaust the combustion products, and the remaining two sides being provided with doors.

Therefrom, it ensues that the blocks, ingots and the like heated in such removable hearth furnaces, cannot be subjected to an uniform temperature both in the upper and lower portion not even when said ingots or the like are placed on suitably arranged supports to insulate them from the hearth and cause them to be well enveloped by the flames.

All this is due to the fact that the hearth is the coolest part of the furnace, since the draft is produced from the side opposite to that from which the heat is supplied without passing through it.

According to my present invention, to eliminate this inconvenience, which may produce a non-uniformity in the material heated in the furnace, the draft is obtained through the hearth itself, it being rendered perfectly tight by means of the packing-device —B—.

The combination gases pass downwardly through the openings —A— of the hearth, collect at —C—, and finally pass to the heat accumulators or to the chimney.

I claim—

1. A furnace comprising a hearth for supporting the objects to be heated, said hearth being provided at various places of its area, with down-draft exit ports, whereby the hot gases can find exit from the furnace simultaneously at a large number of places, the sides of the hearth being luted to prevent gas exit around the hearth.

2. A furnace for heating articles, said furnace having a movable hearth mounted on a truck, the sides of the said hearth being luted to prevent the exit of gases, said hearth being provided at various places of its area with a multiplicity of down-draft exit openings for carrying off gases from all parts of the hearth, and flues in furnace walls connecting with the said down-draft openings for carrying off the gases.

In testimony whereof I have hereunto signed my name in the presence of two witnesses.

ALBERTO FRANCESCO DELACOURT.

Witnesses:

DOMENICO VOLLA,

EMILIO OLIVARI.