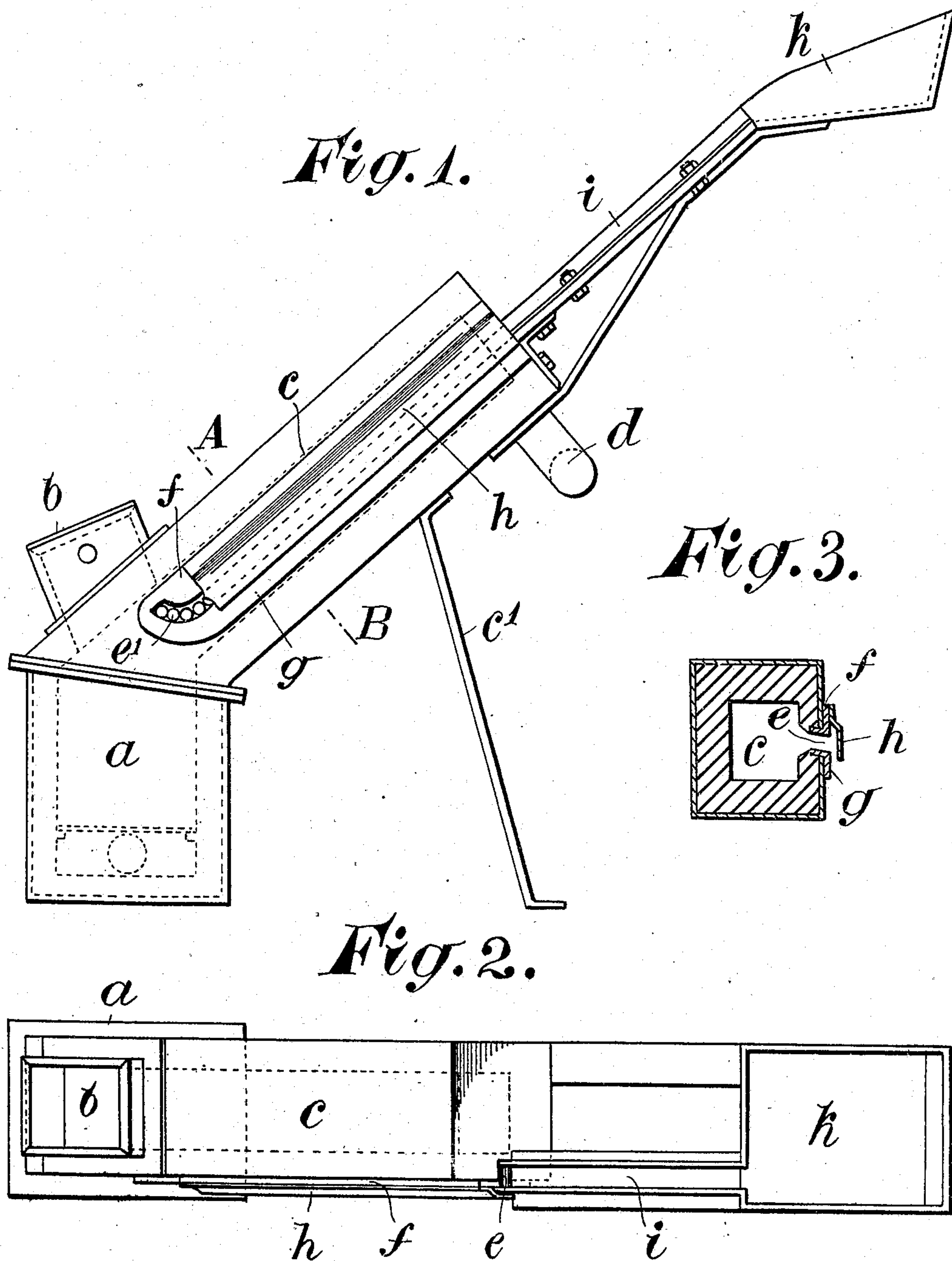


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FURNACE FOR HEATING BLANKS.
APPLICATION FILED NOV. 2, 1906.

924,125.

Patented June 8, 1909.



Witnesses:
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UNITED STATES PATENT OFFICE.

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FURNACE FOR HEATING BLANKS.

No. 924,125.

Specification of Letters Patent.

Patented June 8, 1909.

Application filed November 2, 1906. Serial No. 341,685.

To all whom it may concern:

Be it known that I, VICTOR ANDERSON, a subject of the King of Norway, residing at Nydalen, near Christiania, Norway, have invented certain new and useful Improvements in Furnaces for Heating Blanks; 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to means for heating blanks for instance rivet blanks preparatory to submitting them to a forging or other forming operation for providing them with a head or the like. Heretofore furnaces have been in use for this purpose, of the so-called revolving type, which furnaces are expensive inasmuch as they require much attendance and consume considerable quantities of fuel, and they are also objectionable for the reason, that they do not heat the blanks uniformly.

My invention consists in a furnace having in connection with the firebox a sloping channel for carrying off the products of combustion and a slot in the channel adapted to form a guide way for the blanks, so that these may lie close together in a row, with one end projecting into the said channel, and so that they will automatically roll or sink downward to an offset in the slot where they can be removed one after the other.

My invention will hereinafter be explained in its details reference being had to the annexed drawing, which shows one form of carrying out the same. In this form the furnace is a single-channel furnace, but I may also arrange two parallel channels in one furnace, whereby space and material are saved.

The drawing shows the slot in the side wall of the flue, but I may also arrange the slot in the top wall, especially if the blanks are provided with heads by means of which they may be suspended and slide.

Figure 1 is a side view and Fig. 2 a plan view; whereas Fig. 3 is a cross section on the line A—B of Fig. 1 of a furnace for heating rivet blanks preparatory to their being provided with heads.

a is a fire-box of any suitable form, having a firing chute *b*, which is placed on the upper

face of the inclined flue *c*. The latter is closed at its upper end, a smoke pipe *d* being arranged at the lower face of the flue, which latter is steadied by means of a brace *c'*. The side wall of the flue *c* has provided in it a slot *e*, this slot having preferably a slight inclination outwardly as shown in Fig. 3 and being fitted with angle irons *f*, *g*. In front of the slot a guide plate *h* is fixed or hinged to the flue, leaving (preferably at the lower edge) a narrow opening. At the lower terminal of the slot *e* it is preferably provided with an offset *e'*, which runs in a more or less horizontal direction and may be given an upward curve as shown in Fig 1; this part of the slot is not covered by the guide plate *h*. It will be understood that the outwardly inclined form of the slot prevents the blanks from rolling inward into the fire channel whereas the plate *h* serves to keep them from rolling out of the slot and to keep them in line. The plate also serves as a deflector to prevent the free escape of the fire gases through the slot *e*. The offset part *e'* serves to lessen the pressure and frictional resistance between the blanks at the end of the slot, so that the lowermost of the blanks may easily be withdrawn from the slot.

Above the flue is mounted a feed chute or feed table *i* communicating with a magazine *k*. The said chute *i* forms a continuation of the slot *e*, and is provided with side rails formed of angle-irons as shown to insure the regular feeding of the blanks in a continual row. The inclination of the feed chute and also that of the flue itself may depend upon the nature of the blanks to be heated.

Claims.

1. Furnace for heating blanks, such as rivets, bolts and the like, comprising a fire-box, an inclined flue extending upwardly therefrom and provided with a longitudinal slot, a feed chute, connecting with said slot to permit blanks to be fed sidewise one by one into said slot by gravity, and a blank magazine in connection with said feed chute.

2. Furnace for heating blanks, such as rivets, bolts, and the like, comprising a fire-box, an inclined upward flue extending therefrom and having a longitudinal slot open at its upper end, the outer walls of said slot being slightly inclined downwardly and outwardly, and a plate adjacent to said slot to prevent blanks from dropping out of said slot.

3. Furnace for heating blanks, such as rivets, bolts and the like, comprising a fire-box, a flue extending upwardly therefrom in an inclined position and provided with a
5 longitudinal slot open at its upper end to receive the articles to be heated, angle irons arranged in the opening of said slot to form walls slightly inclined downwardly and outwardly, and a plate adjacent to said slot
10 arranged at the outside of the flue to prevent articles from dropping out of said slot.

4. Furnace for heating blanks, such as rivets, bolts and the like, comprising a fire-box, an inclined upward flue extending there-

from and having a longitudinal slot open at
its upper end, the outer walls of said slot
being slightly inclined downwardly and outwardly and means adjacent to said slot to
prevent blanks from dropping out of said
slot.

In testimony that I claim the foregoing as my invention, I have signed my name in presence of two subscribing witnesses.

VICTOR ANDERSON.

Witnesses:

HENRY BORDEWICH,
MICHAEL ALGER.