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PATENTED DEC. 4, 1906.

M. ZIEGLER.

MEANS FOR CARRYING OFF GASES FROM RETORTS WHILE BEING CHARGED.

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Fig. 1.

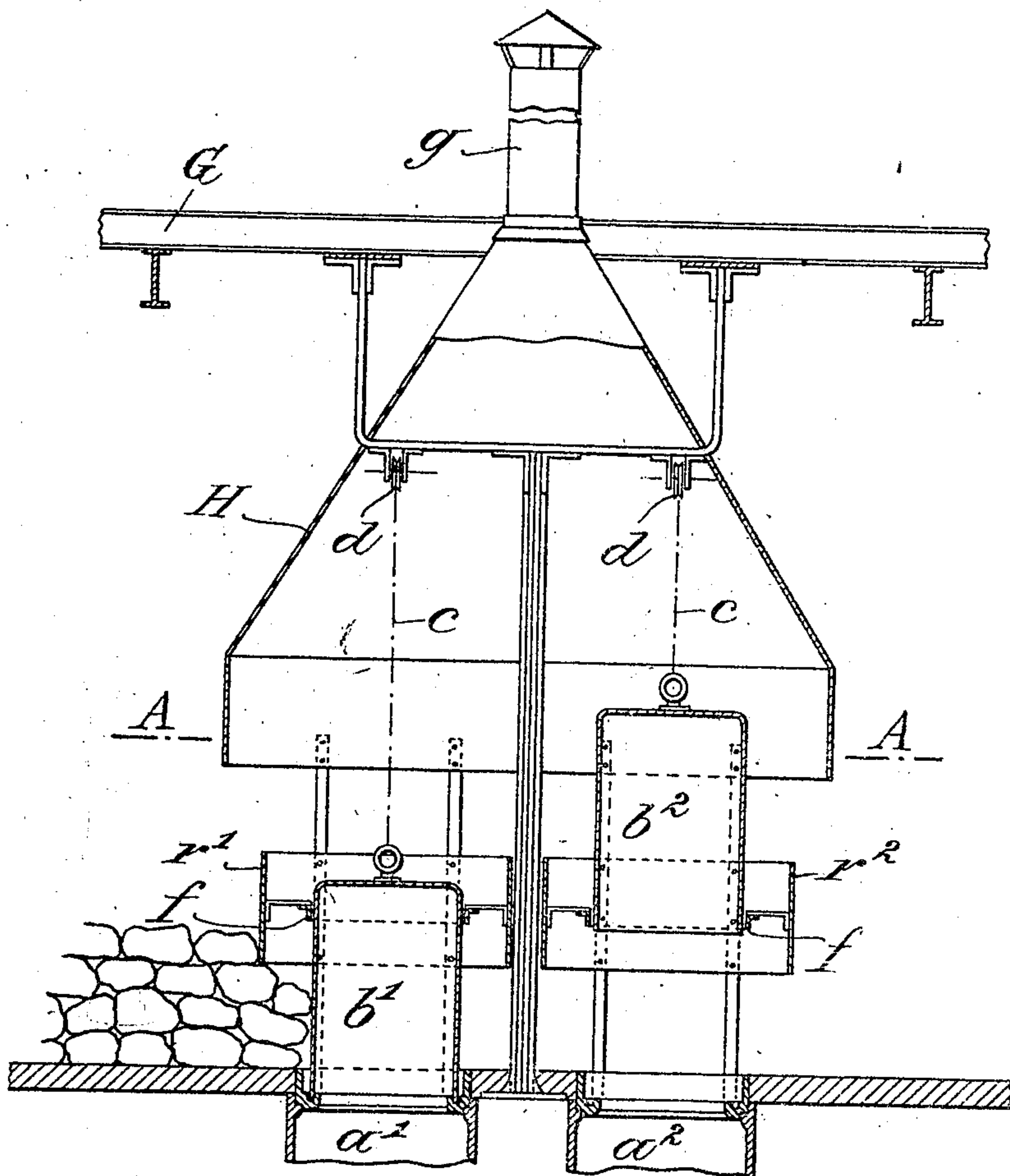
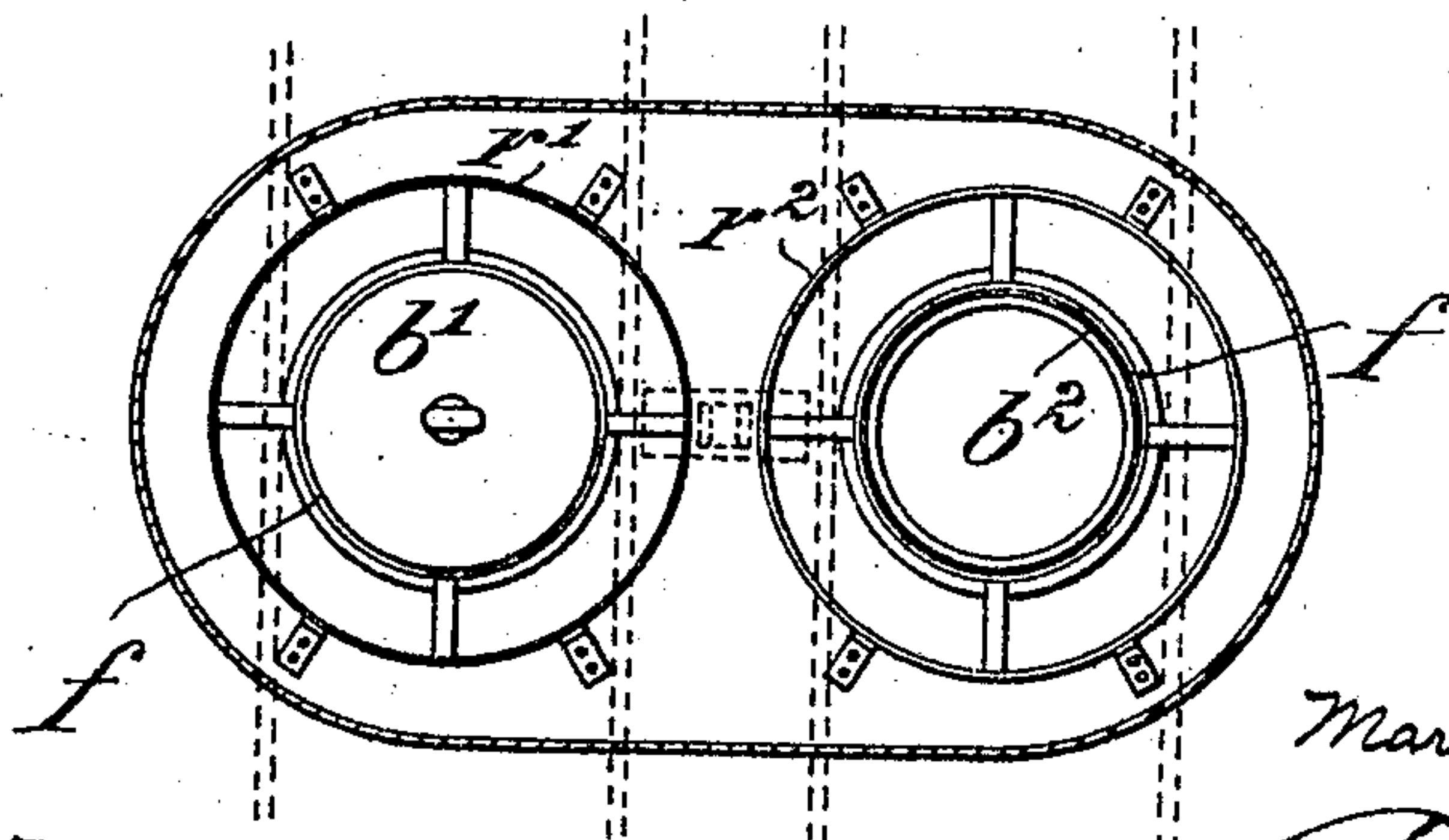


Fig. 2.



WITNESSES
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MARTIN ZIEGLER, OF BEUERBERG, TSARTALBAHN, GERMANY, ASSIGNOR
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MEANS FOR CARRYING OFF GASES FROM RETORTS WHILE BEING CHARGED.

No. 837,446.

Specification of Letters Patent.

Patented Dec. 4, 1906.

Application filed August 1, 1906. Serial No. 328,795.

To all whom it may concern:

Be it known that I, MARTIN ZIEGLER, engineer, a subject of the King of Prussia, German Emperor, residing at Beuerberg, Tsartalbahn, in the Kingdom of Bavaria, German Empire, have invented new and useful Improvements in Means for Carrying off Gases from Retorts While being Charged, of which the following is a specification.

The present invention has for its object means for carrying off the gases from furnaces or retorts while being charged, especially peat-coking furnaces, so that the workmen may charge the furnaces without coming in contact with the gases; and it consists, essentially, of the improvements hereinafter described, and specifically set forth in the appended claims.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a vertical sectional elevation of the device. Fig. 2 is a transverse section on the line A A of Fig. 1.

Similar letters of reference refer to similar parts in both views.

Two charging-openings a' and a^2 , situated one beside the other, are indicated in the drawings. These charging-openings are each provided with a bell-shaped cover b' b^2 , respectively, attached to chains c , running over fixed pulleys d . Said covers are guided in suitable guides f , which may be mounted optionally. The covers b' and b^2 can be raised and lowered by means of chains c .

A hood H is placed in known manner over the charging-openings. Said hood may be suspended from a girder G or the like. Said hood ends above in an outlet-pipe g . A circular casing r' r^2 is arranged pendent above each charging-opening. Said casings or rings may be rigidly connected with said hood, and they form protective rings for the personnel serving the furnace. It is essential that the gases escape upward through said rings without dispersing at the charging-level of the furnace. The covers b' and b^2 may be guided inside the rings r' and r^2 by means of the guides f , carried by the said rings.

The manner of working the device is substantially as follows: For charging the furnace the pieces of peat are placed round the charging-openings a' and a^2 , over the lower

edges of the protective casings r' and r^2 , so that each of these rings forms a tight wall with the peat sods round said charging-openings. In raising the cover b' or b^2 some of the peat sods lying against it fall into the charging-opening, the gases escape through the rings r' and r^2 into the hood H and escape out of the same through the outlet-pipe g without oppressing the workmen. The peat sods which form the protective wall are shoveled into the furnace with the covers open. The gases then escaping likewise go through the hood H into the open air; as the outlet-pipe g exercises a suction effect, like a chimney.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A device for carrying off gases when charging vertical furnaces or retorts, particularly peat-coking furnaces or retorts, with material in lumps or pieces, comprising in combination a hood situated vertically above the charging-opening of said furnace or retort, a cover adapted to close said opening, means adapted to raise and lower said cover, and means surrounding said cover, whereby when said cover is raised the furnace-gases escape into said hood.

2. A device for carrying off gases when charging vertical furnaces, particularly peat-coking furnaces or retorts, with material in lumps or pieces, comprising in combination a hood situated vertically above the charging-opening of said furnace, a bell-shaped cover adapted to close said opening, means adapted to raise and lower said cover, and means surrounding said cover, whereby when said cover is lowered said material can be piled against the same and when the same is raised the furnace or retort gases escape into said hood.

3. A device for carrying off gases when charging vertical furnaces, particularly peat-coking furnaces or retorts with material in lumps or pieces, comprising in combination a hood situated vertically above the charging-opening of said furnace, a bell-shaped cover adapted to close said opening, means adapted to raise and lower said cover, a ring surrounding said cover under said hood, guides in said ring surrounding said cover, whereby when said cover is raised the furnace or retort gases escape through said ring into said hood.

4. A device for carrying off gases when
charging vertical furnaces, particularly peat-
coking furnaces or retorts with material in
lumps or pieces, comprising in combination
5 a hood situated vertically above the charg-
ing-opening of said furnace, a bell-shaped
cover adapted to close said opening, means
adapted to raise and lower said cover, a ring
surrounding said cover under said hood,
10 guides in said ring surrounding said cover,
said ring being arranged pendent at such a
distance from said hood that said cover can
be raised into the intervening space, whereby

when said cover is lowered said material can
be piled against the same and when the same 15
is raised the furnace or retort gases escape
through said ring into said hood, substan-
tially as described.

In testimony whereof I have signed my
name to this specification in the presence of 20
two subscribing witnesses.

MARTIN ZIEGLER.

Witnesses:

FRITZ KAISER,
LUDWIG NEUHART.