

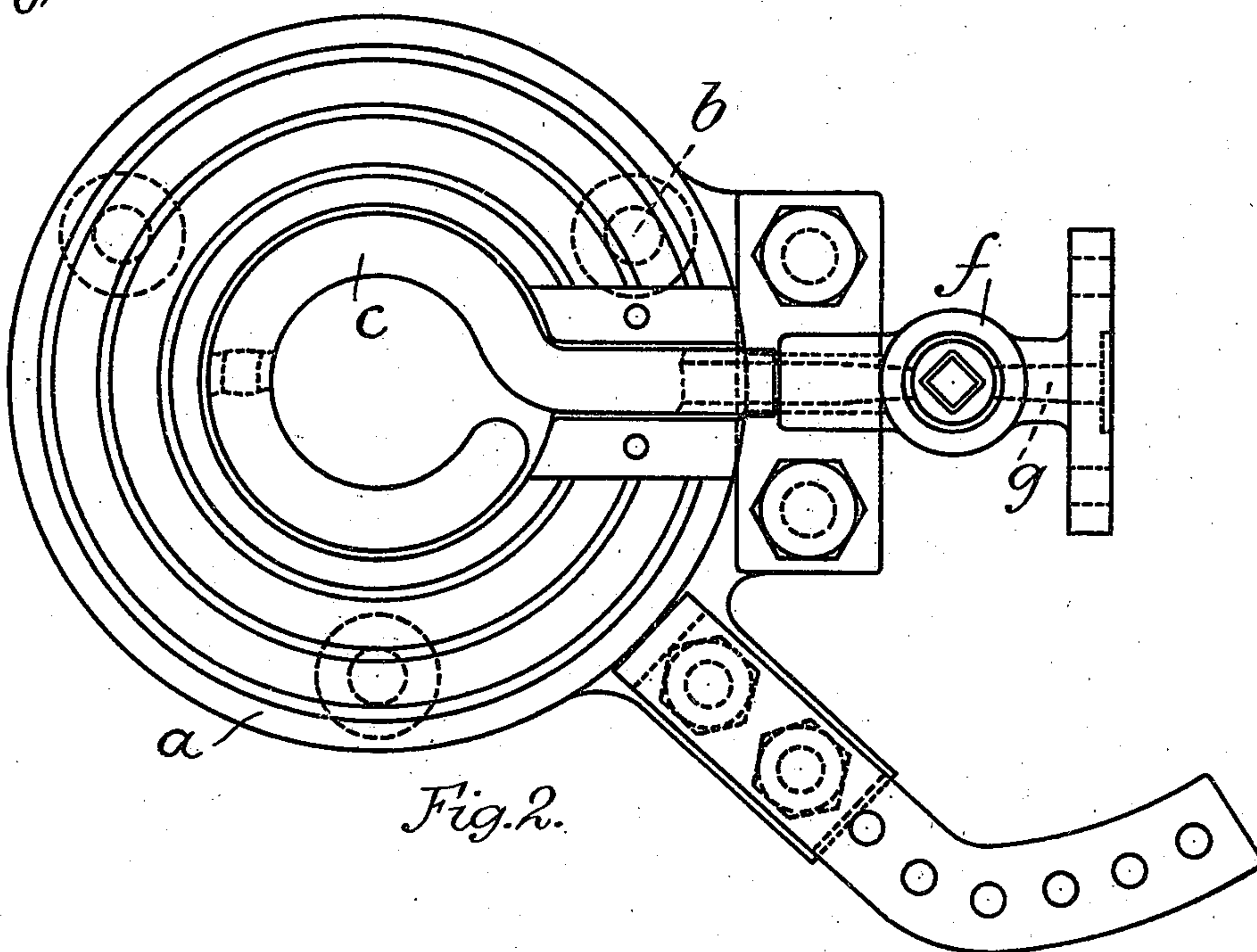
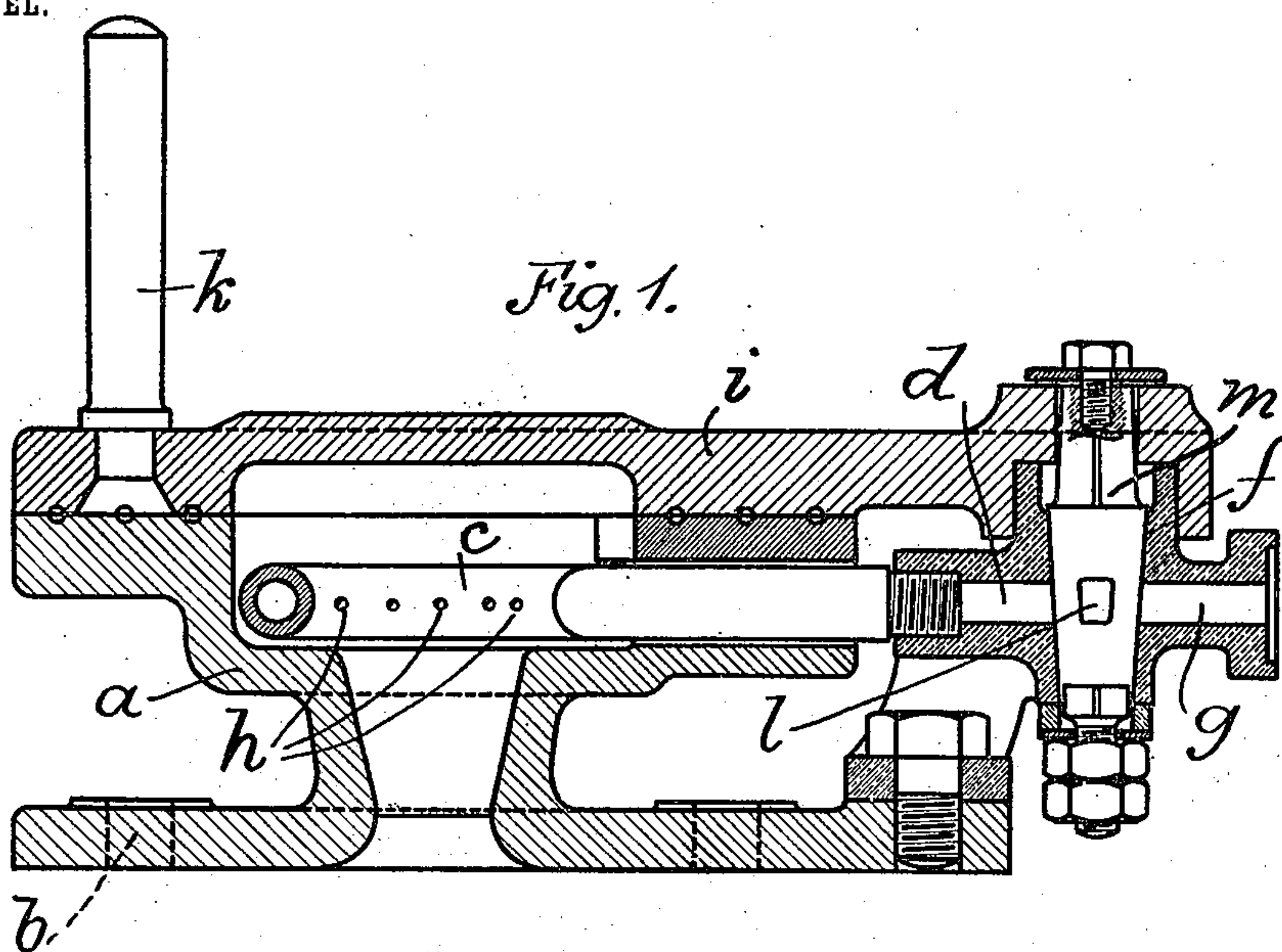
No. 740,757.

PATENTED OCT. 6, 1903.

J. HOFMANN & F. VON STACH.  
APPARATUS FOR PREVENTING ESCAPE OF GAS FROM GAS GENERATORS  
DURING THE STOKING OPERATION.

APPLICATION FILED FEB. 16, 1903.

NO MODEL.



Witnesses

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## UNITED STATES PATENT OFFICE.

JUSTUS HOFMANN, OF WITKOWITZ, AND FRIEDRICH VON STACH, OF  
KLADNO, AUSTRIA-HUNGARY.

APPARATUS FOR PREVENTING ESCAPE OF GAS FROM GAS-GENERATORS DURING THE STOKING OPERATION.

SPECIFICATION forming part of Letters Patent No. 740,757, dated October 6, 1903.

Application filed February 16, 1903. Serial No. 143,696. (No model.)

*To all whom it may concern:*

Be it known that we, JUSTUS HOFMANN, of Witkowitz, and FRIEDRICH RITTER VON STACH, of Kladno, Moravia, Austria-Hungary, subjects of the Emperor of Austria-Hungary, have invented certain new and useful Improvements in Apparatus for Preventing Escape of Gas from Gas-Generators During the Stoking Operation, of which the following is a specification.

The present invention has reference to improvements in apparatus for preventing escape of gas during generation, and relates more especially to an apparatus to take the place of the ordinary cover of the retort or cupola in gas-generators for the purpose of preventing escape of gas upon the cover being removed from the retort for stoking, cleaning, or inspection purposes. With the construction of cover now in use the attendant is exposed to gas-poisoning, and at the same time a comparatively large amount of gas escapes every time the cover is opened.

In order to make the invention more readily understood, we will now describe it with reference to the accompanying sheet of drawings, of which—

Figure 1 represents a sectional elevation of the new cover. Fig. 2 is a plan view of same, the cover-lid being removed.

The apparatus essentially consists of a cup-shaped head-piece *a*, which is provided with bolt-holes *b* or other suitable means for securing it to the retort or cupola. In the upper enlarged part is arranged a pipe-coil *c*, communicating at its straight end with the one way *d* of the cock *f*, the other way *g* of which communicates with a steam-pipe. (Not shown in the drawings.) Upon the inner circumference this pipe-coil is provided with fine perforations *h*, their axes extending slantingly, as shown by dotted lines in Fig. 1. The cock *f* is rigidly secured to the head-piece *a* in any suitable manner. To the top end of the turning cock member *m* is rigidly secured the lid *i*, with handle *k* in such a position that when the lid is in the closed position, as in Fig. 1, the passage *l* in the cock member *m* is at right angles with respect to the ways *d* and *g*, respectively, of the cock. If, however,

the lid is swung about its pivot for the purpose of giving access to the interior of the retort during working, then the passage *l* is brought into communication with the cockways, so that steam can pass into the pipe-coil and out of the slanting perforations *h* and effectually keep back the gases. Upon the lid being swung shut again the steam is turned off again simultaneously.

What we claim, and desire to secure by Letters Patent, is—

1. Apparatus for preventing escape of gas from gas-generators during the coal-stoking or the like operation, comprising a head-piece with stoke-opening, secured to the gas-retort, a steam-pipe coil with inwardly-slanting perforations, encircling the stoke-opening, a removable lid for the said head-piece, and means for automatically admitting steam into the said coil, upon the cover being removed, substantially as and for the purpose set forth.

2. Apparatus for preventing escape of gas from gas-generators during the stoking or the like operation, comprising a cup-shaped head-piece with central stoke-opening, means for securing the said head-piece to the gas-retort, a pipe-coil with slanting perforations in its inner circumference, concentrically arranged to the said central stoke-opening within the said head-piece, a straight pipe end communicating with the said pipe-coil, a steam-cock, adapted to communicate with the said straight pipe end and with a steam-pipe, a cover-lid rigidly secured to the said steam-cock and cooperating therewith so that upon the one being closed, the other is opened, the parts being constructed, arranged and cooperating substantially as and for the purpose set forth.

In testimony that we claim the foregoing as our invention we have signed our names in presence of two subscribing witnesses.

JUSTUS HOFMANN.

FRIEDRICH VON STACH.

Witnesses to signature of Justus Hofmann:

JOSEF WALTER,

PAUL JACOBS.

Witnesses to signature of F. von Stach:

ALAIK KUHN,

HERMANN FUX.