

No. 728,389.

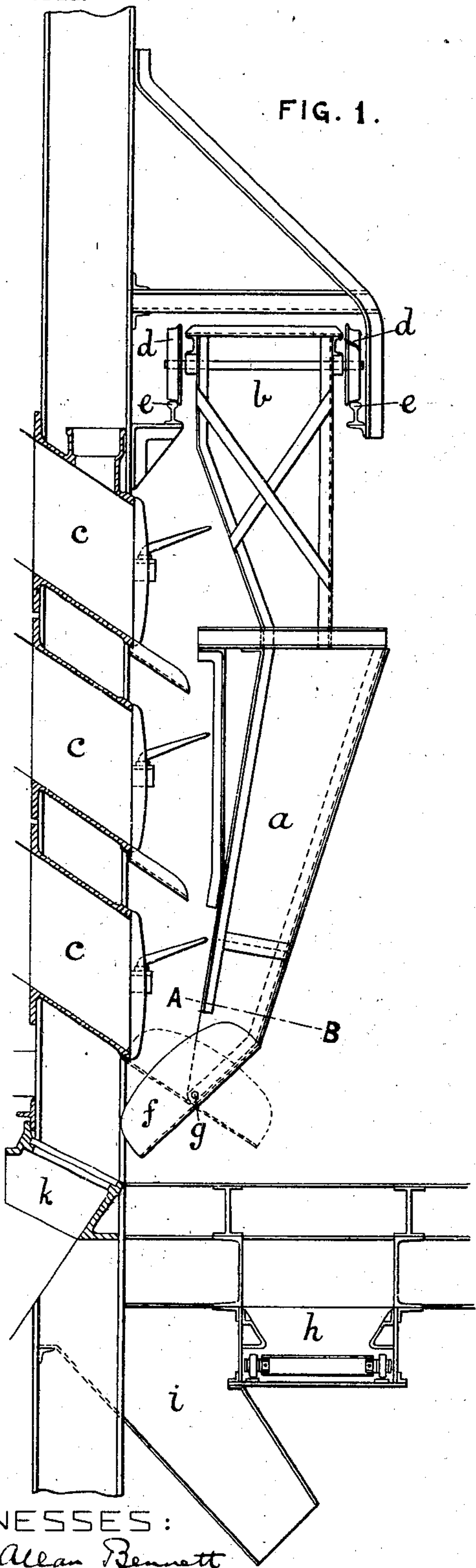
PATENTED MAY 19, 1903.

M. GRAHAM.
RETORT DISCHARGING APPARATUS.

APPLICATION FILED JAN. 20, 1903.

NO MODEL.

FIG. 1.



WITNESSES:

Allen Bennett
Harry Davies.

FIG. 2.

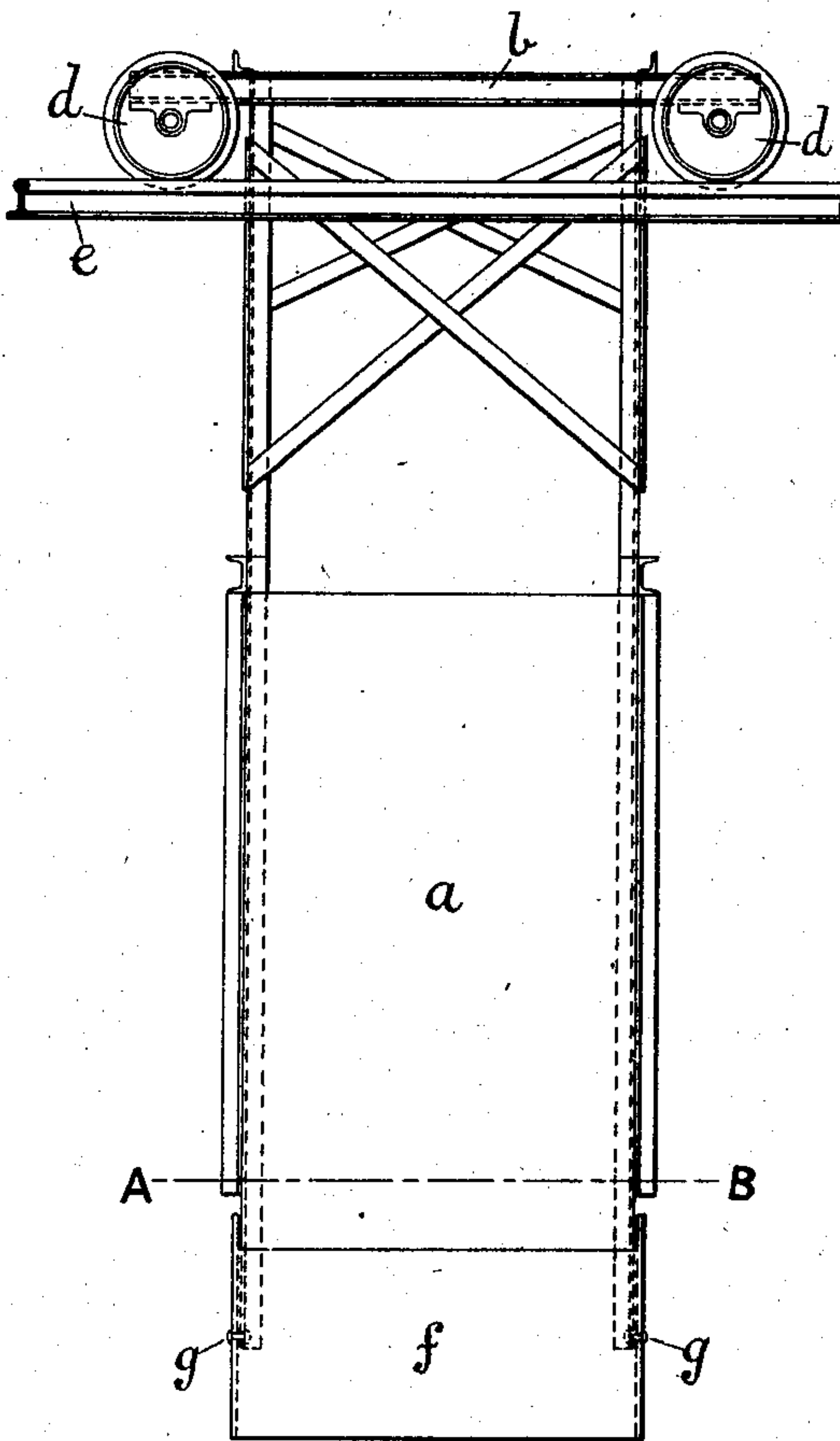
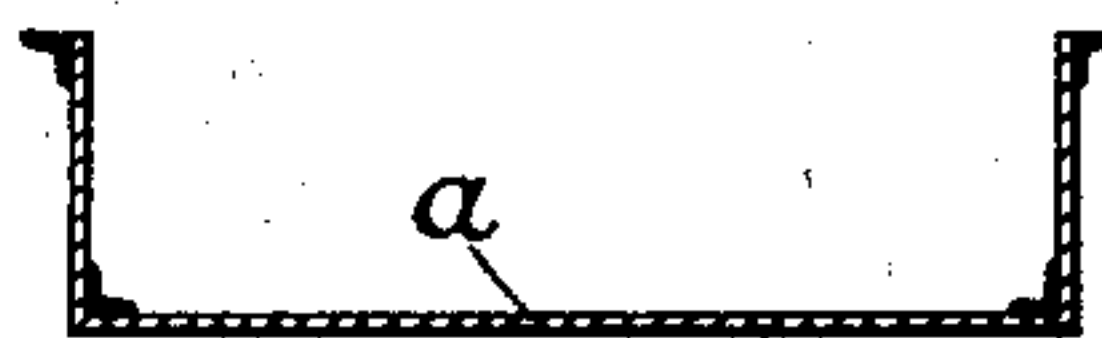


FIG. 3.



INVENTOR:

Maurice Graham
per John E. Walsh
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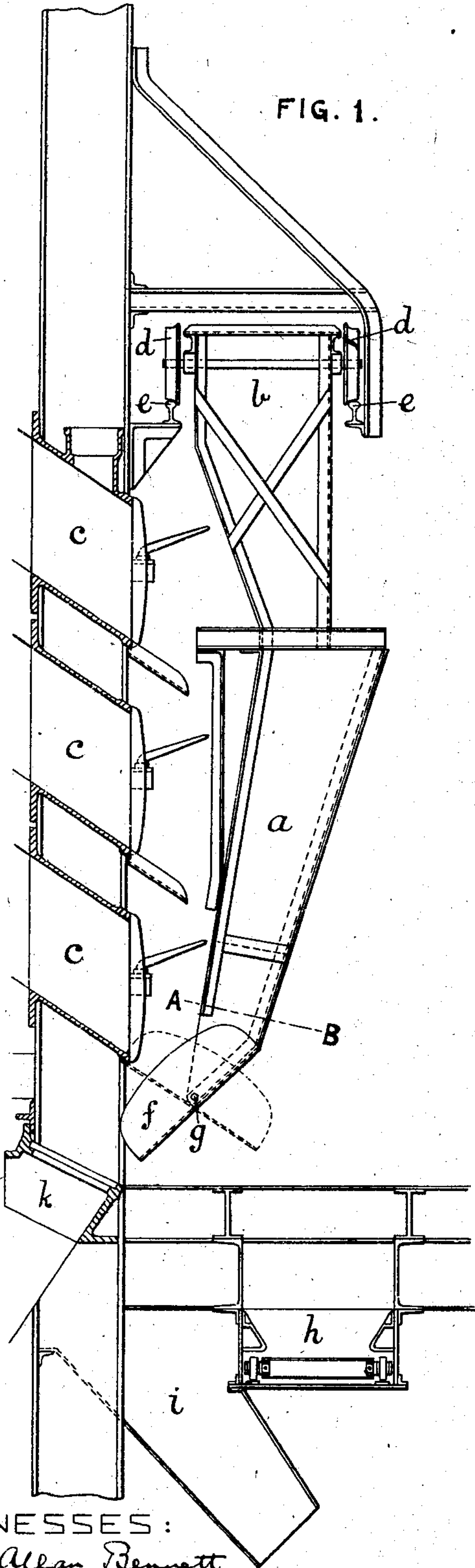


FIG. 2.

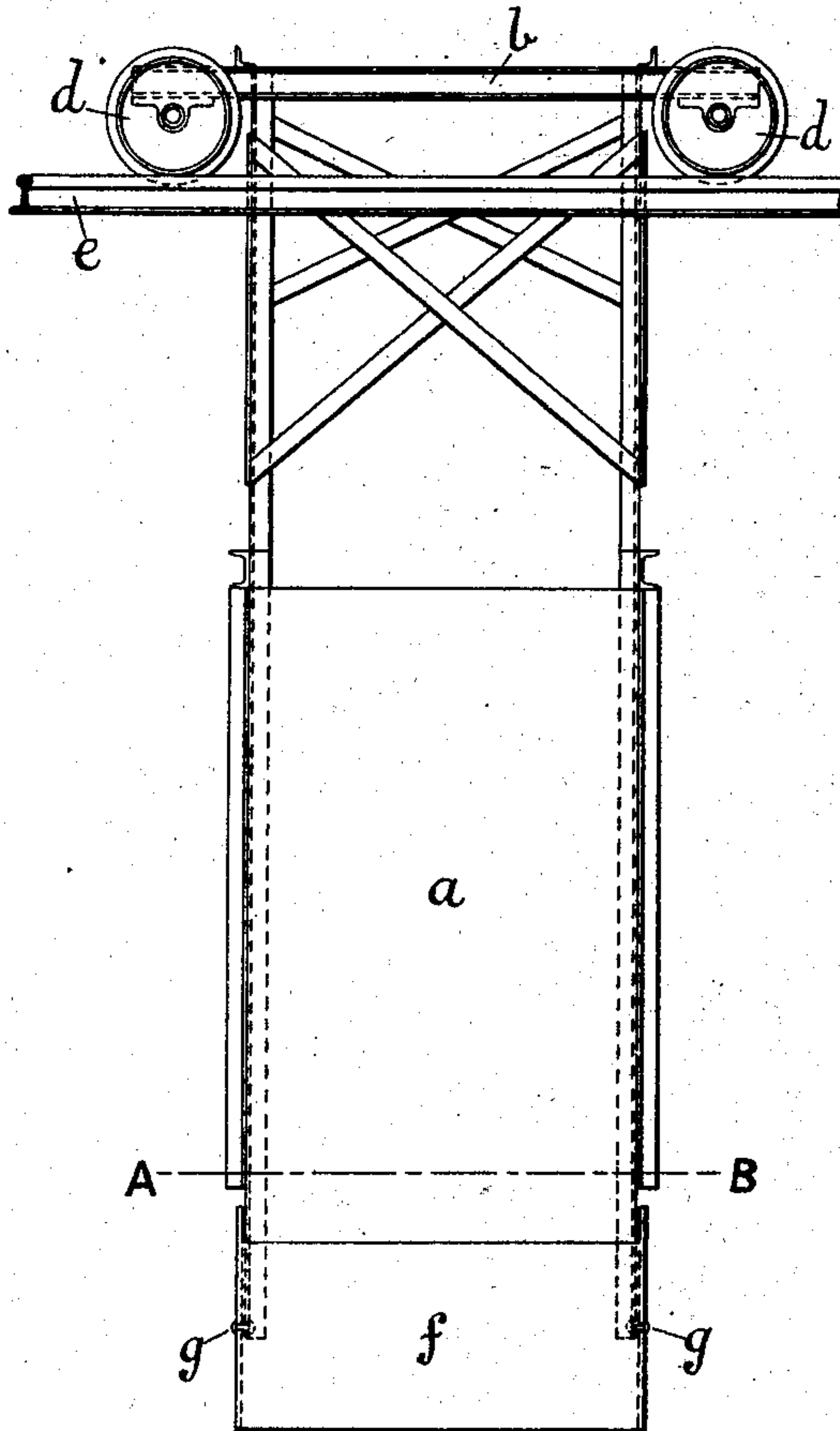
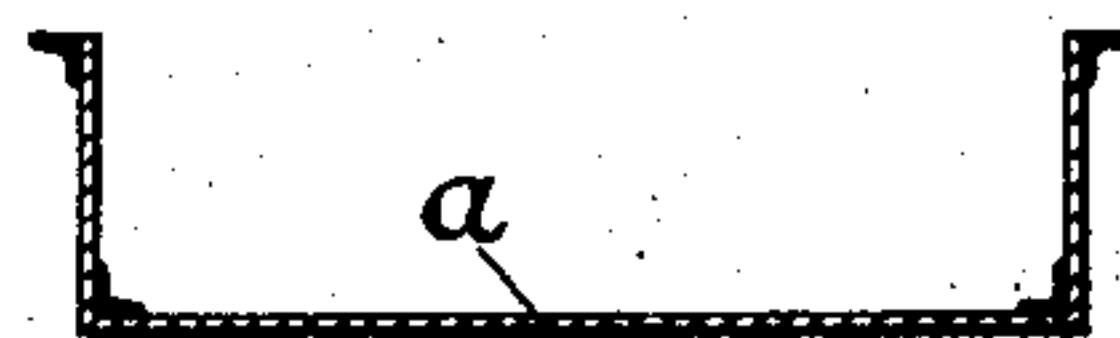


FIG. 3.



WITNESSES:
Allan Bennett
Harry Davies.

INVENTOR:
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Attorney.

UNITED STATES PATENT OFFICE.

MAURICE GRAHAM, OF LEEDS, ENGLAND.

RETORT-DISCHARGING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 728,389, dated May 19, 1903.

Application filed January 20, 1903. Serial No. 139,816. (No model.)

To all whom it may concern:

Be it known that I, MAURICE GRAHAM, a subject of the King of Great Britain and Ireland, residing at Leeds, in the county of York, England, have invented a new and useful Apparatus for Discharging Inclined Gas-Retorts, of which the following is a specification.

This invention relates to apparatus for use in connection with the discharging of inclined gas-retorts, more particularly to movable chutes by which the coke on being discharged from the retorts may be received and be directed into, first, the coke-conveyer; second, the basement-floor, or, third, the producer-charging door.

The object of my present invention is to provide a chute by which the coke can be received on its being discharged from any one of the three tiers of retorts and be delivered at the desired point, the chute being at the same time so constructed as to be without complications and free from any liability to choke up. The operation, therefore, of drawing the coke from the retorts does not necessitate the employment of any men to keep the chute clear.

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

Figure 1 is a side elevation, partly in section, showing the construction of my improved chute and its application to an inclined gas-retort installation, such parts only of the retort installation being shown as are necessary to clearly illustrate the application of the chute. Fig. 2 is an elevation of the back of the chute, and Fig. 3 a transverse section of the chute on the line A B of Figs. 1 and 2.

a is the chute, which is suspended in front of the retort-mouthpieces *c* from a movable carriage *b*, mounted on wheels *d* and guided by rails *e* over the front of the retort-bench. The chute *a* is three-sided (see Fig. 3) and is open toward the front—that is to say, it is open throughout its length on the side adjacent to the retort-mouthpieces *c*. The chute *a* is arranged in an approximately vertical position or at a slight inclination to the vertical and is preferably straight for the greater

portion of its length, with a slight inward curve at its lower end. The chute is preferably of uniform width from top to bottom, as shown in Fig. 2; but, if desired, it may be suitably tapered off at its lower end.

A shoe *f*, pivoted at *g*, may be attached to the lower end of the chute *a*, this shoe *f* being movable about its pivot, as shown in Fig. 1, so as to direct the coke, as may be required, into either the conveyer-trough *h*, the chute *i*, leading to the basement-floor, or the producer-charging door *k*. The coke can therefore be drawn from the whole of the three tiers of retorts and be directed, by means of the single movable chute *a*, to the required point of delivery, the operation being completed in a much shorter time than has heretofore been required and with a minimum of labor.

The carriage *b* may be propelled along the rails *e* either by hand or by means of any simple mechanical traversing gear fitted thereon, or a suitable electric motor may be fitted on the carriage *b* for this purpose.

This apparatus is not used for charging retorts, but only in discharging them as a guide-chute for the coke, which slides out or is otherwise discharged from them.

The car and its track are of any approved construction, and the chute is connected to the car in any approved manner and does not have to be raised or lowered.

What I claim is—

The combination, with superposed gas-retorts, and receiving-passages arranged below the said retorts and in different planes; of a track above the retorts, a car which runs on the said track, a chute suspended from the car and having an open side next to the said retorts, and means for distributing the coke from the said chute to the different receiving-passages.

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

MAURICE GRAHAM.

Witnesses:

ALLAN BENNETT,
CHAS. GILLIARD.