

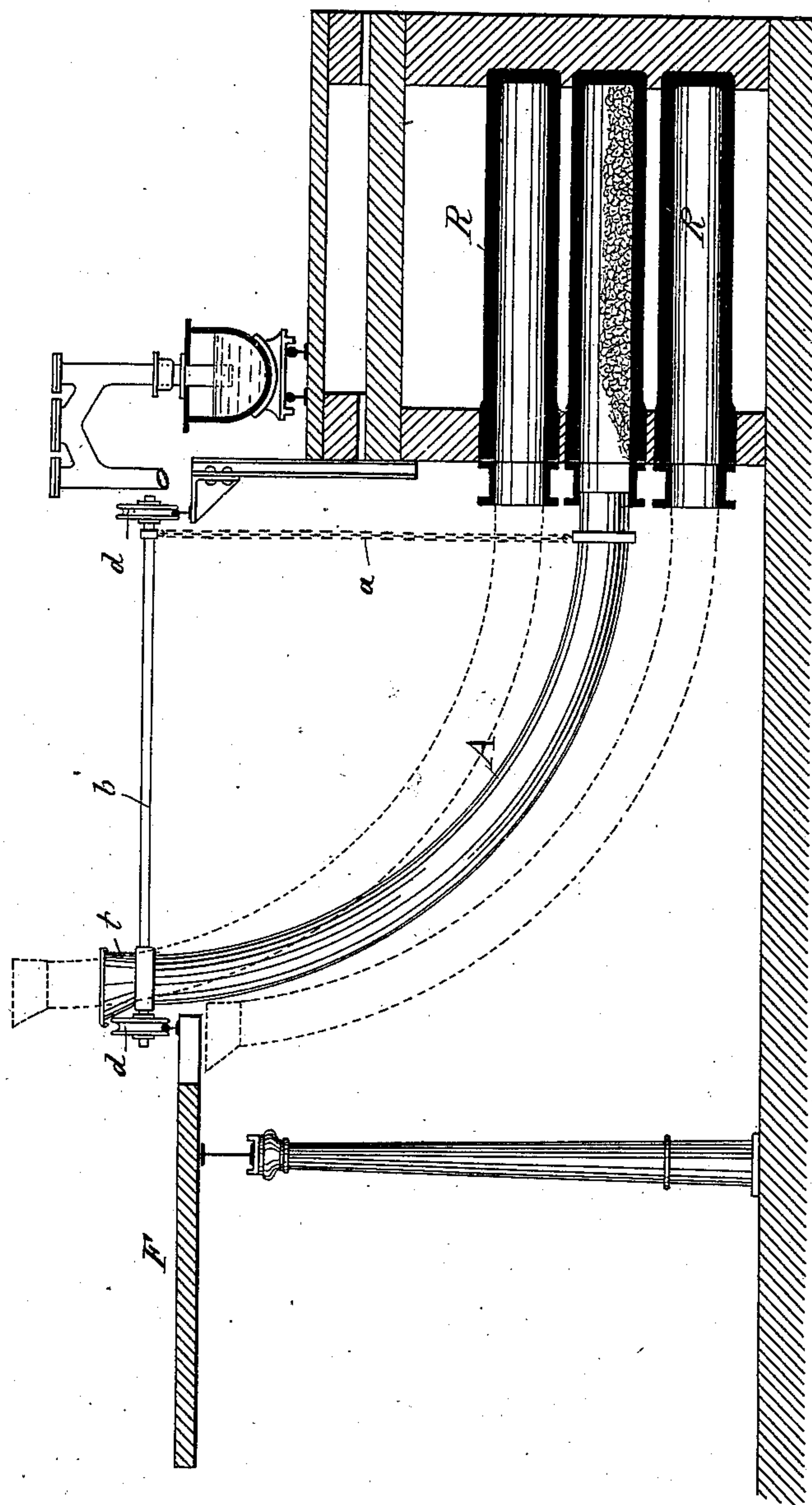
(No Model.)

A. LENTZ.

DEVICE FOR CHARGING RETORTS.

No. 376,531.

Patented Jan. 17, 1888.



Witnesses.

Alfred Joughmans.
William Postington.

Inventor.

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per Rader & Brinner
Attorneys.

UNITED STATES PATENT OFFICE.

AUGUST LENTZ, OF STETTIN, PRUSSIA, GERMANY, ASSIGNOR TO THE STETTINER CHAMOTTE FABRIK ACTIEN-GESELLSCHAFT, FORMERLY DIDIER, OF SAME PLACE.

DEVICE FOR CHARGING RETORTS.

SPECIFICATION forming part of Letters Patent No. 376,531, dated January 17, 1888.

Application filed March 17, 1887. Serial No. 231,258. (No model.)

To all whom it may concern:

Be it known that I, AUGUST LENTZ, a subject of the King of Prussia, residing at Stettin, in the Kingdom of Prussia, German Empire, have
5 invented a new and useful Device for Charging Retorts, of which the following is a specification.

This invention relates to an apparatus for charging retort-furnaces having any number
10 of retorts and adapted for the treatment of coal and other materials.

The invention consists in the various features of improvement hereinafter more fully pointed out.

15 The accompanying drawing represents a sectional side elevation of my improved apparatus.

The letter A represents a tube curved in the shape of a segment of a circle. The upper
20 end of this tube is provided with a funnel, *t*, through which the charge is inserted. The lower end of the tube opens into the mouth of the retort R to be charged. The height of the tube A is proportioned to the length of the
25 retorts about as four to three. The tubes may be closed, as shown, or they may be open on one side similar to a trough.

The charge is delivered into the mouth of the funnel *t* either by means of a shovel or by
30 means of a box or container provided with a slide to regulate the charging of the retorts. When the charge is delivered into the tube, it is shot along the floor of the retort by reason of the considerable height of fall. Subsequent
35 lots encounter on their way the heaps of previously-charged material, push them farther, and remain in front of them, and so on until the retort is gradually charged to the mouth. The height of the tube must also be proportionate to the nature of the material to be
40 charged; but the speed of the descent of the materials can also be influenced by more or less violently projecting the materials into the

funnel; hence it becomes possible to charge horizontal retorts of any desired length heavily 45 or lightly at will.

In retort-furnaces for gas-making with several rows of retorts the charging apparatus may be combined with a traveling platform or with a fixed charging-floor, as represented. 50 In this case the material to be charged is placed on the floor F, and the tube A embraced by the eyed end of a shaft or carriage, *b*, provided with wheels *d*, to move the tube A from one retort to another. For each horizontal row of 55 retorts one tube is usually required; but the apparatus can be arranged so that one tube suffices to charge a whole set of retorts. In this case the tube is raised or lowered by a suitable lifting mechanism. This mechanism 60 is shown to consist of a chain, *a*, suspended from the carriage or shaft *b*, the other end of which is connected to the lower end of tube A. By revolving the shaft *b* the chain *a* will be wound upon it, and thus the tube will be 65 raised. With shifting platforms the tube can be attached to the platform so that it travels with the same in front of the retorts. In this manner apparatuses of various sizes and containing any number of retorts can be charged 70 either from fixed or from traveling platforms.

What I claim is—

The feeding mechanism for retorts, consisting of the curved feeding-tube provided with a feed-hopper, the wheeled shaft for carrying 75 said tube, and a chain, as described, for raising and lowering said tube, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two sub- 80 scribing witnesses.

AUGUST LENTZ.

Witnesses:

JULIUS DITTMER,
GUSTAV HEITZ.