L. C. FLACCUS.

HOISTING DEVICE FOR OVEN DOORS.

APPLICATION FILED AUG. 29, 1910.

1,017,142. Patented Feb. 13, 1912.

Fig. 1.

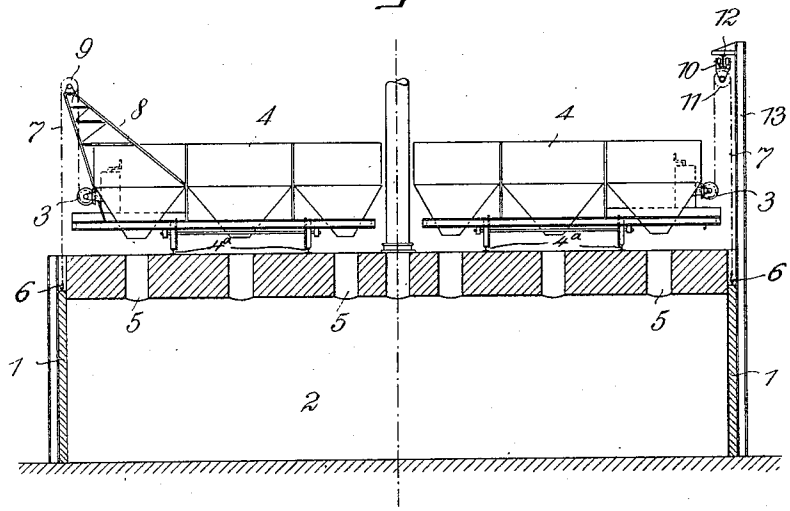


Fig. 2.

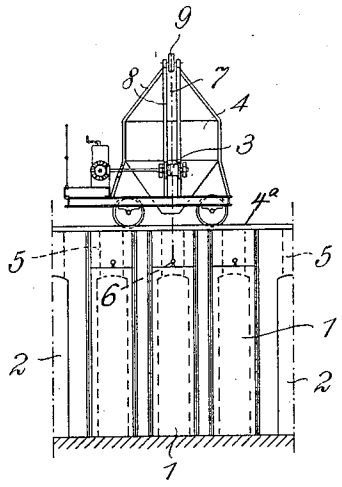
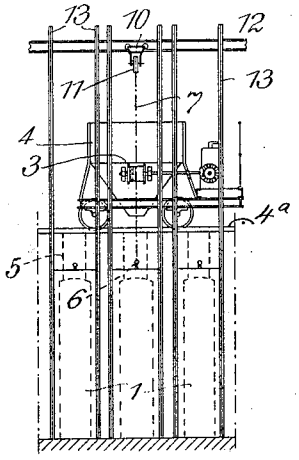


Fig. 3.



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UNITED STATES PATENT OFFICE.

LUDWIG CARL FLACCUS, OF STETTIN, GERMANY, ASSIGNOR TO STETTINER CHAMOTTE-FABRIK ACTIEN-GESELLSCHAFT VORM. DIDIER, OF STETTIN, GERMANY, A CORPORATION OF GERMANY.

HOISTING DEVICE FOR OVEN-DOORS.

1,017,142. Specification of Letters Patent. **Patented Feb. 13, 1912.**

Application filed August 29, 1910. Serial No. 579,498.

To all whom it may concern:

Be it known that I, LUDWIG CARL FLACCUS, a subject of the German Emperor, and a resident of Stettin, Germany, have invented certain new and useful Improvements in Hoisting Devices for Oven-Doors, of which the following is a specification.

The doors of coke ovens and the like are customarily arranged to be raised or lowered by means of a windlass which is mounted to travel transversely on top of the bench of ovens.

Another device which has been used for this purpose consists of a windlass carried by upward extensions of the beams serving to brace and anchor the oven, the doors being raised or lowered by means of a continuous chain or like element through which a pull may be exerted.

The object of my present invention is to simplify and facilitate the operation of the doors of coke ovens and the like by raising and lowering the doors through the medium of a hoisting device carried by the charging truck which brings the coal to the ovens, the operative member of said device being arranged for detachable connection with the oven doors. The oven doors may thus be operated by the same attendant who is in charge of said truck, with a corresponding saving in labor and wages.

The starting and stopping of the hoisting device provided on said truck may be effected manually or mechanically, according as local conditions make one way or the other appear more suitable.

The improved arrangement is particularly adapted for use in cases where electrically propelled charging trucks of large capacity are employed.

The accompanying drawing illustrates two examples of my invention, Figure 1 being a longitudinal section through a coke oven chamber with two charging trucks arranged to travel on its roof and carrying the hoisting devices, the hoisting device represented at the left being differently constructed from the one shown at the right; Fig. 2 is an end elevation looking from the left of Fig. 1; and Fig. 3 is an end elevation looking from the right of Fig. 1.

In the construction shown, the doors 1 are mounted to slide vertically at the ends of the longitudinal (horizontal) coking chambers 2, and the hoisting devices or windlasses 3, of any approved construction, are carried by the charging trucks 4, mounted to travel on suitable tracks 4^a laid transversely on top of the coke ovens, said trucks being provided with hoppers or other means for discharge the coal into the customary filling openings 5.

According to the construction shown in Fig. 2 and at the left in Fig. 1, the truck 4 is provided with a derrick-like structure 8 provided at the top with a guide pulley 9 over which passes the chain or other flexible connection 7 which is controlled by the hoisting device 3. This operating connection 7 is adapted to be connected detachably with the door 1, a hook and eye connection being indicated at 6.

In the construction illustrated by Fig. 3 and by the right-hand portion of Fig. 1, the chain 7 or the like passes over a pulley 11 carried by a traveler 10 running on a stationary track or rail 12 (parallel to the tracks 4^a) secured to the upward extensions of the posts 13 serving to anchor the oven.

In either construction, after the parts have been brought into approximate registry and the chain 7 or the like secured to the door, the hoisting device is operated, either by the attendant turning a crank, or mechanically, as by means of an electromotor (not shown), and similarly the door is lowered when desired.

It will be understood that the hoisting device may be actuated in other ways, and that various modifications may be made without departing from the nature of my invention as set forth in the appended claims.

I claim as my invention:

1. The combination with an oven having a movable door and a charging truck movable adjacent to the oven, of a door-operating mechanism carried by said truck, a track parallel with the path of the said truck, a guide pulley arranged to travel on said track, and a flexible connection extending from said mechanism to said pulley and provided with means for detachably connecting it with the door.

2. The combination with an oven having a movable door and a charging truck movable adjacent to the oven, of a door-operating mechanism carried by said truck, a track parallel with the path of said truck, up-

wardly extended anchoring posts to which said track is secured, a guide pulley arranged to travel on said track, and a flexible connection extending from said mechanism to said pulley and provided with means for detachably connecting it with the door.

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

LUDWIG CARL FLACCUS.

Witnesses:
WILLIAM P. ENGELMAN,
JOHN LOTKA.