

(No Model.)

2 Sheets—Sheet 1.

W. T. GILES & W. BOOTH.

DEVICE FOR DISCHARGING COKE OVENS.

No. 379,390.

Patented Mar. 13, 1888.

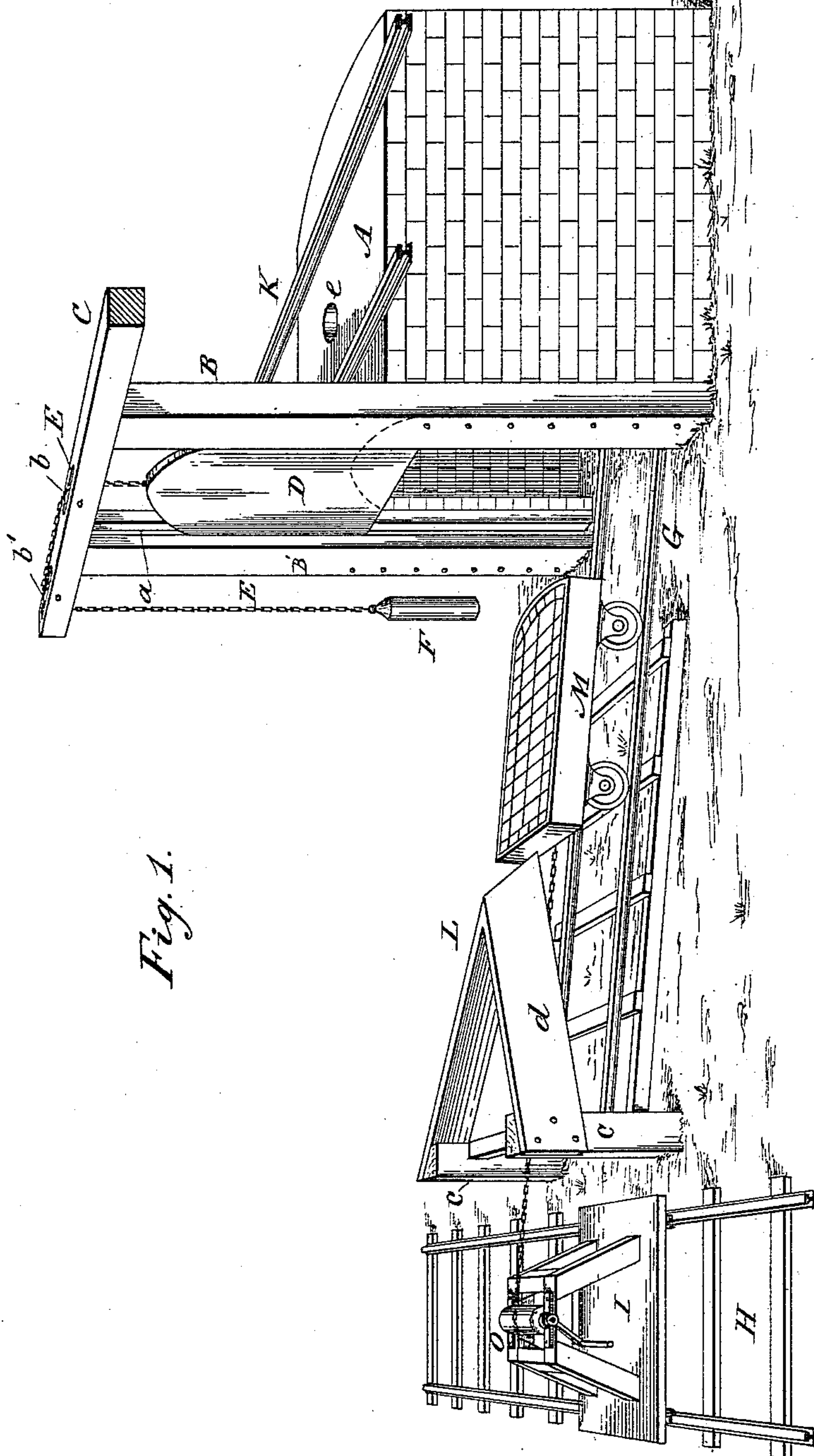


Fig. 1.

WITNESSES:

D. C. Reusch.
C. Sedgwick.

INVENTOR:

W. T. Giles.

W. Booth

Munn & Co.

ATTORNEYS.

(No Model.)

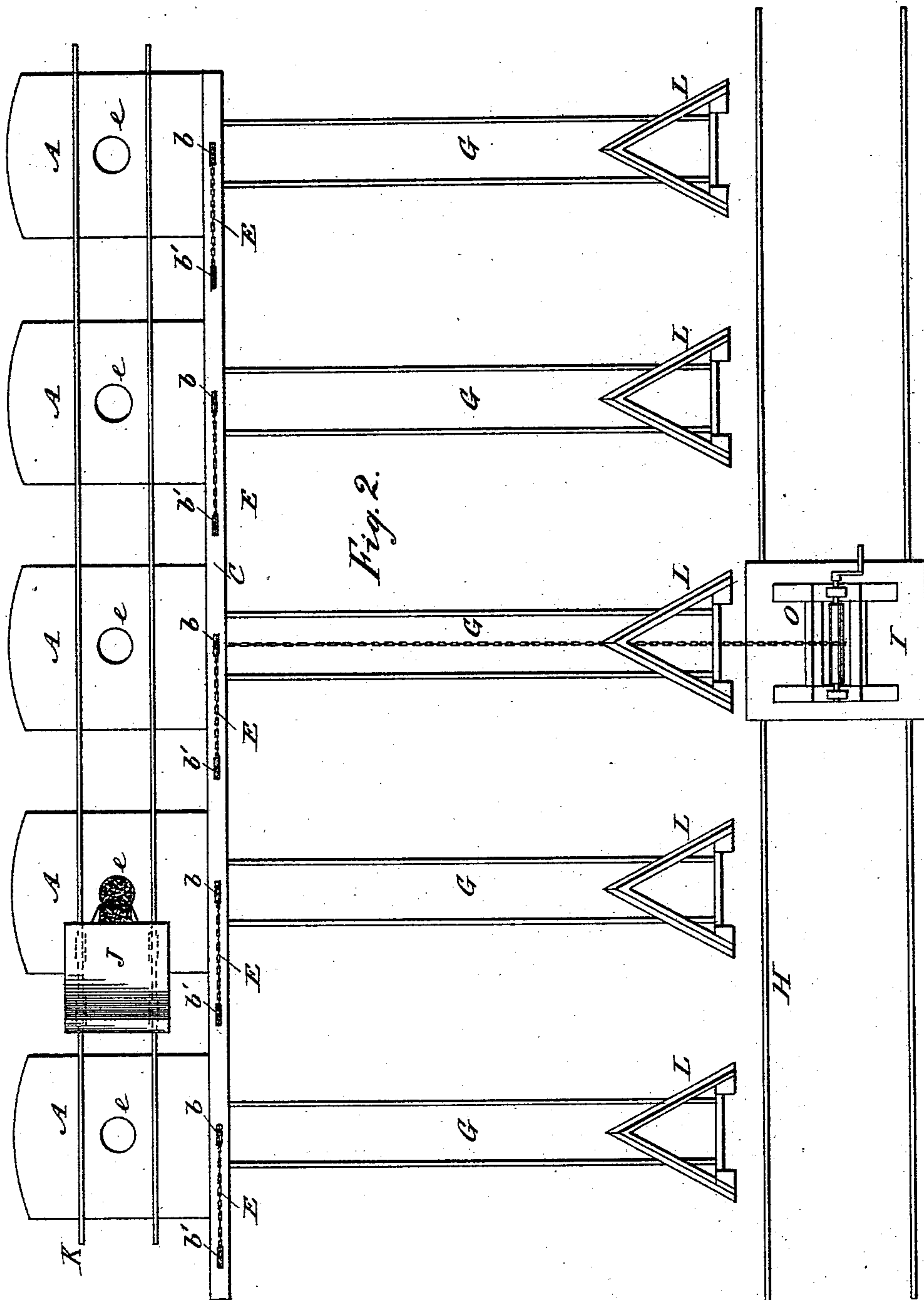
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W. T. Giles
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BY Munn & Co.
ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM T. GILES AND WILLIAM BOOTH, OF SHAMOKIN, PENNSYLVANIA.

DEVICE FOR DISCHARGING COKE-OVENS.

SPECIFICATION forming part of Letters Patent No. 379,390, dated March 13, 1888.

Application filed September 19, 1887. Serial No. 250,120. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM T. GILES and WILLIAM BOOTH, both of Shamokin, in the county of Northumberland and State of Pennsylvania, have invented new and useful Improvements in Coke-Ovens, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

10 Figure 1 is a perspective view of our improved coke oven with parts broken away to bring it within the compass of the drawings, and Fig. 2 is a plan view.

Similar letters of reference indicate corresponding parts in both views.

15 The object of our invention is to provide means for rapidly charging and discharging coke-ovens, thereby saving the heat which is lost when the ovens are charged and discharged in the usual way by means of hand implements; also saving a large amount of time and labor.

Our invention consists in the combination, with an oven or series of ovens having suitable doors for closing their fronts, of a railway-track entering each oven and a railway-track running at right angles to the tracks entering the ovens, provided with a traveling crab which may be moved along to the different ovens; also, in the combination, with the ovens and railway-tracks, of trucks of novel construction for conveying the coal to the ovens; also, in a plow arranged opposite each oven for discharging the trucks carrying the coke, all as hereinafter more fully described.

35 The oven A is built of brick, in the usual way, and provided at the front thereof with grooved vertical standards B B', supporting a cross-beam, C. To the grooves *a* of the standards B B' is fixed a sliding door, D, provided with a brick lining and suspended by a chain, E, extending over sheaves *b b'*, which are journaled in mortises in the cross-beam C. To the opposite extremity of the chain E is attached a weight, F, which balances the door D. In the bottom of the oven A is built a railway-track, G, which extends a short distance beyond the mouth of the oven A. Series of such ovens A are arranged parallel with each other, and in front of the series is arranged a railway-track, H, to which is fitted a truck, I, carrying

a windlass, O, the truck I being arranged so that it may be brought opposite any of the tracks G of any of the ovens.

At the side of each track entering the ovens is supported a triangular plow, L, by standards *c*, the said triangular plow L being provided with beveled sides *d*. To the tracks G are fitted trucks M, made of incombustible material, for receiving the coal to be coked. The truck M is provided with a chain, *f*, by which it may be drawn forward under the plow L by means of the windlass O.

The coal to be coked is placed upon the truck J, running on the track K, extending over the tops of the ovens, and is dumped into the ovens A through a trap-door, *e*, at the top of each oven. The oven, after being charged, is closed until the coking process is finished, when the trucks M, with their loads, are withdrawn from the ovens and discharged, being drawn forward under the plows L, the plows L pushing the coke laterally off from the trucks M. In this manner time and heat lost by removing the coke from the oven by means of hoes and hooks is saved, and the process may be carried forward more rapidly and with less manual labor.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent—

1. An apparatus for discharging coke from ovens, comprising a truck adapted to receive and hold the coal while in the oven, and a plow arranged outside of the oven and under which the truck is to be drawn to discharge its load, substantially as described.

2. An apparatus for discharging coke from ovens, comprising tracks G, extending into the ovens, the track H, running parallel with the faces of the ovens, the truck I, provided with the windlass O, the plow L, supported above the end of the track G, and the truck M, adapted to run under the plow L, substantially as described.

WILLIAM T. GILES.
WILLIAM BOOTH.

Witnesses:

R. B. DOUTY,
CHAS. H. DOUTY.