

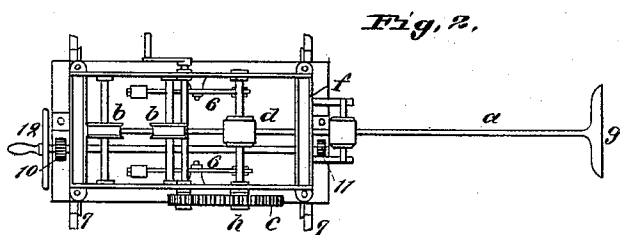
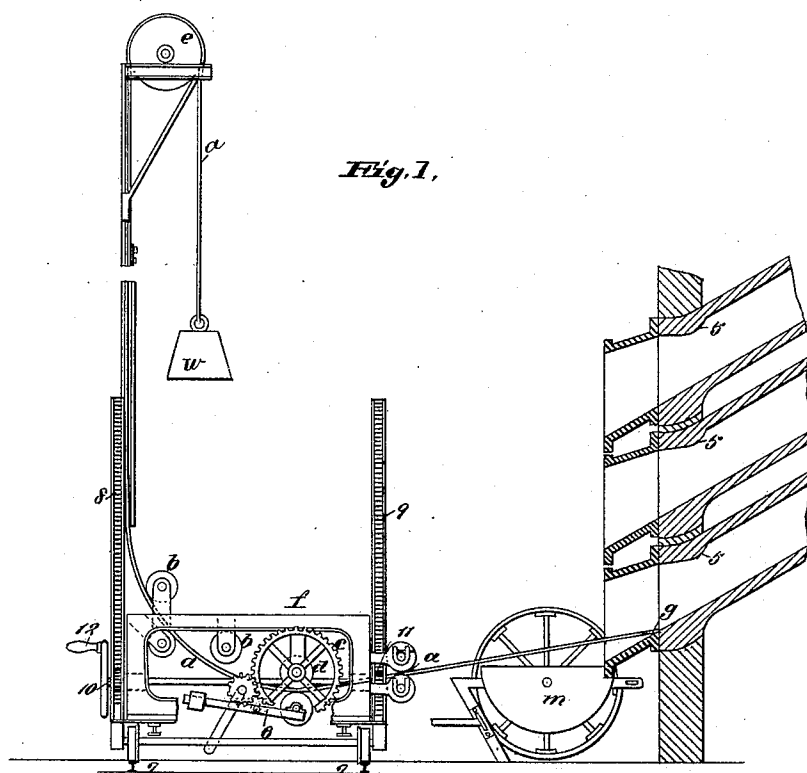
(No Model.)

A. COZE.

APPARATUS FOR DISCHARGING GAS RETORTS.

No. 475,540.

Patented May 24, 1892.



Witnesses;
Charles Pickles,
W. S. Ruder.

Inventor;
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UNITED STATES PATENT OFFICE.

ANDRÉ COZE, OF PARIS, FRANCE, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO SOCRATES NEWMAN AND JAMES GREEN, OF ST. LOUIS, MISSOURI.

APPARATUS FOR DISCHARGING GAS-RETORTS.

SPECIFICATION forming part of Letters Patent No. 475,540, dated May 24, 1892.

Application filed November 28, 1890. Renewed March 30, 1892. Serial No. 427,018. (No model.) Patented in France February 14, 1885, No. 167,044; in Germany March 27, 1885, No. 33,959; in Belgium June 17, 1885, No. 69,316; in England June 20, 1885, No. 7,563; in Italy June 30, 1885, No. 438; in Austria-Hungary October 30, 1885, No. 23,286 and No. 57,022, and in Spain December 22, 1885, No. 7,837.

To all whom it may concern:

Be it known that I, ANDRÉ COZE, a citizen of the Republic of France, formerly residing at Rheims, France, but now a resident of Paris, in said country, have invented certain new and useful Improvements in Apparatus for Discharging Gas-Retorts, (for which I have obtained Letters Patent in France, No. 167,044, dated February 14, 1885; in Germany, No. 33,959, dated March 27, 1885; in Austria-Hungary, No. 23,286 and No. 57,022, dated October 30, 1885; in Spain, No. 7,837, folio 190^a, dated December 22, 1885; in Italy, No. 438, folio 36, dated June 30, 1885; in Belgium, No. 69,316, dated June 17, 1885, and in England, No. 7,563, dated June 20, 1885,) of which the following is such a full, clear, and exact description as will enable any one skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of my apparatus for discharging gas-retorts, showing the same in connection with three inclined gas-retorts arranged at different levels. Fig. 2 is a plan view of the apparatus for discharging the retorts.

The same letters and figures of reference indicate the same parts in the two views.

The discharger consists of a metallic band *a*, passing around guide-rollers *b* in the curved form shown, whereby to permit, on the one hand, of the introducing the tool or rake *g* into each retort *5*, and, on the other hand, of enabling it to be guided in a vertical direction, and thus economize the space which would be required were the band or rake handle *a* extended horizontally. The forward movement is effected by toothed gearing *c*, operated by hand or other power, the band *a* being fed forward by rollers *d* on the gear-wheel shafts, between which it is gripped, the pressure being maintained constant by means of counterweighted levers *6*. The backward movement of the band is obtained either by reversing the motion of the gearing *c* or by

raising the counterweighted pressing-roller *d*, which renders the band slack, or by means of a weight *w*, which passes over pulley *e*, suitably supported, or the apparatus may be provided with a spring for raising the band. The mechanism is mounted on a carriage *f*, traveling on rails *7 7*, and carrying a rack *8 9* at front and rear, which, by means of two pinions *10 11*, operated by a hand-wheel *12*, enables the band *a* to be raised or lowered to suit the height of the retorts to be discharged. *m* is a wheeled receptacle into which the contents of the retorts may be discharged.

What I desire to claim and secure by Letters Patent of the United States as my invention is—

1. A rake and a rake-handle, consisting of a flexible metallic band having a T-head and adapted to be curved or bent, as shown, in combination with suitable guide-rollers and mechanism for propelling such rake and handle into and out of the retort.

2. In combination with a suitable traveling carriage and the rake and handle consisting of a flexible band or rod adapted to be curved upward, the guide-rollers for guiding the handle in a vertical direction and mechanism for propelling such rake and handle into and out of the retort.

3. In combination with a traveling carriage, the rake having a flexible handle or rod, rollers arranged on suitable shafts above and below the rake-handle for gripping such handle between them, and suitable power-gearing operating the rollers to propel the handle and rake back and forth for discharging the retort.

4. In combination with a traveling carriage, a rake and flexible handle mounted therein, the gripping-rollers mounted on shafts above and below such handle, the counter-weights connected with one of the gripping-rollers for pressing it against the rake-handle, and power-gearing for operating the gripping-rollers to propel the rake-handle, substantially as described.

5. In combination with a traveling carriage,

a rake and flexible handle mounted therein,
the gripping-rollers mounted on shafts above
and below such handle, the counter-weights
connected with one of the gripping-rollers
5 for pressing it against the rake-handle, power-
gearing for operating the gripping-rollers to
propel the rake-handle and the guide-rollers,
substantially as described.

In testimony whereof I have hereunto set
my hand and affixed my seal this 5th day of 10
November, 1890, at Paris, France.

ANDRÉ COZE. [L. S.]

Witnesses:

ROBT. M. HOOPER,
ALBERT MOREAUX.