

AUGUSTA M. RODGERS.

Improvement in Conveyers of Smoke and Cinders for Locomotives.

No. 114,605.

Patented May 9, 1871.

Fig. 1.

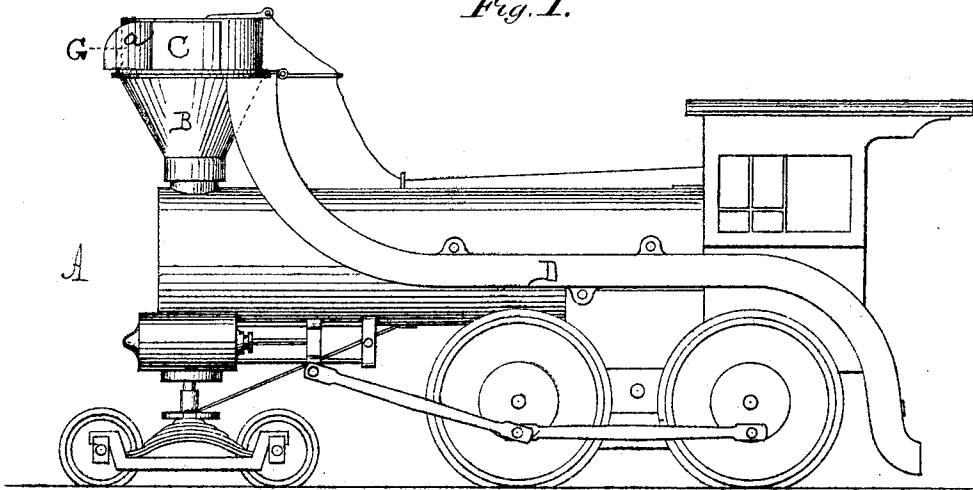


Fig. 2.

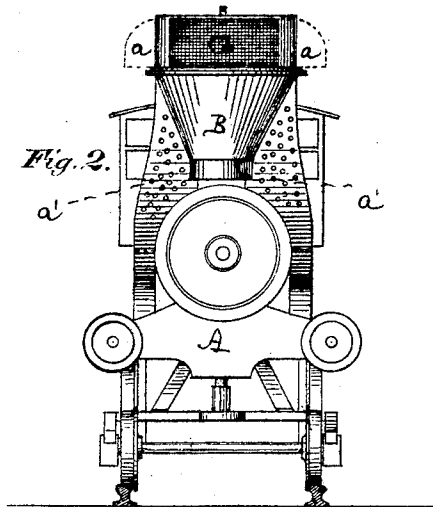
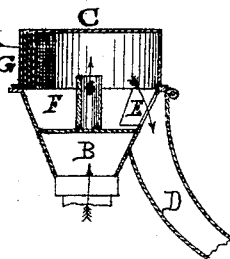


Fig. 3.



Witnesses:

T. C. Wright.
P. V. Knapp.

Inventor:

A. M. Rogers
by John A. Diederichs
att'y

UNITED STATES PATENT OFFICE.

AUGUSTA M. RODGERS, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN CONVEYERS OF SMOKE AND CINDERS FOR LOCOMOTIVES.

Specification forming part of Letters Patent No. **114,605**, dated May 9, 1871.

To all whom it may concern:

Be it known that I, AUGUSTA M. RODGERS, of Brooklyn, in the county of Kings and State of New York, have invented new and useful Improved Conveyer for Smoke and Cinders of Locomotives; and I do hereby declare the following to be a clear and exact description thereof, sufficient to enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawings, making part of this specification, in which drawing—

Figure 1 is a side view of a locomotive-engine having my invention applied thereto. Fig. 2 is a front view thereof. Fig. 3 is a central longitudinal section in the line *x x*, Fig. 2.

Similar letters of reference indicate corresponding parts in the several figures.

In the drawings, A represents a locomotive-engine, which may be of any well-known form and construction. B represents the smoke-stack, which is formed with a hinged cap, C. D is a conveyer, which, in the present case, is in the form of a tube and an auger along the sides of the boiler. Its forward end communicates with the top of the smoke-stack, and its rear end extends to near the ground, and, preferably, in line with the track, for purposes to be hereinafter described.

E represents an opening in the smoke-stack for its communication with the conveyer D, and F represents the chamber formed by the top of the smoke-stack and the cap C.

A portion of the cap or smoke-stack is cut away and occupied by a gauze or netting, or, in lieu thereof, slots may be formed in the cap so as to form a passage, G, for admitting air into the chamber F and conveyer D.

It will be seen that when the engine is in motion a current of air enters the chamber F, and is forced down the conveyer. As the smoke and cinders arise they are conveyed

with the air and directed toward the ground, so as not to enter the windows of the cars, and thus not annoy and discomfort the passengers. The cinders will be deposited on the track, and serve to give hold to the wheels, whereby slipping or flying of the wheels is obviated.

In order to increase the current of air through the conveyer, fans or wings *a* may be arranged at the sides of the passage C, and openings be made in the conveyer, as shown at *a' a'*.

It is essential that the draft or current be strong, to force the cinders to the rear and prevent clogging in the conveyers.

It is well that the conveyers be made detachable, in case of repairs, and also in sections, for cleaning purposes; and their ends may be arranged in front of the driving-wheels or in the rear thereof. In the latter case, additional attachments or conveyers may be placed under the tender, so as to be connected, by suitable means, with pipes attached to the other cars, in order to conduct the smoke to the rear of the train.

When the train is stopped, the engineer raises the cap, by means of a cord, lever, or other means, to permit the smoke and cinders to escape in the usual manner from the top of the stack.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination of the smoke-stack B, chamber F, opening E, hinged cover C, provided with screen G, and conveying-pipes D, perforated at their forward sides, all constructed and arranged as herein shown and described.

To the above specification I have signed my name this 26th day of January, 1871.

AUGUSTA M. RODGERS.

Witnesses:

I. H. HAVINS,
M. A. WOOD.