G. DE NOTTBECK.

CANAL LOCOMOTIVE.

No. 193,147. Patented July 17, 1877.

Fig: 1.

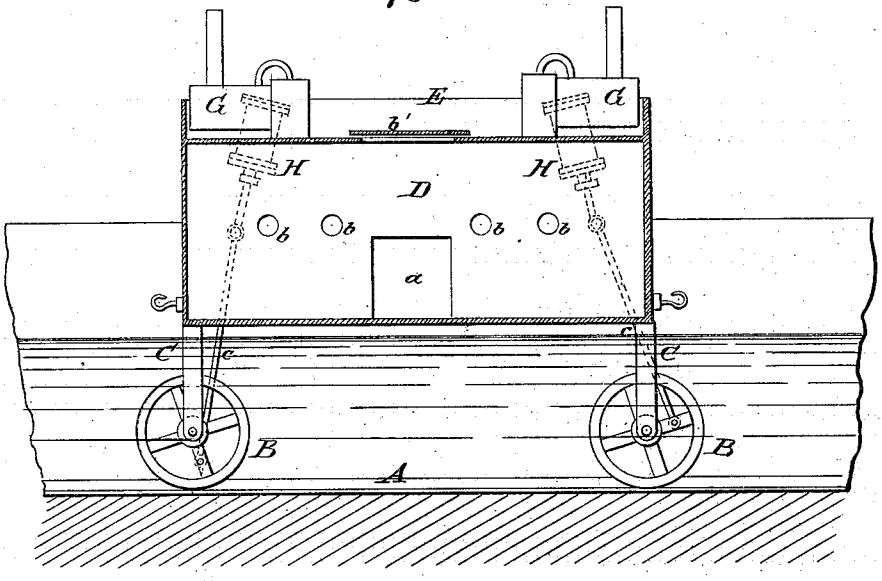
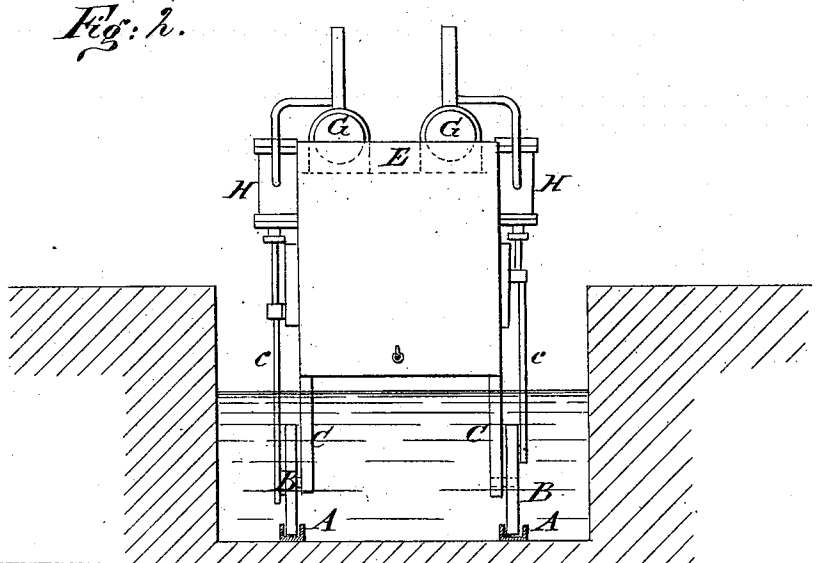


Fig: 2.



WITNESSES:

Chas. Nida.

J. H. Scarborough.

INVENTOR:

G. de Nottbeck

BY Munn & Co

ATTORNEYS.

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

GABRIELLE DE NOTTBECK, OF NEW YORK, N. Y.

IMPROVEMENT IN CANAL-LOCOMOTIVES.

Specification forming part of Letters Patent No. **193,147**, dated July 17, 1877; application filed June 18, 1877.

To all whom it may concern:

Be it known that I, Miss GABRIELLE DE NOTTBECK, of the city, county, and State of New York, have invented a new and Improved Locomotive for Canals, of which the following is a specification:

This invention has for its object the construction of a locomotive which will practically run in a canal, the rails or track being laid upon the bed of the canal, and the body of the locomotive raised above the water and mounted upon standards, to which the driving and transporting wheels are applied.

I am aware that canal-boats have been propelled by means of locomotives or traction-engines which run on the sides of the canals; but the power in such instances was oblique to the length of the boats, and the resistance was very great. I have invented a locomotive which will run in a canal, and in a direct line with the boat which it draws, as will be understood from the following description.

In the annexed drawings, Figure 1 is a vertical section taken longitudinally through my improved locomotive mounted upon rails laid on the bottom of a canal. Fig. 2 is a cross-section through a canal in which is arranged the locomotive.

Similar letters of reference indicate corresponding parts.

I arrange upon the bottom of a canal two rails, A A, which are preferably grooved, as shown, and adapted to support and guide the driving and transporting wheels B. These wheels are applied on short axles which are rigidly secured to strong standards C, of such construction as will afford the least resistance to the water while passing through it. The body of the locomotive is strongly built upon the standards C, and has a large storage-room, D, provided with doors *a* and windows *b*, and on top of this room is a deck, E, with a hatchway, *b'*. On the deck E, and located at the ends thereof, are four steam-boilers, G, constructed in any suitable manner. Each steam-boiler supplies an engine, H, which is arranged on the outside of the locomotive-body, and provided with the well-known steam-chest, slide-valve, and piston. The piston-rod of each engine communicates rotary motion to a driving-wheel, B, through the medium of a pitman-rod, *c*.

If desired, the four engines may be supplied with steam from a single boiler, using suitable valves in the steam-pipes for cutting off when necessary.

In practice the body of the locomotive will be entirely out of the water, and it will be provided with a hook at each end for the attachment of a boat.

I use engines at each end of the locomotive for driving it in either direction, and thus avoid the necessity of turning it around. All of the engines may be run at the same time, although I believe that two engines will be sufficient.

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

1. A canal-locomotive having supporting-standards C and drive-wheels B, in combination with track-rails A, laid upon the bed of a canal, so as to enable the locomotive to run in the latter, and be used for towing boats, as herein set forth.

2. The locomotive-body mounted above the water upon standards C, and constructed with a storage-room, D, a deck, E, and engines H, arranged substantially as and for the purposes specified.

GABRIELLE DE NOTTBECK.

Witnesses:

M. R. JOHNSON,

S. B. GOODALE.