

T. J. BURKE.

Improvement in Propulsion of Canal Boats.

No. 121,749.

Fig. 1.

Patented Dec. 12, 1871.

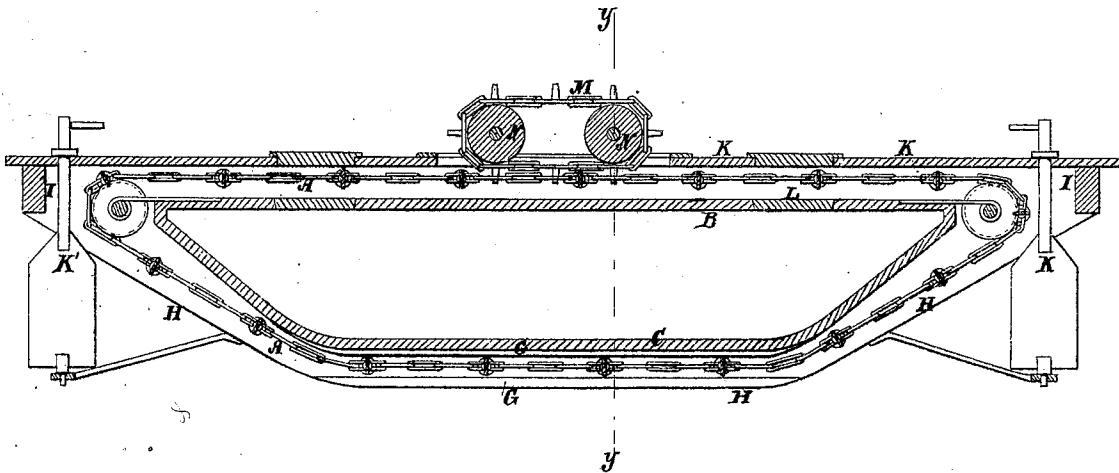


Fig. 2.

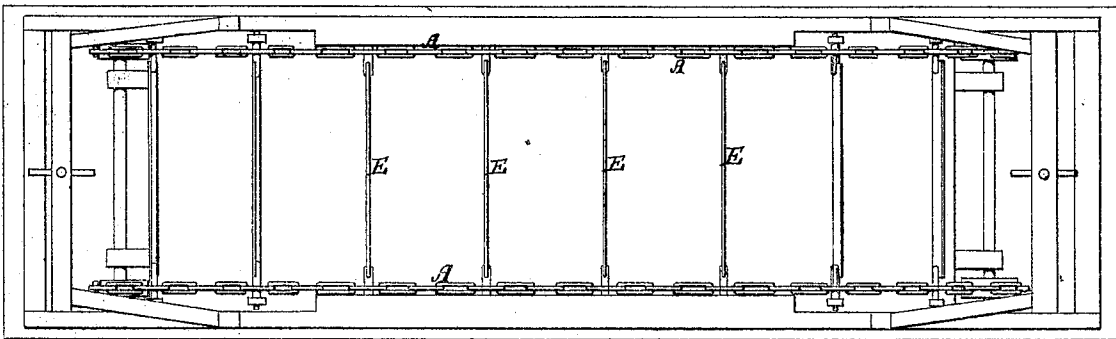
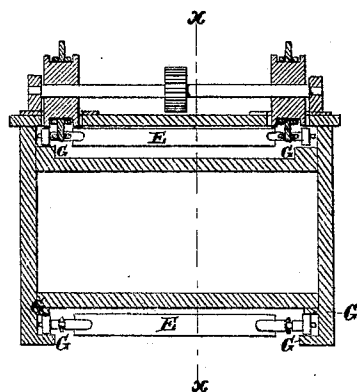


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

THOMAS JAMES BURKE, OF VIRGINIA, ILLINOIS.

IMPROVEMENT IN PROPULSION OF CANAL-BOATS.

Specification forming part of Letters Patent No. 121,749, dated December 12, 1871.

To all whom it may concern:

Be it known that I, THOMAS JAMES BURKE, of Virginia, in the county of Cass and State of Illinois, have invented a new and useful Improvement in Propelling Canal-Boats; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to an improvement in the class of canal-boats which are propelled by apparatus consisting of endless chains carrying vertical buckets, and running from end to end over the deck and under the bottom. The improvement pertains particularly to the means of imparting motion to such propelling apparatus; and to this end consists in the arrangement of a pair of rollers and chains thereon, (the latter being provided with projections,) in relation to the bucket-chains, as hereinafter more fully described.

Figure 1 is a longitudinal section of a boat provided with the said improvement, the section being taken on the line *x x* of Fig. 3. Fig. 2 is a plan of the bottom, and Fig. 3 is a cross-section on the line *y y* of Fig. 1.

Similar letters of reference indicate corresponding parts.

A represents a pair of endless chains, arranged to work over the disk B and under the bottom C, in the lengthwise direction of the boat, on rollers D, one at each end, the chains being arranged

as close to the sides of the boat as practicable, and carrying buckets or paddles E extending from one to the other end, so connected to said chains that the sides will be presented to the water perpendicular to the line of their movement. They are provided with a roller, F, at each end, to roll on guides or tracks G both above and below them to keep the chains in position. Flanges or guards H project below the bottom of the boat to protect and guide the chain-rollers. They also project beyond the ends at I for the support of the rudders K' K', and also for the support of the secondary deck K, which likewise rests on the sides L. The chains are worked by power applied through the medium of the pair of rollers N N and chains M M on said rollers, provided with projections or spikes which take into the links of the chains, as shown. Power is applied to but one of the rollers, the other being driven by the first. This constitutes a very simple, durable, strong, and efficient mechanism.

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

The propelling apparatus for a canal-boat, formed of the chains M M provided with projections, and the rollers N N, in combination with the endless chains and buckets E, all arranged in connection with the boat, as specified.

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Witnesses:

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(139)