(No Model.)

H. J. SULLIVAN, Dec'd.

M. J. SULLIVAN, Executrix.

LOG HAULING LOCOMOTIVE.

No. 511,975. Patented Jan. 2, 1894.

Fig. 1.

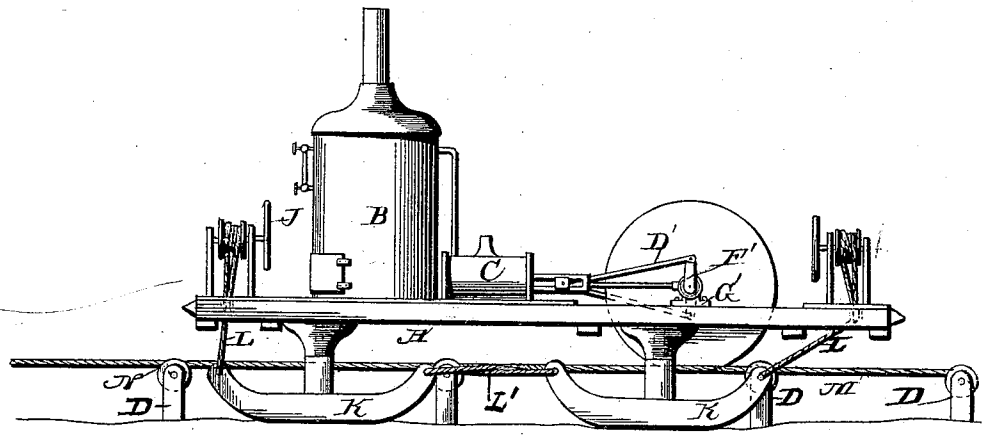


Fig. 4.

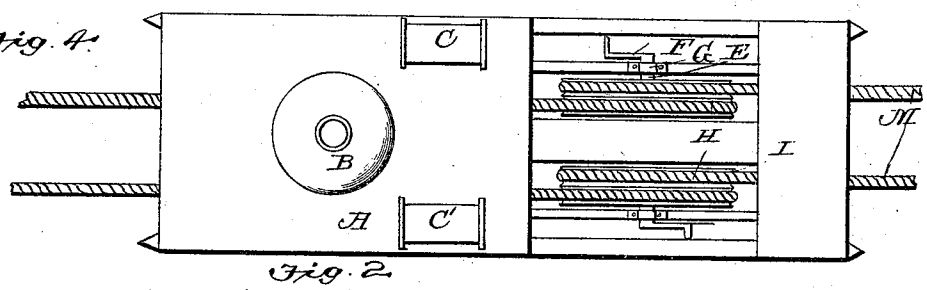


Fig. 2.

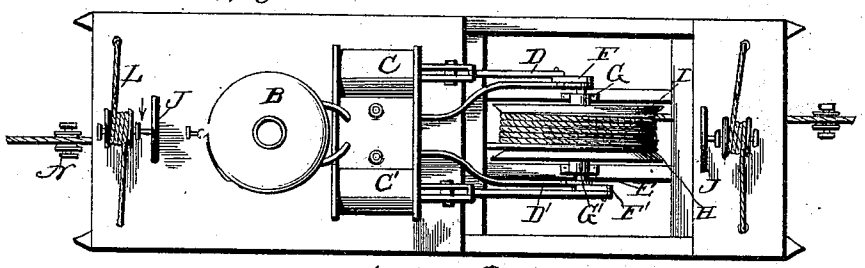
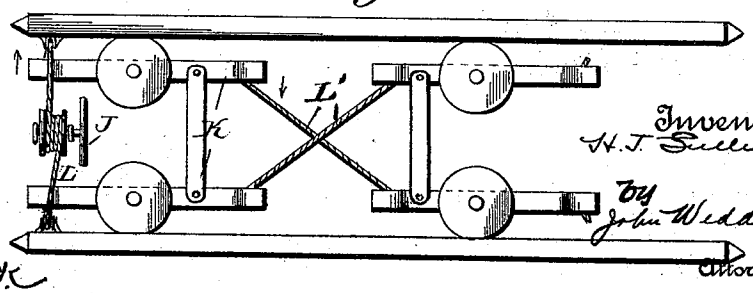


Fig. 3.



Witnesses

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HENRY J. SULLIVAN, OF STILLWATER, MINNESOTA; MARY JANE SULLIVAN EXECUTRIX OF SAID HENRY J. SULLIVAN, DECEASED.

LOG-HAULING LOCOMOTIVE.

SPECIFICATION forming part of Letters Patent No. 511,975, dated January 2, 1894.

Application filed March 2, 1893. Serial No. 464,395. (No model.)

To all whom it may concern:

Be it known that I, HENRY J. SULLIVAN, of Stillwater, in the county of Washington and State of Minnesota, have invented certain new and useful Improvements in Log-Hauling Locomotives; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention is an improvement in log hauling locomotives or machines, and it has for its object to provide a device of this class which shall possess superior advantages in point of simplicity of construction as well as inexpensiveness, and general efficiency.

Other objects and advantages of the invention will appear in the following description, in which I have set forth fully the details of construction and the essential features thereof, and illustrated them in the accompanying drawings in which similar letters of reference designate corresponding parts.

Figure 1 is a side elevation of my improved locomotive, and Fig. 2 is a plan view of the same. Fig. 3 is a bottom plan view, and Fig. 4 is a plan view showing my machine constructed with two drums and two cables.

Reference being had to the above figures, A, represents the body or bed of a sled or car, on which is mounted in a suitable manner the boiler B, and double cylinders C, C′, the piston rods D D′, of the latter of which are connected to the shaft E, by means of the crank arms F F′. The shaft E, being mounted on the platform A, by means of the bearings G G′.

Rigidly secured to the central portion of the horizontal shaft E, is the drum H, the periphery of which contains the groove I.

Situated at the forward and rear portions of the body A, is the steering apparatus, which consists of the operating wheels J, pivoted runners K, and connecting ropes L, the operation of which will be readily seen from the accompanying drawings. The front ends of the rear runners and the rear ends of the front runners are connected by crossed ropes or analogous devices L′ and also with cross braces to produce unitary action of the runners in steering.

Situated beneath the body A, and extending the entire length of the road bed, is the wire cable or rope M, which is supported at suitable intervals by means of the rollers N, situated in the stationary posts D. The cable M, after passing about the drum from beneath the sled, and following the groove I, passes from the groove in the same plane in which the cable was before passing about said drum. Therefore the amount of elevation of the cable above the supporting pulley N, is comparatively slight.

My improved device can also be employed for hauling cars and other heavy articles up steep grades, and when thus used, I construct my machine with two drums and cables, such as shown in plan view in Fig. 4.

It will be readily seen from the foregoing drawings, that when the drum H, is caused to revolve by means of the engine, the extremities of the cable remaining fixed, the sled, and consequently the load attached thereto, is caused to follow the cable, and by this construction, loads of considerable capacity are readily and quickly transported from place to place, and the expense of such transportation is comparatively small.

I am aware that changes in the form and proportion of parts of the device herein shown and described as an embodiment of my invention, can be made without departing from the spirit or sacrificing the advantages thereof, and I therefore reserve the right to make such changes and alterations as fairly fall within the scope of my invention.

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

In a log hauling locomotive, the combination of a cable fastened at opposite ends, a body above said cable, having a drum thereon over which said cable passes and operating mechanism for said drum, front and back pairs of runners pivoted independently to said body, and having the front ends of the back pair attached to the rear ends of the front pair by crossed connections, and means for turning said runners, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

H. J. SULLIVAN.

Witnesses:
H. E. BALDWIN,
H. L. HAGERMAN.