04-136

EXAMINER.

J. Wallner.

Patented Apr. 13, 1838.

Railroad.

No 6go.

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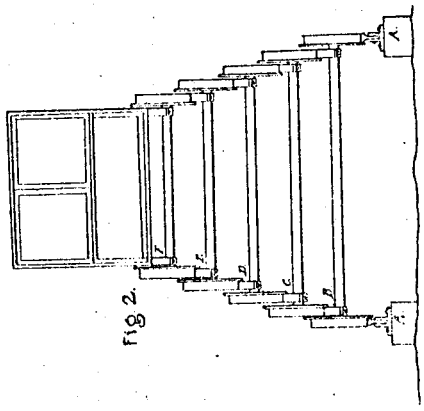

Fig 2.

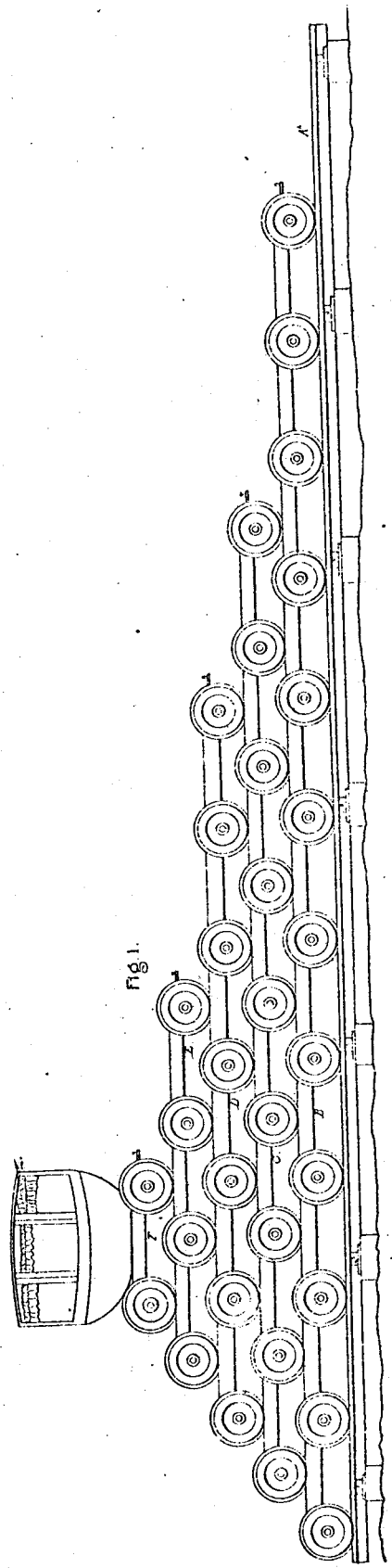

Fig 1.

UNITED STATES PATENT OFFICE.

JACOB NOLLNER, OF WASHINGTON, DISTRICT OF COLUMBIA.

APPARATUS FOR ATTAINING A HIGH DEGREE OF VELOCITY ON RAILROADS, &c.

Specification of Letters Patent No. 690, dated April 13, 1838.

To all whom it may concern:

Be it known that I, JACOB NOLLNER, of the city of Washington, in the District of Columbia, have invented a new and improved mode of combining certain well-known kinds of apparatus or machinery so as to attain a very high degree of velocity, and which combined machinery may be applied to the purpose of transportation upon railroads and to other objects where it may be desirable to attain a high degree of speed upon the principle or in the manner devised by me; and I do hereby declare, that the following is a full and exact description thereof.

The principle upon which I proceed is the same with that which obtains when vehicles of any kind are made to have a progressive motion upon the surface of the earth. A carriage or a floating vessel placed upon any part of that surface, and relatively at rest, all the articles or persons, stationed thereon, will be at relative rest; if the vessel or carriage be made to move in any direction, by a force applied to it alone, such force, if sufficient to overcome its friction and inertia will have absolute motion communicated to it, and that in a degree proportioned to the nature of such force; and will, in a short space of time, cause whatever articles are placed upon it from their inertia, to move with it in a right line, if the power of the first mover be equable. Let us suppose motion to be communicated to a car, platform, or other article mounted upon wheels, from an independent source, both the car and motive power being placed upon another platform, vessel, or other article, and let the motion communicated to the second car or other article, be equal in velocity to, and in the direction of that communicated to the first car, platform, or vessel upon which it moves, and the absolute motion, on the earth's surface, will be thereby doubled.

If, for the purpose of illustration, we suppose a movable railroad of sufficient length to be constructed, and to run upon an ordinary, permanent, fixed railroad perfectly level or otherwise; and we also suppose a train of cars, with wheels, placed thereon capable of a separate and independent motion, and adapted to the rails fixed on the top of the movable road: that the movable road be one mile in length and could be drawn upon the permanent road by a locomotive engine, or moved by any other adequate power; and further suppose, that a train of cars be placed, as above stated, upon the movable railroad, and be drawn forward thereon, as upon a stationary railroad, by a locomotive giving to the train the same relative velocity with the movable railroad, is it not manifest that its own relative velocity will be doubled; or it will pass over the same space, on the permanent railroad, in one half of the time, that the movable railroad would. A further illustration: Let a movable railroad be placed upon a permanent railway; then let a train of cars be placed upon the top of the movable railroad, and let it be supposed that the velocity given to the movable railroad, by a locomotive, to be equal to twenty miles an hour; the train of cars placed thereon, when at rest, must needs go at the same velocity; suppose further, that while the movable road is in motion, the train of cars be also put in motion, by a separate locomotive attached to it, at the same rate of twenty miles an hour; then, is it not undeniable, that the train will go at the velocity of forty miles an hour—being carried twenty miles an hour by the movable road, and twenty miles an hour by its own locomotive; or in other words, the train will travel twenty miles in thirty minutes; that is, it will go over the same space, in one half of the time; and so, of any number of mounted railroads superincumbent upon each other, and so constructed as to operate upon the principle above laid down.

The better to exemplify this principle, I refer to the annexed drawing, which represents a permanent railroad, having upon it four movable railroads running on wheels, placed one above the other, and also a carriage or car on the top of the whole, each of the movable railroads being of a proportionate length to that which stands immediately above it.

A^1, A^2, Figs. 1 and 2, is the permanent railroad, and B, C, D, and E, the respective movable railroads, and F, a car forming the topmost and last of the series, B, being placed directly on the permanent road, and the others, one surmounting the other, as represented. If the movable railways be placed as in the drawing, so that one end of each be at the point A^1, of the permanent road, and the movable railway B, be made to travel toward A^2, by the application of any motive power, say at twenty miles an hour; and each of the surmounted railways,

and the car, be made to travel independently, by a separate motive force applied to itself, and giving it the same velocity, C, will thereby be caused to travel forty; D, sixty; E, eighty; and F, one hundred miles, in the same period of time.

I have presented, for illustration, the construction of a stationary railway and of mounted railways, such as I am aware it may appear to some persons, impracticable to make and use; but I have thus shown it, principally, for the purpose of exemplification; I am of opinion, however, that the principle of attaining a high velocity, as herein described, may be so modified as to be applied advantageously to the purposes of locomotive; and also, that it may be found to be applicable, in a greater or lesser extent, to the various purposes in the machinery employed in various useful arts; and it is my object to secure to myself the right of applying it, in any way, in which it may be advantageously used.

What I claim, therefore, as my invention, and wish to secure by Letters Patent, is—

The placing of two or more movable railways, platforms, or articles capable of progressive motion, one above the other, so that each may be drawn along by an independent power applied to it, and, like itself sustained upon the railroad, platform, mounted railway, or other article, upon which it is to move; and this I claim, whatever form or arrangement the same may be made to assume, while the principle of action is the same with that herein exemplified.

JACOB NOLLNER.

Witnesses:
JNO. M. MOORE,
SAML. DAVIDSON KING.