6406X

E. Kimber,

Inclined Railroad

Patented Mar. 5, 1831.

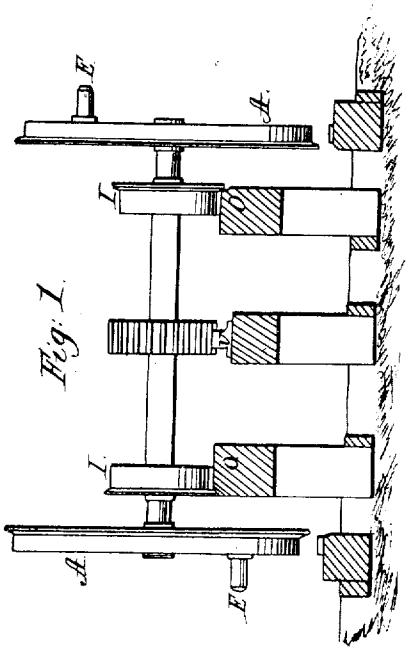


Fig. 1.

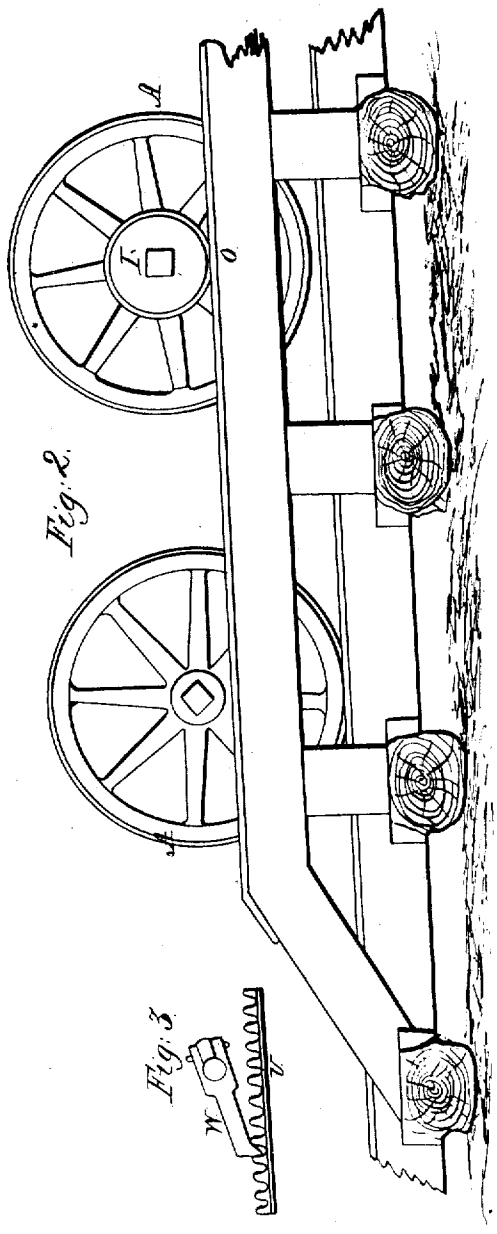


Fig. 2.

Fig. 3.

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

Mar. 5. 1831

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Emmor Kember
Locos Patent

The schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said Emmor Kember himself of his improvement in Locomotive Carriages & rails adapted thereto

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To all to whom these presents may come. Be it known that I Emmor Kember of Hambleton in the County of Chester State of Pennsylvania have invented a new & useful improvement in Locomotive Carriages and that the following is a full & exact description of the construction & operation of the said improvement and the formation of the Rail way or railroads adapted thereto

The invention consists principally in employing the power of locomotive engines on railroads in such manner that by diminishing the gravity of the carriage the effective force of the engine will be increased in the same ratio thereby superseding the necessity of stationary engines. 1st a, a, are the common wheels of a locomotive carriage (3 feet in diameter) to which the power of the engine is applied by a wrist or crank at c, c, . On these wheels the locomotive carriage runs upon a plane drawing the train forward on the rails nearly nine feet for every revolution 2nd i, i, are two smaller wheels (attached to a, a, or separate (feet in diameter) and placed upon the same axle with a, a, To aid and facilitate the locomotive carriage runs upon i, i, upon their own rails o, o, raising the common wheels clear from their rails and therefore the carriage with the train moves forward only three feet for every revolution. 3rd The diameter of the wheels being as three to one the engine employs three times as much power in a given space on the smaller wheels as on the common ones, but the carriage and train move forward on the rails proportionably slower. and so of wheels of any other proportions as four to one, five to one, &c. 4th On the middle of the fore axle is planted a cog wheel 2 of the diameter

ance with the smaller wheels to work free in the cog rail w, to prevent slipping on great assents. This side of the cog wheel is known and has been recently improved & laied. The improvement consists in substituting one cog wheel and its rail in the centre in the stead of meyer rails and cog wheels on both sides of locomotive carriages. 5th w, is a drag or pawle that may be attached to locomotive carriages and every car in their trains to work upon the cog rail w, Its use is well known to prevent a slip or slide in case of accidents on great acclivities— but it deserves new importance from its connexion with the cog rail w. allowed in the middle of the road. 6th The ascending rails o, o, and w, may be so constructed as to rest upon the foundations with the common rails and be raised to their proper height by blocks, they are only used in ascending acclivities and for the small wheels. The hind wheels of the locomotive carriage and the wheels of all the cars in the train run on the common rails. 7th In this specification the wheels on the fore axle only are mentioned because the power is considered as applied to the fore wheels. If the power should be applied to the hind wheels instead or in part to both fore & hind the principle would not thereby be changed. The small additional wheels on either or on both would be the application of power described & claimed as my invention.

Rhinebeck, 2. mo. 24th 1831.

Witnesses
Mynd. McVaugh
Saml. Skinner

Emmor Rhinebeck

Emmor