

J. E. Wickham,

Toy Locomotive.

No. 103,224.

Patented Oct. 11, 1870.

Fig. 1.

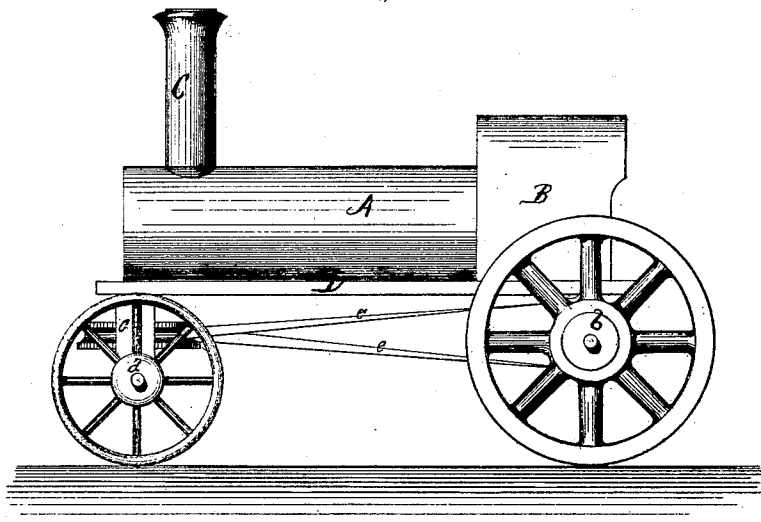
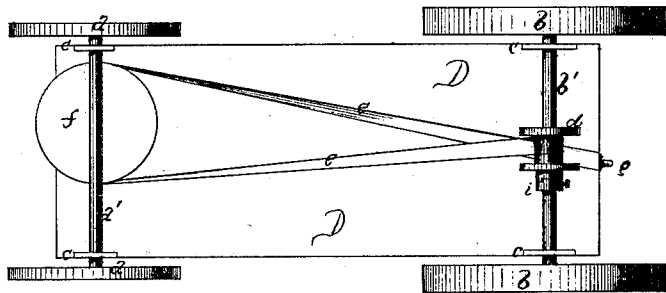


Fig. 2.



Witnesses.

L. H. Klein

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Inventor.

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United States Patent Office.

JAMES E. WICKHAM, OF HARTFORD, CONNECTICUT.

Letters Patent No. 108,224, dated October 11, 1870.

IMPROVEMENT IN TOY LOCOMOTIVES.

The Schedule referred to in these Letters Patent and making part of the same

I, JAMES E. WICKHAM, of Hartford, county of Hartford and State of Connecticut, have made certain Improvements in Mechanism for Propelling of Toy Locomotives and similar vehicles, of which the following is a specification.

Nature and Objects of the Invention.

My invention consists in a new and simple mechanism for propelling toy locomotives and other toy vehicles.

Description of the Accompanying Drawing.

Figure 1 is a side elevation.

Figure 2 is a view of the bottom of the toy locomotive, upon which the driving-mechanism is placed.

General Description

The letter A indicates the wooden imitation boiler; B, the cap; C, the smoke-stack; and D, the wooden plate, to which the driving mechanism is attached.

The letters *a a* indicate the forward wheels, and *b b*, the driving-wheels.

a' is the axle of the former, and *b'*, the axle of the latter.

These axles are raised somewhat from the plate D by the bearings *c c c c*.

On the shaft or axle *b'* is rigidly fixed the clutch *i*, which fastens to the shaft by a set-screw.

On this same shaft is the loose metal spool *d*, which

has its side, which is next the clutch *i*, made so as to catch into and revolve with the clutch in one direction, but to slip upon it and upon the shaft, when the shaft and clutch are revolved in an opposite direction.

To this loose metal spool is fastened one end of the rubber string *e*, which runs around the pulley *f* and fastens at *g*.

The clutch and spool are so arranged that, when the wheels *b b* are revolved in the direction opposite from that which they will take when the locomotive runs forward, the rubber spring will be wound upon the spool, and, when released and put upon the floor, the locomotive will be propelled forward by the unwinding of the rubber spring.

This arrangement is, of course, applicable to other toys than locomotives.

Claims.

I claim as my invention—

1. The combination of the shaft *b'*, clutch *i*, spool *d*, and rubber spring *e*, the whole being arranged, constructed and operated as described, for the purpose set forth.

2. The combination of the shaft *b'*, loose spool *d*, clutch *i*, rubber spring *e*, and pulley *f*, the whole arranged, constructed, and operated substantially as described, for the purpose set forth.

JAMES E. WICKHAM.

Witnesses:

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