H. GROTH.
Toy-Carriage.

No. 200,714. Patented Feb. 26, 1878.

Fig. 1.

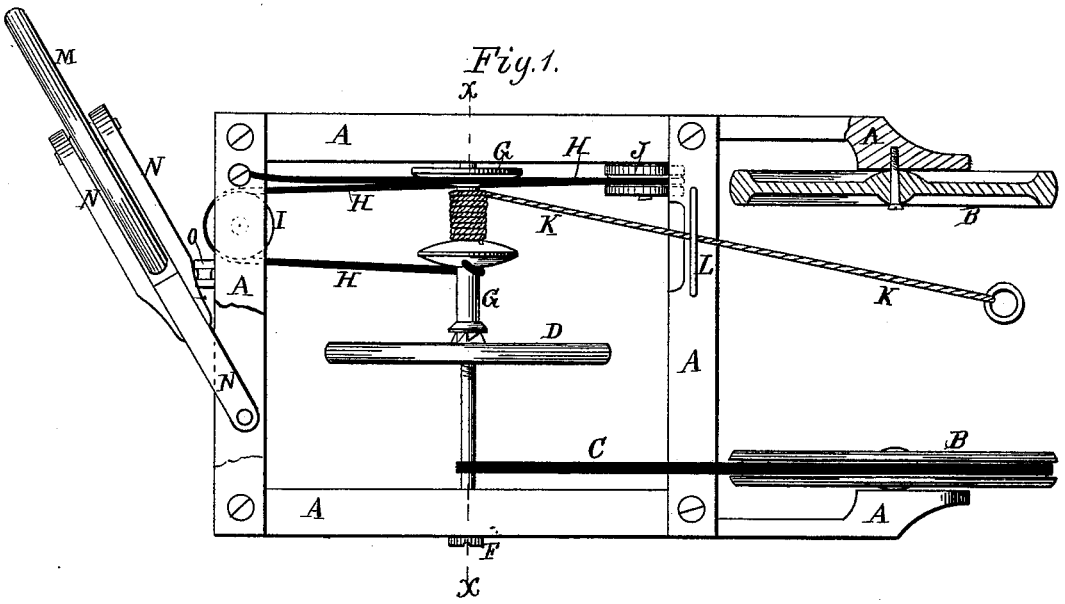
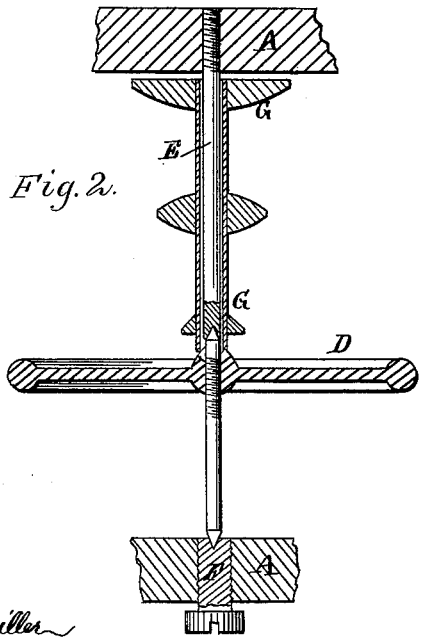


Fig. 2.



WITNESSES:
Henry N. Miller
C. Seligwick

INVENTOR:
H. Groth
BY Munn & Co
ATTORNEYS.

UNITED STATES PATENT OFFICE.

HENRY GROTH, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND PHILIP KLEE, OF SAME PLACE.

IMPROVEMENT IN TOY CARRIAGES.

Specification forming part of Letters Patent No. **200,714**, dated February 26, 1878; application filed December 27, 1877.

To all whom it may concern:

Be it known that I, HENRY GROTH, of the city, county, and State of New York, have invented a new and Improved Toy Carriage, of which the following is a specification:

Figure 1 is a top view of my improved toy carriage, partly in section to show the construction. Fig. 2 is a cross-section of the same, taken through the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved toy carriage which shall be so constructed that the uncoiling of a spring-cord may rewind the cord that impels it, ready to be again operated, and which shall be simple in construction and inexpensive in manufacture.

The invention consists in an improved toy carriage formed by the combination, with the frame, the wheels, and the adjustable guide-wheel, of the band, the fly-wheel, the double clutch-spool, the elastic cord, the guide-pulleys, and the impelling-cord, as hereinafter fully described.

In the drawing, A is the frame of the toy carriage, the side bars of which project in the rear of the rear cross-bar, and to them are pivoted two wheels, B. One of the wheels B is grooved to receive the band C, which also passes around the journal of the fly-wheel D. The end of one journal of the fly-wheel D revolves in the end of a shaft, E, rigidly attached to one of the side bars of the frame A, and the end of its other journal revolves in the end of a screw, F, passing in through the other side bar of the said frame A.

Upon the shaft E is placed a double spool, G, upon the inner end of which are formed clutch-teeth to engage with clutch-teeth formed upon the end of the hub of the fly-wheel D.

To the inner part of the double spool G is attached the end of an elastic cord, H, which passes around a horizontal guide-pulley, I, pivoted to the forward end of the frame A.

The cord H extends in a backward direction from the pulley I, passes beneath the spool G, and takes a turn around the pulley J pivoted to the rear part of the frame. From this point the cord passes forward above the spool G, and has its front end attached to the forward end of the frame A.

The pulleys I J and the stationary end of the cord H are so arranged that the parts of the said cord that pass below and above the spool G may bear against the outer flange of the said spool G, and tend to draw it outward and disengage its inner end from the fly-wheel D.

To the outer part of the spool G is attached the end of a cord, K, which passes through a keeper, L, or around a guide-pulley, O, attached to the rear or forward cross-bar of the frame A in such a position that the cord K will draw the spool G inward. The forward end of the frame A is supported by a wheel, M, which is pivoted to a forked standard, N.

The standard N is horizontal, and its rear end is pivoted to and between the parts of the front cross-bar of the frame A, so that by adjusting the standard N parallel with the side bars of the frame A the machine will run straight forward, and by adjusting it at a greater or less inclination the carriage will run in a circle of a greater or less diameter.

With this construction, by drawing the cord K to unwind it from the spool G, the said spool G will be thrown into gear with the fly-wheel D, and will give a rapid motion to said fly-wheel, and at the same time wind the spring-cord H upon the inner part of the spool G. The cord K is then slackened, which allows the rubber spring H to withdraw the spool G from the fly-wheel D, and at the same time wind up the cord K, ready to be again used. The carriage is then placed quickly upon the floor, and the band C will turn the wheel B and cause the said carriage to run forward until the momentum of the fly-wheel D has been exhausted.

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

An improved toy carriage formed by the combination, with the frame A, the wheels B, and the adjustable guide-wheel M N, of the band C, the fly-wheel D, the double clutch-spool G, the elastic cord H, the guide-pulleys I J, and the impelling-cord K, substantially as herein shown and described.

HENRY GROTH.

Witnesses:
JAMES T. GRAHAM,
C. SEDGWICK.