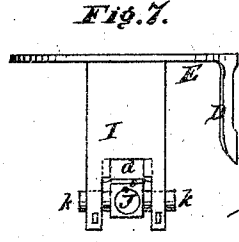
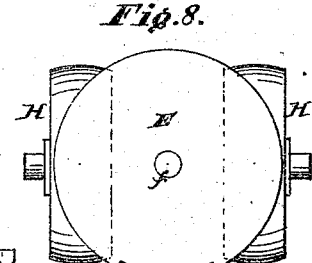
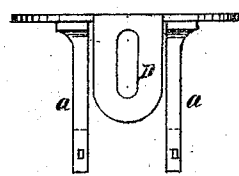
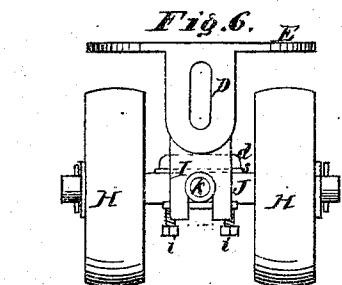
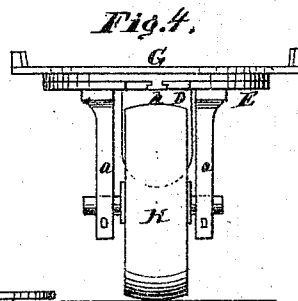
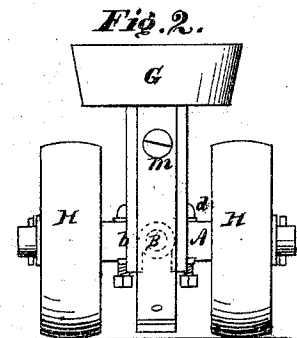
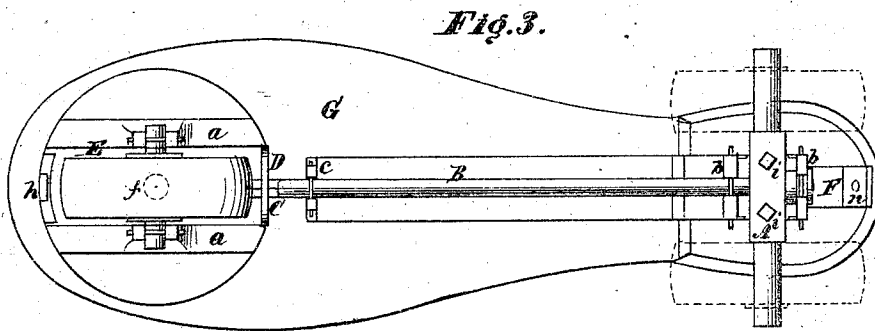
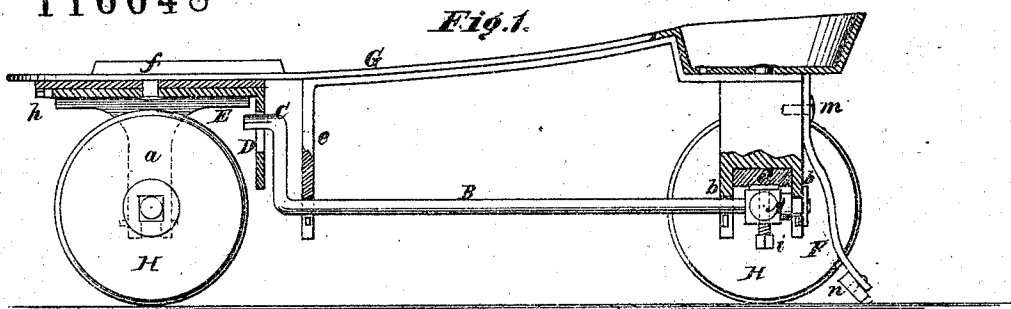


*George Vincent's
Impd. Roller Skate.*

PATENTED JUL 4 1871

116648



Witnesses.

Herbert C. Hall.
Galus C. Heyatt

Inventor.

George Vincent.

UNITED STATES PATENT OFFICE.

GEORGE VINCENT, OF STOCKTON, CALIFORNIA, ASSIGNOR OF TWO-THIRDS HIS RIGHT TO WILLIAM H. VAN VLEAR AND CHARLES D. LADD, OF SAME PLACE.

IMPROVEMENT IN ROLLER-SKATES.

Specification forming part of Letters Patent No. 116,648, dated July 4, 1871.

To all whom it may concern:

Be it known that I, GEORGE VINCENT, of the city of Stockton, county of San Joaquin and State of California, have invented certain Improvements in Roller-Skates, of which the following is a specification:

The first part of my invention relates to the pivoted bearings for the front roller or rollers, operated by a crank or arm rigidly attached to the axle of the rear rollers, for the purpose of compelling a corresponding action of either the front or rear rollers by the motion of the others. The second part of my invention relates to a stop for preventing the skate from running ahead from under the foot as it is usually inclined to do with persons not expert in the use of roller-skates.

Figure 1 is a longitudinal vertical section of my invention. Fig. 2 is an end view looking from the right, as shown in Fig. 1. Fig. 3 is a bottom view of my invention with the rollers omitted. Fig. 4 is an end view looking from the left, as shown in Fig. 1. Fig. 5 is a view of the pivoted plate and hangers for the axle of the front roller or rollers, as shown from the right in Fig. 1. Fig. 6 is a view of the pivoted plate and hangers when arranged for two front rollers, looking from the right, as shown in Fig. 1. Fig. 7 is a side view of same. Fig. 8 is a top view of same with rollers.

G is the body of the skate, which I construct of metal or wood. H H H are the rollers, of which I prefer to and do use three, one in the front and two in the rear, but four can be used, if desired, by the use of the double hanger I, the axle J, and the trunnions k k for the front rollers, as shown in Figs. 6 and 7. E is a plate to which is attached the hangers a a for the front roller or rollers, and is pivoted on the body of the skate at f, but is prevented from turning further than is desired by the stop h. Upon this plate is a slotted or forked arm, D, to receive the crank C, by which the front roller or rollers are operated. The crank-rod B rests in the hangers c and b b, and is attached rigidly to the rear axle A, which bears upon a plate, S, which rests upon a rubber or metal spring, d. The set-screws i i are for the purpose of adjusting the axle A so as to change the running direction of the skate, as may be desired. The stop F is a plate or rod

with a pad or cushion of rubber, or other suitable material, at the bottom of it, and nearly as low as the bottom of the rear rollers.

The skate is secured to the foot in any of the usual modes, and the rear axle being properly adjusted by the set-screws i i acting upon the plate S and the spring d, and the foot kept level, the course of the skate is in line with the foot, but by rolling the foot and with it the body of the skate either to the right or left, the rear axle A, by means of the rod B, operates the crank C, which causes the plate E and hanger a to turn on the pivot f, thus throwing the front roller or rollers at an angle with the line of direction of the skate, thus causing the rollers to describe a curve, and the elasticity of the spring d causing the rollers to return to the line of the foot as soon as the pressure is removed. Should there be a tendency to roll the foot either to the right or left, the axle A can be adjusted by the set-screws i i, and the plate S acting upon the spring d so as to accommodate it, and at the same time maintain the proper line of direction.

The stop F is designed more especially for learners, and is to prevent their falling backward, owing to the skate running ahead of the body, so as to throw its whole weight upon the rear rollers. The pad or cushion n being but slightly above the floor when both the front and rear rollers are bearing, the raising of the front rollers, as will be done when the skate is too far ahead of the body, will bring the pad or cushion in contact with the floor, immediately checking the forward motion of the skate, and allowing the body to regain its balance. The stop can be readily removed by removing the screw m.

I do not claim the roller nor the springs; but

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

1. The pivoted standards a a and plate E, in combination with the crank C, the rod B, and the axle A, substantially as and for the purposes hereinbefore set forth.

2. The plate or rod F, and the pad or cushion n, substantially as and for the purposes hereinbefore set forth.

GEORGE VINCENT.

Witnesses:

HERBERT E. HALL,
GALEN C. HYATT.