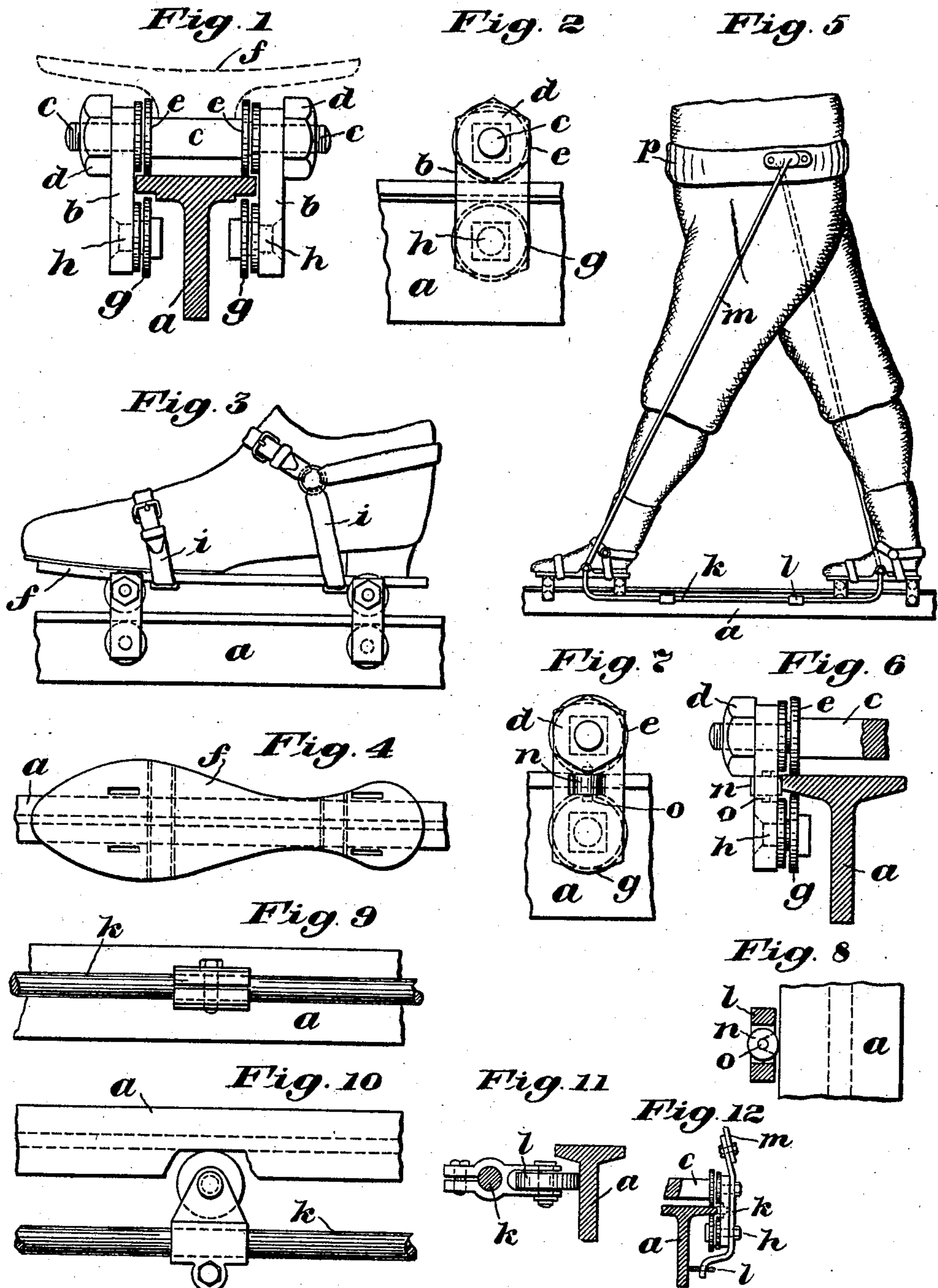


No. 828,409.

PATENTED AUG. 14, 1906.

A. KAZUBEK.
ROLLER SKATE FOR NARROW TRACKS.
APPLICATION FILED NOV. 30, 1904.



Witnesses:
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UNITED STATES PATENT OFFICE.

ADALBERT KAZUBEK, OF BERLIN, GERMANY.

ROLLER-SKATE FOR NARROW TRACKS.

No. 828,409.

Specification of Letters Patent.

Patented Aug. 14, 1906.

Application filed November 30, 1904. Serial No. 234,835.

To all whom it may concern:

Be it known that I, ADALBERT KAZUBEK, a subject of the German Emperor, residing at 2 Josefstrasse, Berlin, Germany, have invented certain new and useful Improvements in Roller-Skates for Narrow Tracks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a roller-skate for traveling over narrow single-line tracks. The track is preferably made of T-iron, as this offers the greatest resistance in the case of loops, spiral, or other similar curves.

The roller-skate is so formed that it embraces the T-iron or the like in such a manner that it cannot slip off the same. For this purpose a second pair of counter-rollers is seated under the foot-plate, which is supported on rollers. This arrangement prevents the skate from being raised from the track when the skater passes over a very sharp curve, loop, or the like. The side plates, which secure the lower pair of rollers, make it impossible for the skater to slip sidewise, and in order to avoid any friction between these plates and the track side rollers which rotate around a vertical axis may be further provided. According to the invention two such skates are connected together by rods in order that the legs of the skater, which in traveling are one behind the other, may not come farther apart than is consistent with the safety of the skater. Moreover, from these rods holders may be carried to which a belt is fastened which surrounds the skater and protects him against any sudden backward movement or the like.

The invention is illustrated in the drawings.

Figure 1 is a single skate in elevation, partly in section; Fig. 2, a pair of rollers in side elevation; Fig. 3, a skate in side elevation attached to a foot, Fig. 4 being a plan of Fig. 3. Fig. 5 is a side elevation showing the novel connection of two skates; Fig. 6, a side roller on a skate; Fig. 7, a front elevation of the roller, and Fig. 8 a plan of the same, while Figs. 9, 10, and 11 illustrate the rods connecting the two skates with a side roller in side elevation, plan, and front elevation, respectively, partly in section; and, finally, Fig. 12 illustrates the connection of the rods with the two skates.

The T-iron *a* is provided on the under side of its head with longitudinal roller-tracks. The shaft *c* beneath the foot-plate *f* is seated in the side plates *b*, which carry the rollers *g* on pins *h*. The whole device is supported on the sliding surface of the track, with the rollers *e* on the shaft *c*. The ends of this shaft are screw-threaded for the reception of the nuts *d*, so as to secure the side plates. The shafts *c* are made suitably square in the middle in order that the foot-plate *f*, onto which the foot can be firmly buckled by means of straps *i* or the like, may have a secure hold.

In the present case two roller-skates are used, one behind the other. These are kept apart at a distance of a step by means of one or two rods *k*, which run along the track below the sliding surface or the like. In order that these rods may not rub against the track, they are suitably supported away therefrom by rollers *l* or the like. From the connecting-rods holders *m* are carried upon both sides. These holders support a belt *p*, so as to secure the skater against any backward movement that may arise from too suddenly increasing his speed. Friction between the side plates *b* and the vertical side surface of the track can be avoided by cutting through the plates in places, so as to form a slot in which a roller *n*, pivoting around a vertical pin *o*, is arranged.

The skate-rollers can also be actuated by electricity. In this case an electric wire is suitably laid along the T-iron in order to convey the current to suitable small motors adjoining or between the skates. In this manner it is possible to travel over very steep tracks without the necessity of an accelerated starting speed.

For traveling over vertical curves, looping-the-loop tracks, or the like it is desirable (not as shown in Fig. 3) to make use of two pairs of rollers *e* and *g*, one of each of which lies at each end of the foot-plate *f*, but rather to support each foot-plate *f* with one pair of rollers *e* and *g*, which obviously must be laid in the middle of the foot-plate *f*. For as, especially in small curves, the foot-plate *f*, if supported by two pairs of rollers, takes a different position to that of the rod *k* the two would be at an angle in relation to each other, whereas if only one pair of rollers *e* and *g* be placed under a foot-plate *f* this foot-plate will not assume a position of its own, but take that of the rod *k*.

With experienced skaters it is possible to

dispense with the holders *m* and to make use of an ordinary rope or wire rope, which is fastened in front of the front skate. The free end of this wire rope can be held in the
5 skater's hand or be fastened on the front of the belt and a sudden and very high rate of speed be acquired.

What I claim, and desire to secure by Letters Patent, is—

10 1. A device for traveling over a single rail, comprising a pair of roller-skates, positioned one before the other, and secured at a distance apart equal to the length of an ordinary step.

15 2. A device for traveling over a single rail, comprising a pair of roller-skates, positioned one before the other, and secured at a distance apart equal to the length of an ordinary

step, said skates having means to retain them on the rail against vertical and lateral movement. 25

3. A device for traveling over a single track, comprising a pair of roller-skates, positioned one before the other, and secured at a distance apart equal to the length of an ordinary step, a belt attached to the person of
25 the skater and connections extending between said belt and the forward and rear extremities of said secured skates.

In testimony whereof I have affixed my
30 signature in presence of two witnesses.

ADALBERT KAZUBEK.

Witnesses:

HENRY HASPER,
WOLDEMAR HAUPT.