

S. J. NESBITT, Sr.
 BRAKE FOR ROLLER SKATES.
 APPLICATION FILED JULY 26, 1910.

982,846.

Patented Jan. 31, 1911.

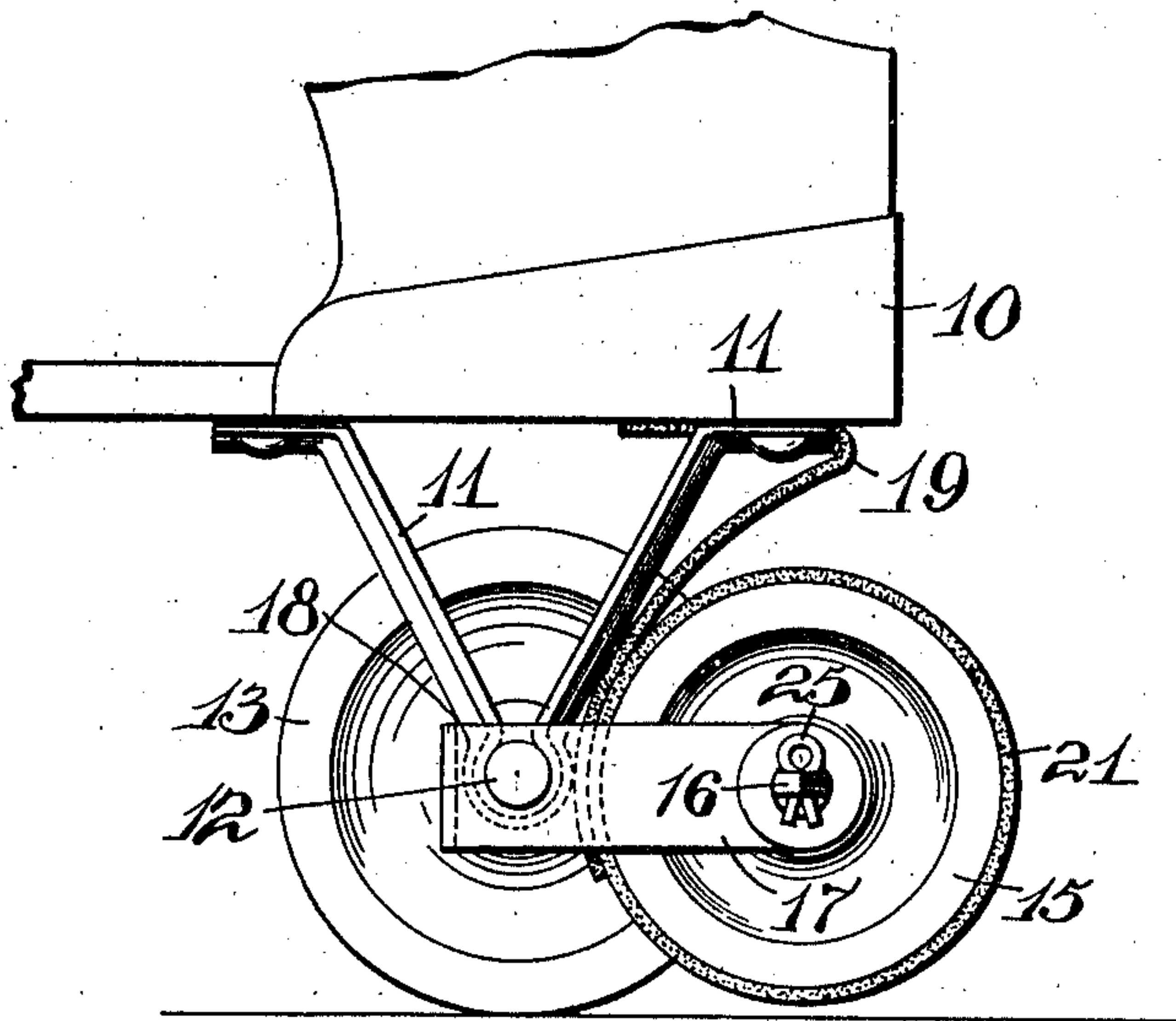


Fig. 1.

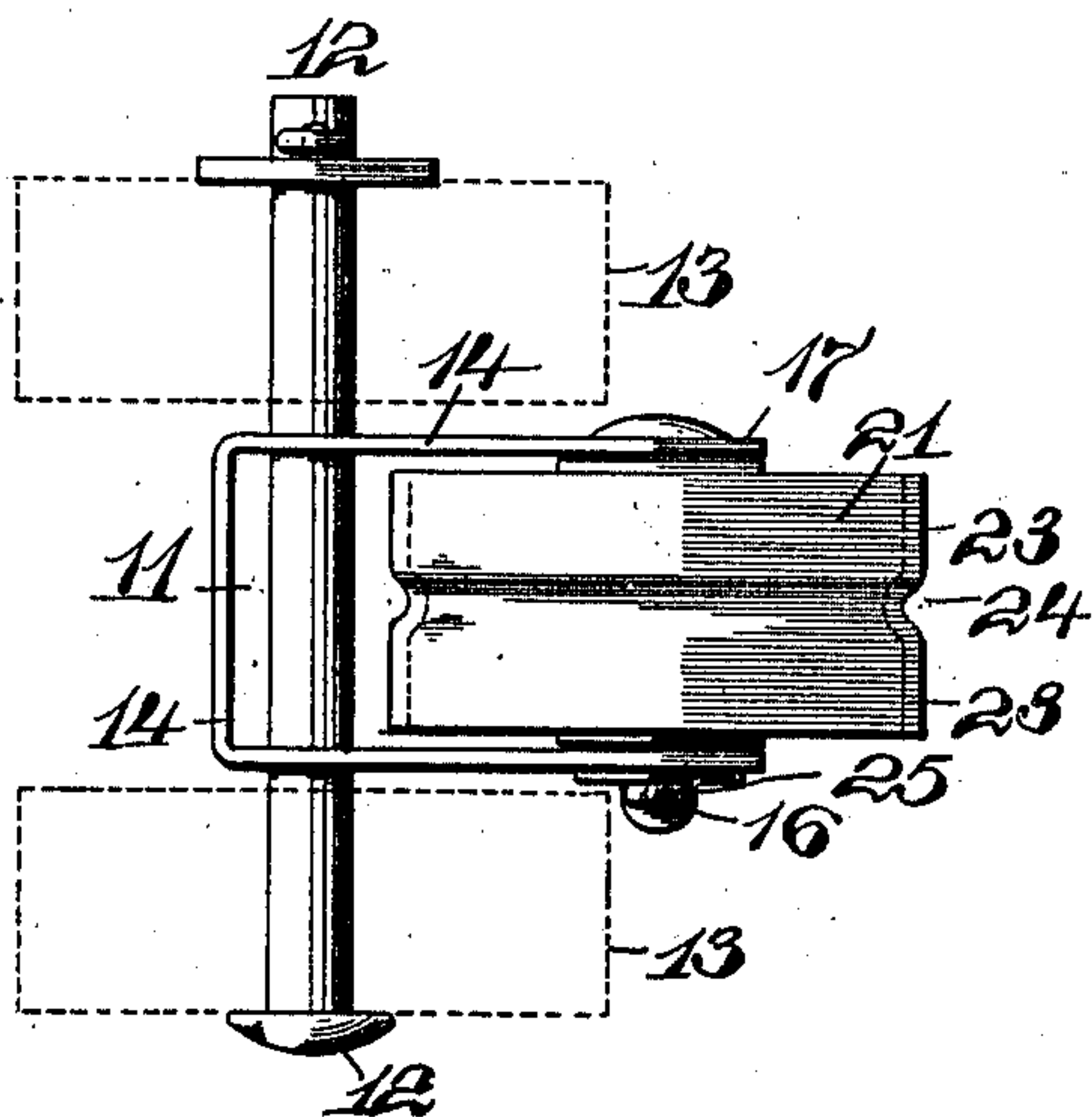


Fig. 2

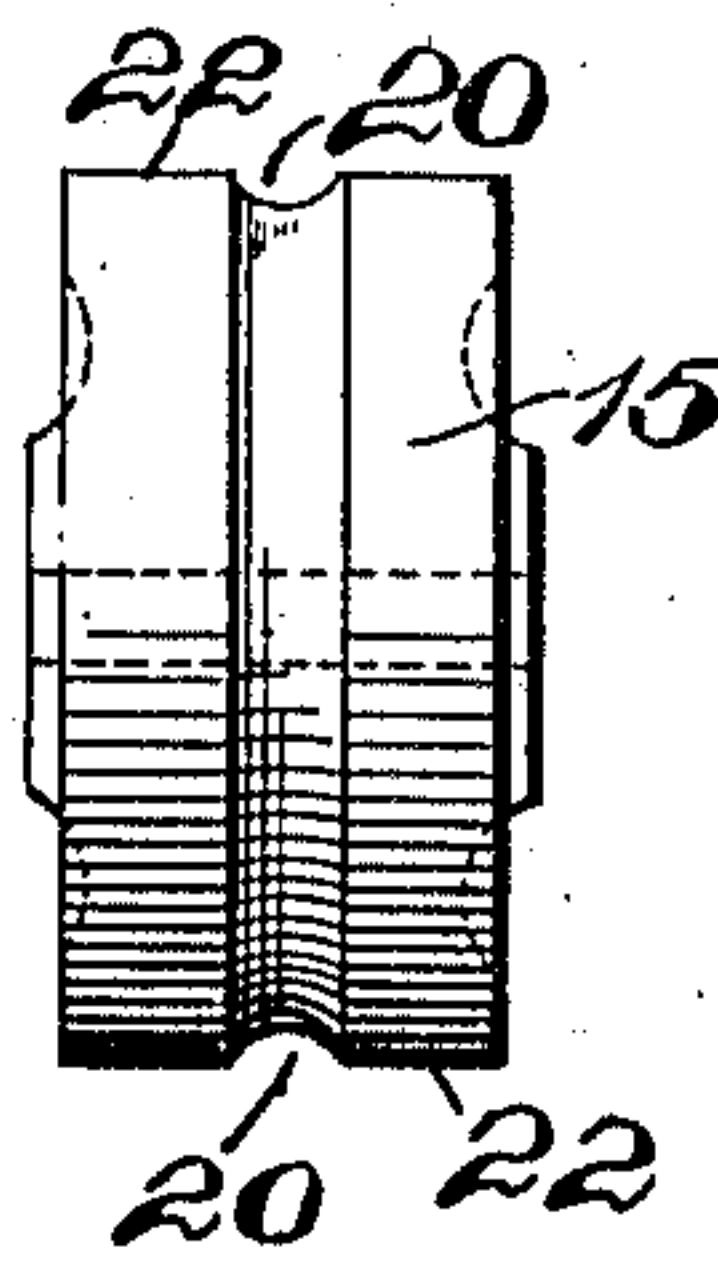


Fig. 3



Fig. 4

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BRAKE FOR ROLLER-SKATES.

982,846.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, SAMUEL J. NESBITT, Sr., a citizen of the United States, residing at Elizabeth, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Brakes for Roller-Skates; 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, reference being had to the accompanying drawings, and to figures of reference marked thereon, which form a part of this specification.

My new braking device for roller-skates as embodied in this invention provides for the easy and quick substitution of one covering for another, these coverings being used on the periphery of a brake-wheel to receive the friction when the brake is operated. When worn out these bands are replaced, and since the bands are cheap they make the operation of the skate inexpensive, as far as its braking attachment is concerned, and always provide a good surface for frictional contact to stop the skate when it is desired to cause the brake to act.

The invention is particularly adapted for those skates where a brake-wheel is used against a surface or strip attached to the skate body, or any other convenient element, and is used when the skate is tilted at a certain angle so that the brake-wheel is forced to bear on the ground and on the skate and to be locked against rotation by this contact and thus act to stop the skate.

The invention has a further object of providing a brake-wheel with means for preventing the transverse movement of the strip on its periphery and thus insure the strip and the brake-wheel being alined so that the strip will not ride off sidewise.

The invention is used on a device of the class illustrated and described in my Patent No. 989,536, issued November 9, 1909, for a brake for roller-skates.

The invention is illustrated in the accompanying drawing, in which—

Figure 1 is a side view of the rear of a skate. Fig. 2 is a plan view showing the axle of the skate with the braking attachment arranged thereon. Fig. 3 is a front view of the brake-wheel, and Fig. 4 is a view of the band that is placed around the brake-wheel.

The brake-wheel is adapted to be used on any kind of roller-skate and is preferably mounted so as to be used at the rear of the skate and in a position where it will be thrown into operative engagement when the skate is tilted backward on the back wheels of the skate, thus acting to stop the skate when the foot is tilted backward at the will of the skater, and also acting to brake the skate when the skater is about to fall and the foot involuntarily assumes the tilted position. The skate 10 has a bracket 11 in which is mounted the axle 12 on which the skate wheels 13 rotate, the wheels 13 being adapted to act as a fulcrum for the skate when the skate is tilted backward. Extending between the bracket 11 and the skate wheels 13 is a yoke 14 which is U-shaped and arranged to swing, near its closed end, on the axle 12. On the projecting end of the yoke is the brake-wheel 15 mounted on an axle 16 which in turn is passed through the projecting ends 17 of the U-shaped yoke 14. The brake-wheel is limited in its downward pull on the yoke by the engagement of the yoke, at the point 18, with the bracket 11, or with any other element suitably disposed.

Secured to the skate 10, preferably by being clamped under an end of the bracket 11, is a braking-strip 19 which extends down between the bracket 11 and the brake-wheel 15 so that when the brake-wheel engages the ground or floor, and the skate is tilted backward on the skate wheels 13, the braking-strip is compressed between the brake-wheel and the bracket to cause the wheel 15 to stop in its rotation and thus act to hold back the skate. I provide the brake-wheel 15 with a peripheral annular groove 20, and on the skate wheel I put a band 21 which is formed of material, or provided with a surface of material, that makes good frictional contact with the braking-strip 19, or with the element which it engages. I show but one annular groove 20 in the illustration, but it will be understood that it can be duplicated or a series of these grooves put in place. I prefer, however, to leave the major portion of the periphery of the brake-wheel flat, as at 22, so that more surface for braking is provided without having a number of raised portions or ridges where the wear would be centered and which would not be desirable because the frictional surface would be reduced. The band 21 can be

made, if desired, of elastic material, such as a band of rubber, and can be placed over the brake-wheel 15, being normally of slightly smaller diameter, and it would thus be forced, by its own elasticity, into the groove 20, as shown in Fig. 2, thus providing considerable space 23 for braking surface, and causing the portion 24 to grasp the groove 20 and prevent transverse or side motion of the brake-band 21 on the brake-wheel 15. The brake-band 21 is adapted to take the wear from the brake-wheel 15 and it can be easily replaced, when worn, by simply removing the split key 25 which holds the axle 16 in place, and then removing the brake-band and replacing it by a new one.

Having thus described my invention, what I claim is:—

1. A braking device for roller-skates comprising a U-shaped yoke adapted to swing on the axle of a roller-skate, a brake-wheel on the end of the swinging yoke, means for limiting the swinging of the yoke to normally hold the brake-wheel from engagement with the surface on which the skate travels, the brake-wheel being adapted to be forced in engagement with the ground and with the skate when the skate is tilted, the brake-wheel having an annular peripheral groove therein, and a brake-band arranged on the periphery of the brake-wheel and having a degree of elasticity sufficient to cause the portion of the brake-band surrounding the groove to fit in the groove to prevent transverse motion of the band on the brake-wheel.

2. A brake-wheel for roller-skates having an annular groove in its periphery, and an elastic brake-band on the periphery of the brake-wheel and adapted to enter the groove

by its own elasticity to prevent transverse movement of the brake-band.

3. A brake-wheel for roller-skates, and a band arranged on the periphery of the wheel, the wheel having most of its periphery flat to provide a good braking surface and having a grooved portion in its periphery, the brake-band being elastic to a degree to cause the portion adjacent to the grooved portion of the brake-band to enter the grooved portion, the grooved portion being disposed so as to prevent transverse movement of the brake-band on the brake-wheel.

4. A brake-wheel for roller-skates having the major portion of its periphery flat and having a central, annular groove arranged around its periphery, and a rubber band of slightly smaller diameter than the wheel in place thereon and held by its own tension so that a portion of its surface will be drawn into the groove to prevent transverse movement of the brake-band on the brake-wheel.

5. A brake-wheel for roller-skates having the major portion of its periphery flat and having a central, annular groove arranged around its periphery, and an elastic band of slightly smaller diameter than the wheel in place thereon and held by its own tension so that a portion of its surface will be drawn into the groove to prevent transverse movement of the brake-band on the brake-wheel.

In testimony that I claim the foregoing, I have hereunto set my hand this 25th day of July 1910.

SAMUEL J. NESBITT, Sr.

Witnesses:

E. A. PELL,

M. A. JOHNSON.