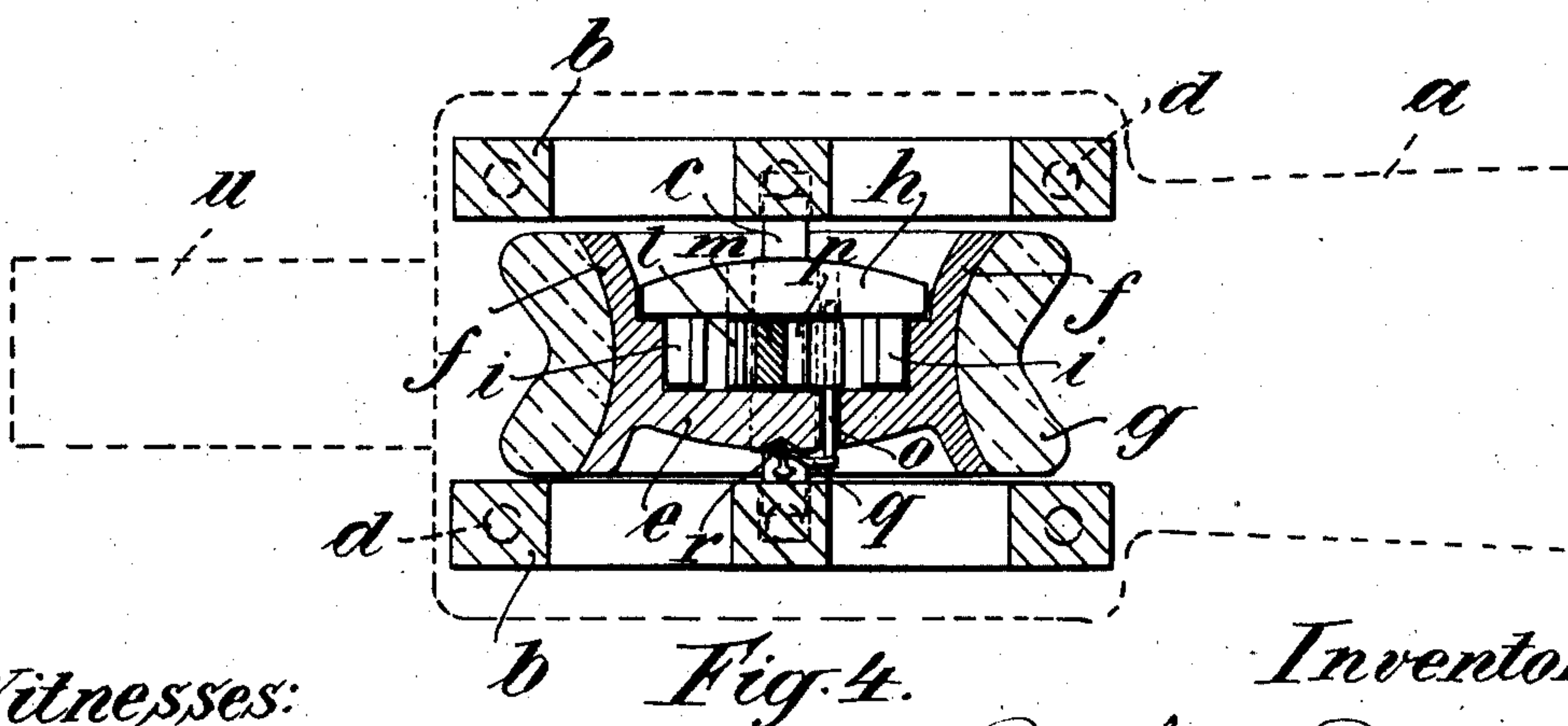
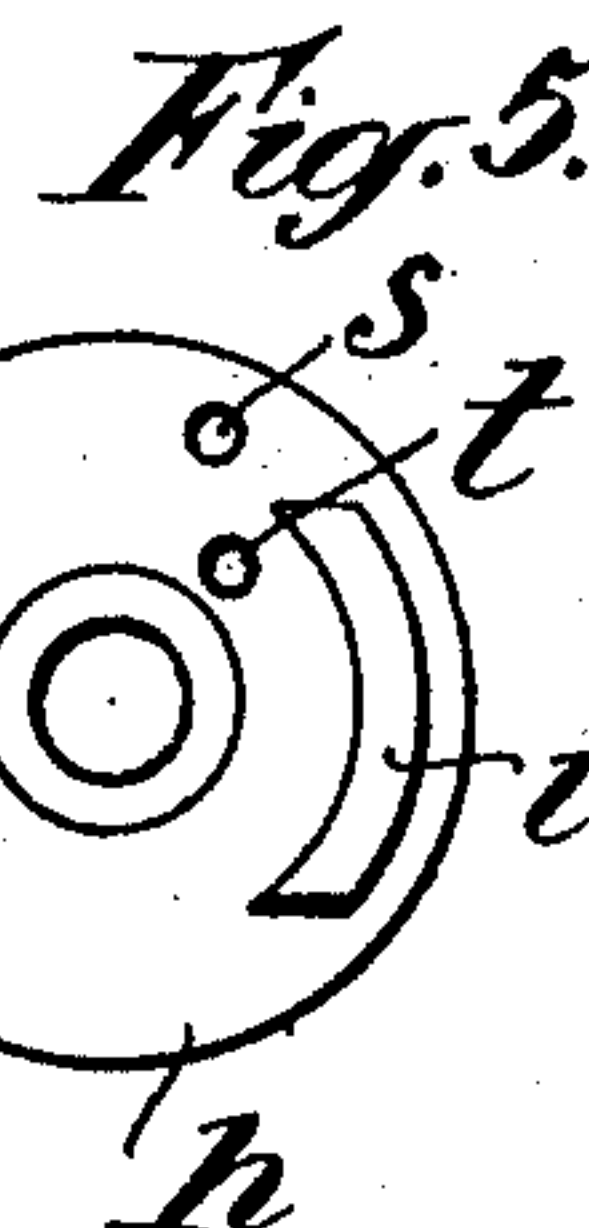
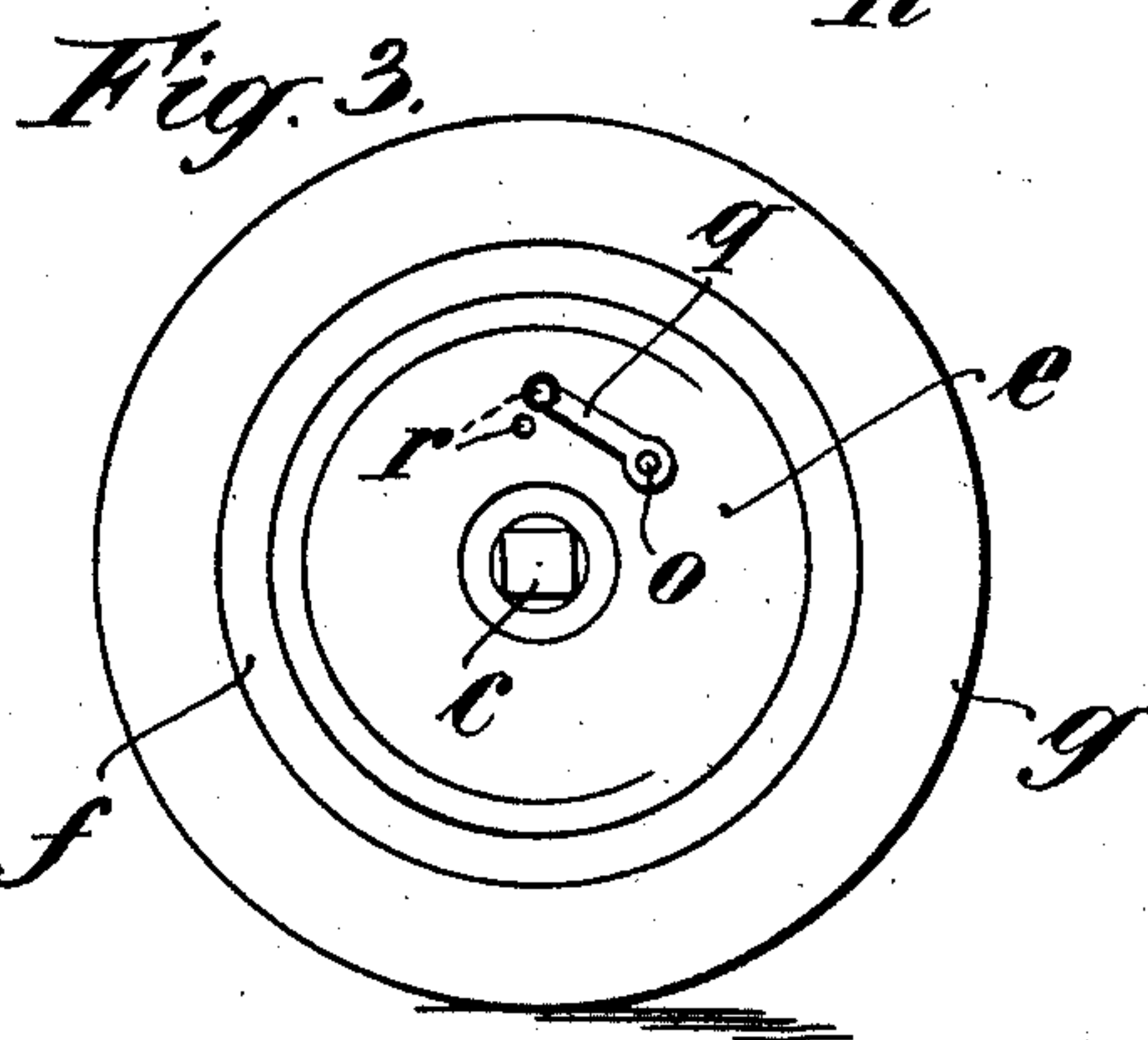
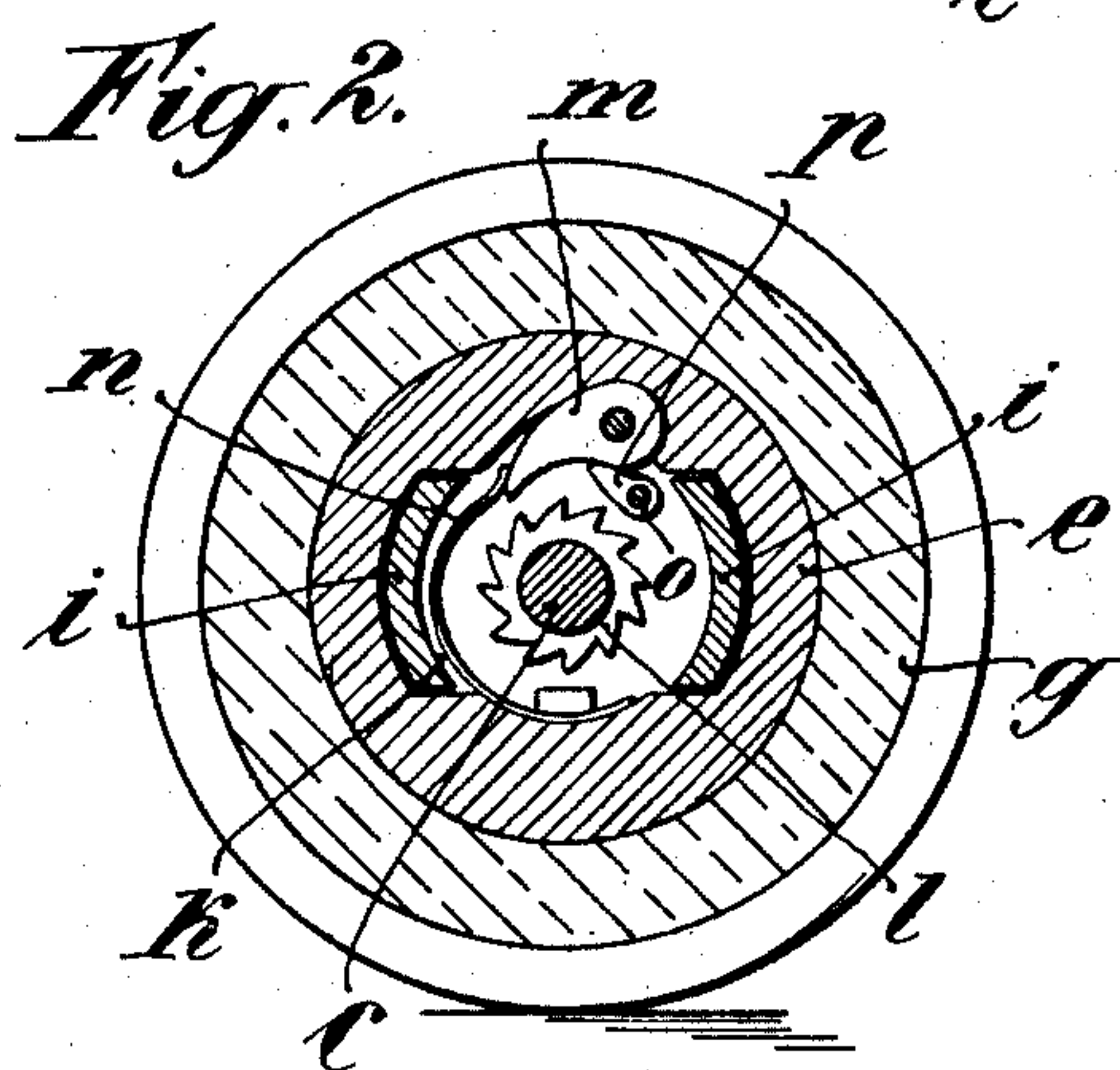
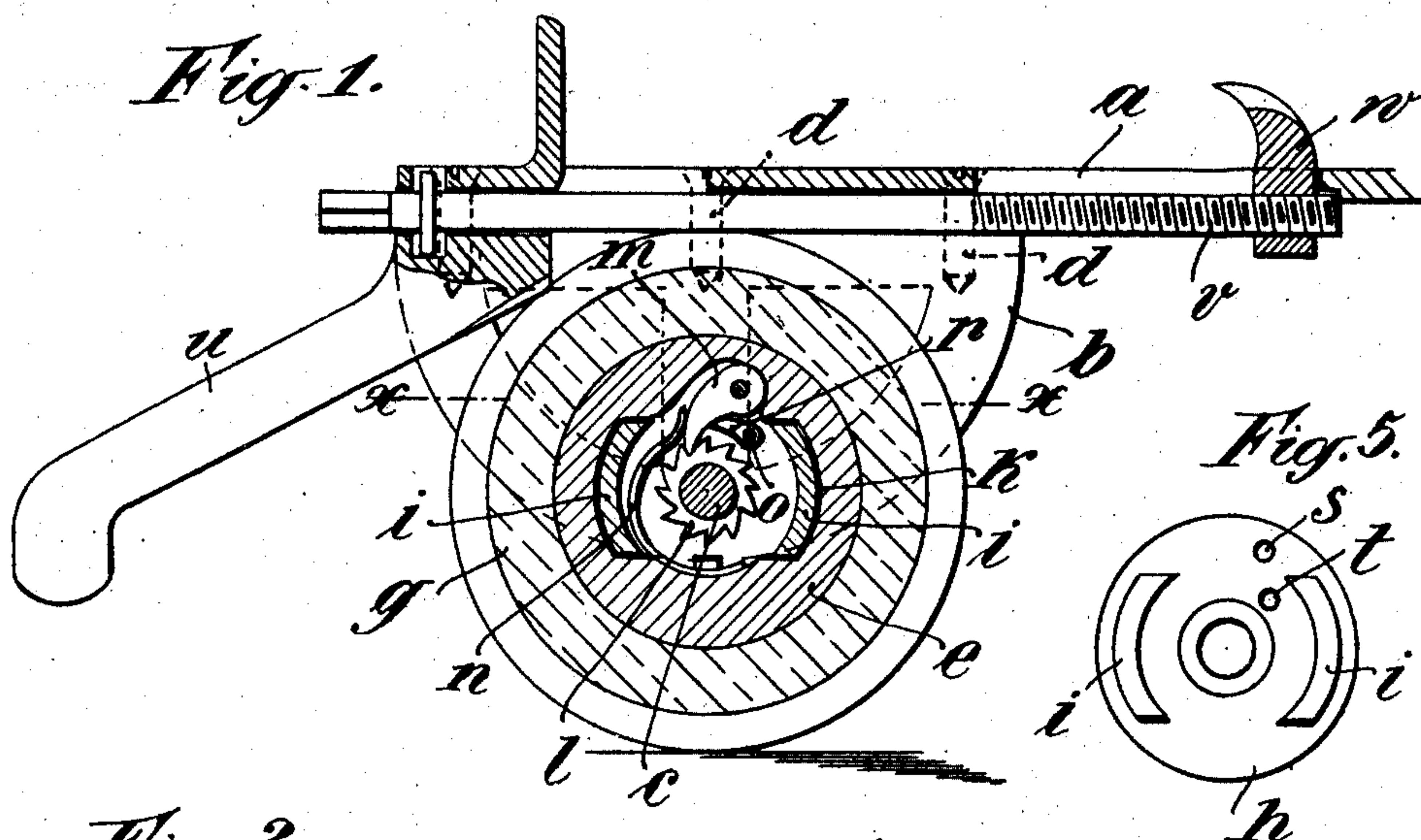


No. 864,334.

PATENTED AUG. 27, 1907.

P. G. PILZ.
ROLLER SKATE.

APPLICATION FILED AUG. 18, 1906.



Witnesses:
J. M. Stymberope
A. Knight.

Inventor:
Paul Georg Pilz,
By Knight & Sons Attys.

UNITED STATES PATENT OFFICE.

PAUL GEORG PILZ, OF SCHLETTAU, ERZGEBIRGE, GERMANY.

ROLLER-SKATE.

No. 864,334.

Specification of Letters Patent.

Patented Aug. 27, 1907.

Application filed August 16, 1906. Serial No. 330,886.

To all whom it may concern:

Be it known that I, PAUL GEORG PILZ, a citizen of the German Empire, and a resident of Schlettau, Erzgebirge, Germany, have invented certain new and useful Improvements in Roller-Skates, of which the following is a specification.

My invention relates to improvements in parlor skates of that class in which the rollers are furnished with an arresting device which permits rotation in one direction only, viz. in the direction of skating.

The subject of the invention is a contrivance which enables the arresting device of such skates to be disengaged, so that the skate can be used, as desired, with or without the arresting-device, that is to say, so that the rollers can rotate only in one direction, or in both directions.

A further essential improvement consists in the special form of the rollers, the tread-ring or tire of which presents two or more annular ridges, whereby the skate though provided with only two rollers, stands exceedingly firmly, so that the wearer can skate with more ease, while there is less liability of the feet turning over at the ankle.

One form of construction of the new skate is shown in the accompanying drawing.

Figure 1 is a vertical section of the heel portion of the skate, with arresting-device in action. Fig. 2 is a vertical section through a roller with arresting-device disengaged. Fig. 3 is a side elevation of the roller. Fig. 4 is a horizontal section on the line $x-x$ of Fig. 1. Fig. 5 is an inside view of the cover which closes the open side of the roller.

To the sole-plate a of the skate hangers b are secured by means of screws d , or in other suitable manner, to receive the axle c . The ends of the axle c are square and fit into like-shaped holes in the hangers b , so that the axle can not rotate. On the axle c is mounted the actual body of the roller e , comprising the felly-ring f , closed at one side. On the felly-ring there is fitted the tread-ring or tire g , made of rubber or other suitable material and presenting peripherally two annular ridges. By this means, as already mentioned, the skate stands perfectly firmly, the front roller being likewise fitted with such a tire. The open side of the roller-body e is closed by a cover h (Fig. 5), loosely rotatable on the axle c and having two lateral cheeks i , which engage in correspondingly shaped recesses or pockets k in the interior of the roller body e . On the axle c in the space between the body e and the cover h , there is rigidly mounted a ratchet-wheel l , with which there engages a detent m , controlled by a spring n and pivoted to the body e . By this means the roller can only rotate for the forward motion of the skate, so that the latter can not run backward. In order, however, to enable disengagement of the detent, and thus per-

mit of the skate running either only in one direction, or in both directions, the following contrivance is provided.

To an axis o , mounted in the roller body e , there is secured a wiper p , which presses against the underside of the detent m . At the end of the axis o which projects from the body e , there is fixed a small crank q , by means of which the axis o with its wiper p can be turned and the detent m retracted from the teeth of the ratchet-wheel l , against the action of the spring n . For the purpose of securing the crank q , and therefore the wiper p , in the end positions and thus preventing unintentional engagement or disengagement of the detent m , two indentions r are provided on the outside of the roller body e , in such manner that when the arm q is in either of its end positions, a small projection on it snaps into one of the indentions r . By turning the crank-arm q into one or the other position the skate can thus be used, as desired, with or without the arresting-device.

Naturally the front roller of the skate may also be provided with the above-described contrivance, but in general it is sufficient if only one roller is so fitted.

The recesses s t in the cover h serve to accommodate the free end of the pivot of the detent m and of the axis o of the wiper p . u is a brake-arm at the heel end of the skate; and v is the screw bolt which serves in well-known manner, to adjust the clamp-jaw w which grips the boot-heel.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is:

1. In a roller skate, in combination a stationary axle, a hollow roller rotating on the latter, an arresting-device for preventing rotation of the roller in a direction contrary to that of propulsion of the skater and arranged within the said hollow roller and means for disengaging the said device also arranged within the roller, substantially as described.

2. In a roller skate, in combination, a stationary axle; a hollow roller rotating thereon; a ratchet-wheel secured to the axle, inside the roller; a spring-actuated detent pivoted inside the latter and engaging with the ratchet wheel; and means for disengaging the detent from the wheel; substantially as described.

3. In a roller skate, in combination, a stationary axle; a hollow roller rotating thereon; a ratchet-wheel secured to the axle, inside the roller; a spring-actuated detent pivoted inside the latter and engaging with the ratchet-wheel; a wiper axis mounted in the roller; and a wiper secured thereon and retracting the detent from the ratchet wheel on rotation of the wiper-axis; substantially as described.

4. In a roller skate, in combination, a stationary axle; a hollow-roller rotating thereon; a ratchet-wheel secured to the axle, inside the roller; a spring-actuated detent pivoted inside the latter and engaging with the ratchet-wheel; a wiper axis mounted in the roller; a wiper secured thereon and retracting the detent from the ratchet-wheel on rotation of the wiper-axis; and means at the end of the latter for turning the same and for retaining the wiper in its end positions; substantially as described.

5. In a roller skate, in combination, a stationary axle;
a hollow roller, having indentions on one side, rotating
thereon; a ratchet-wheel secured to the axle, inside the
roller; a spring-actuated detent provided inside the lat-
5 ter and engaging with the ratchet-wheel; a wiper-axis
mounted in the roller; a wiper secured thereon and re-
tracting the detent from the ratchet-wheel on rotation of
the wiper-axis; and a spring-actuated crank at the end
of the wiper-axis having a projection which engages in
10 the indentions in the roller substantially as described.

6. In a roller-skate, in combination, a stationary axle;
a hollow roller, having internal pockets, rotating thereon;
a ratchet-wheel secured to the axle, inside the roller; a
spring-actuated detent provided inside the latter and en-
15 gaging with the ratchet-wheel; a wiper axis mounted in

the roller; a wiper secured thereon and retracting the
detent from the ratchet-wheel on rotation of the wiper-
axis; means at the end of the latter for turning the same
and for retaining the wiper in its end positions; and a
cover mounted on the axle, closing in the arresting-mech- 20
anism, and having two cheeks, which fit into the pockets
in the roller, and two recesses to receive the axes of the
detent and the wiper; substantially as described.

The foregoing specification signed at Annaberg, Saxony,
this 31st day of July, 1906.

PAUL GEORG PILZ.

In presence of—

CARL BORNGRAEBER,
GUIDO MÜLLER.