

No. 698,281.

Patented Apr. 22, 1902.

A. HOUÉE.
ROLLING SKATE.

(Application filed Sept. 1, 1900.)

(No Model.)

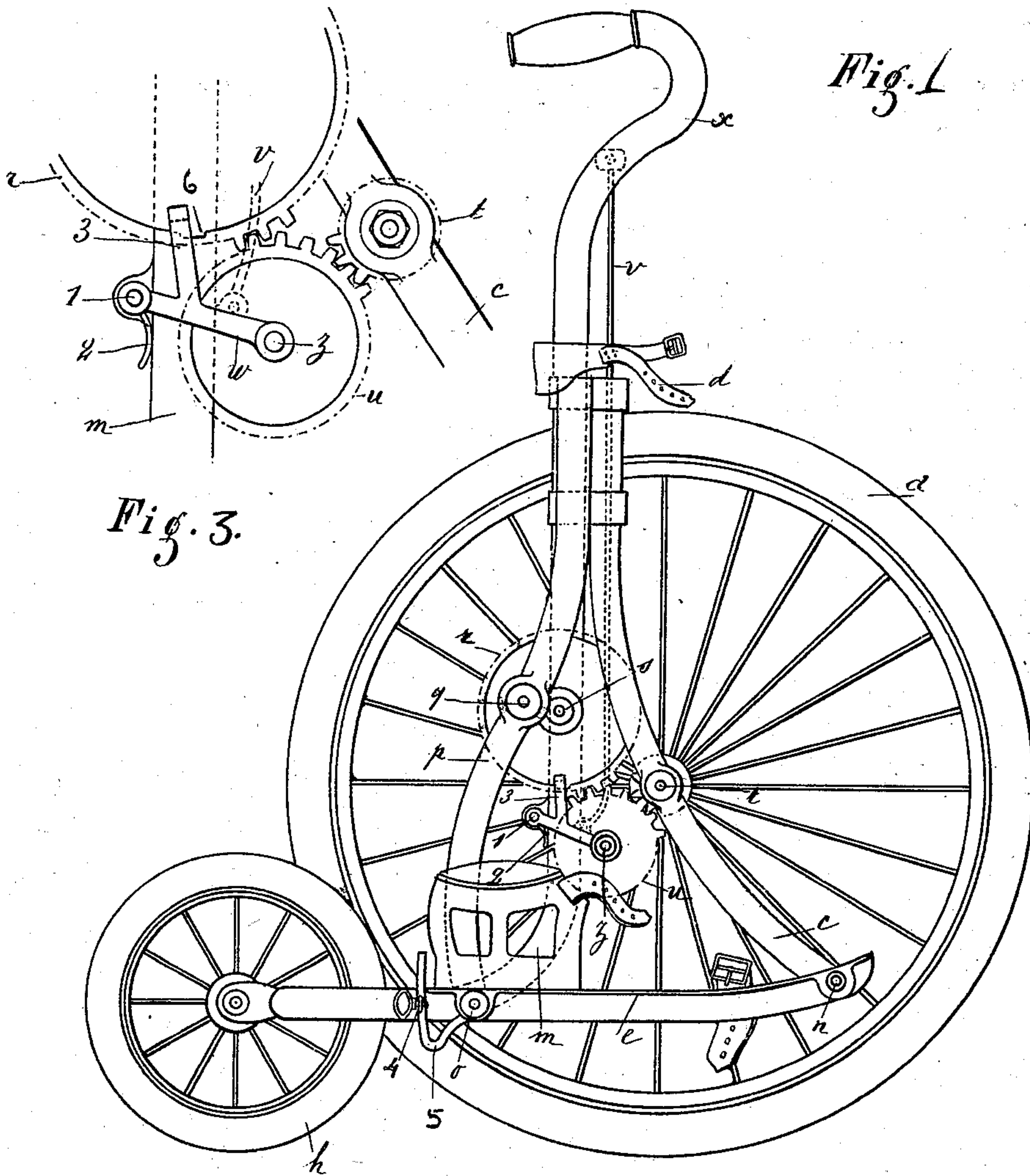


Fig. 1

Fig. 3.

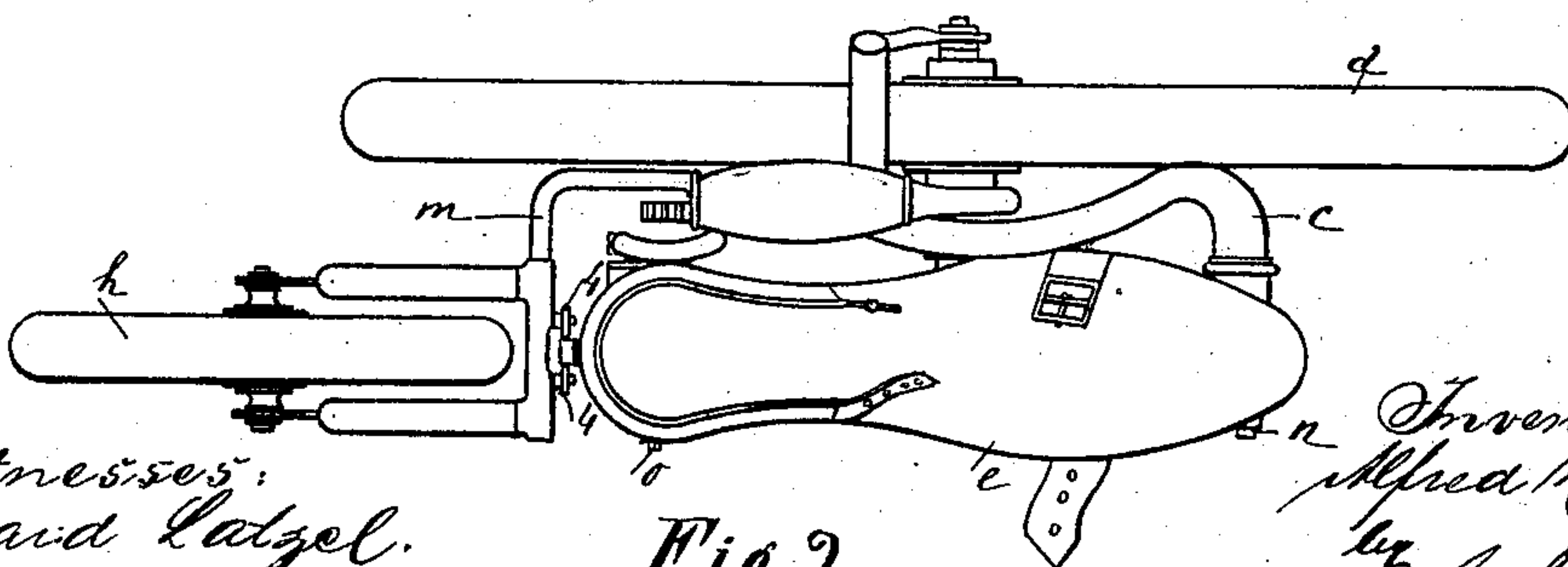


Fig. 2.

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UNITED STATES PATENT OFFICE.

ALFRED HOUÉE, OF RENNES, FRANCE.

ROLLING-SKATE.

SPECIFICATION forming part of Letters Patent No. 698,281, dated April 22, 1902.

Application filed September 1, 1900. Serial No. 28,817. (No model.)

To all whom it may concern:

Be it known that I, ALFRED HOUÉE, a citizen of the French Republic, residing at Rennes, France, have invented certain new and useful
5 Improvements in Rolling-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.

10 This invention is in the nature of roller-skates or wheel devices adapted to be secured to the legs of persons, whereby the wearer may move rapidly with a minimum of fatigue and a maximum of safety.

15 The invention consists in the improved construction, arrangement, and combination of parts hereinafter fully described and afterward specifically claimed.

20 In the accompanying drawings, Figure 1 illustrates in side elevation a structure embodying my invention. Fig. 2 is a top plan view thereof. Fig. 3 illustrates the gearing on an enlarged scale.

Referring to the drawings by letters, the
25 two wheels *a* and *b* are carried by the two fixed branches *c* and *m* of the forked frame. The pedal *e* is hinged to the lower end of the forward fixed branch *c* at *n*, and at its rear end the pedal is pivotally connected by a pin
30 *o* to a movable connecting-rod *p*, which is provided with attachments *d* for securing it to the leg of the user and terminates in a curve *x*, surmounted by a handle *x'*, to be grasped by the hand when adjusting the device in position and which may be grasped by the
35 wearer when in a stooping position. The connecting-rod *p* receives a wrist or crank pin *q*, projecting from the side of a gear-wheel *r*, which rotates on an axle fixed in the
40 branch *m* of the frame. The oscillation of the pedal *e* on its pivot *n* moves the connecting-rod *m* up and down and through its connection with crank-pin *q* causes the gear-wheel *r* to rotate, which motion is communi-
45 cated to a gear or pinion *t*, secured on the driving-wheel *a* through the medium of an intermediate gear-wheel *u*, and as the gear-wheel *r* is larger than the pinion *t* the latter will rotate faster than the former and carry
50 the wheel *a* with it.

The intermediate gear-wheel *u* is mounted on an axle or pin *z* in the outer end of a lever *w*, which is pivoted at its opposite end on a pin *l*, fixed in the branch *m* of the frame.

The lever *w* is normally pressed downward 55 by a spring 2, which holds the intermediate gear *u* out of engagement with the gear *r* and pinion *t*, in which normal condition the device operates the same as the device heretofore described and illustrated in Figs. 1 and 2. 60 When, however, increased speed is desired, the intermediate gear is raised into engagement with gear *r* and pinion *t*, the following means being provided to effect this movement, to wit: *v* indicates a rod, pivoted to lever *w*, which at its upper end may be engaged 65 in or released from a stop *x* on the handle end of rod *m*. By this rod *v* the lever *w* may be raised in opposition to the pressure of spring 2 to engage the gears, as before described. A 70 vertical branch or arm of lever *w* carries a small tooth or projection which may be engaged in a notch 6 in the inner face of the rim of gear-wheel *r*, whereby the lever *w* may be locked rigidly in position to keep the foot- 75 pedal horizontal when the gears and pinion are disengaged.

To avoid lateral motion of the foot-pedal during the running of the gears, small rollers 4 are journaled on axes fixed in the branch 80 *m* of the frame to guide an arm 5, rigidly fixed to the rear end of the pedal.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is— 85

In a roller-skate the combination with a frame, a driving-wheel having a pinion on its hub, a foot-pedal pivoted at its forward end to the frame, a connecting-rod pivoted to the pedal, a gear-wheel journaled in the frame 90 and having a notch in the inside of its rim, a crank-pin thereon engaging a hole in the connecting-rod, a lever pivoted to the frame, an intermediate gear-wheel journaled at the free end of said lever, a spring normally pressing 95 the lever down and the gears out of engagement, and a pawl-arm rigid with the pivoted lever having a tooth to engage the notch in the rim of the crank gear-wheel and hold the gears out of engagement, and the foot-pedal 100 fixed in a horizontal position, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ALFRED HOUÉE.

Witnesses:

EMILE GRIMONT,
FELIX HALVUA.