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C. W. RASMUS

2,022,604

SAFETY DEVICE

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Fig. 1.

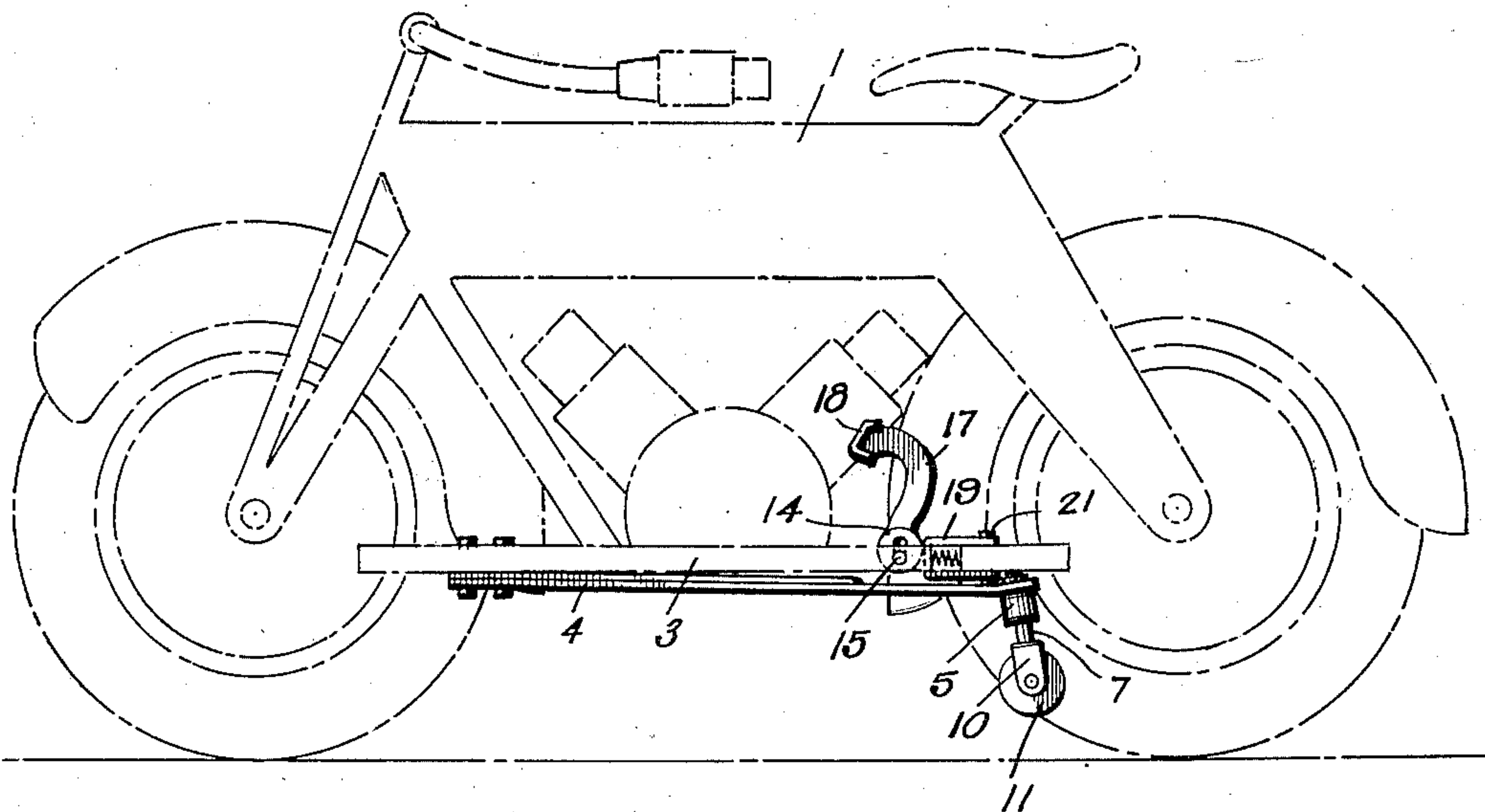


Fig. 2.

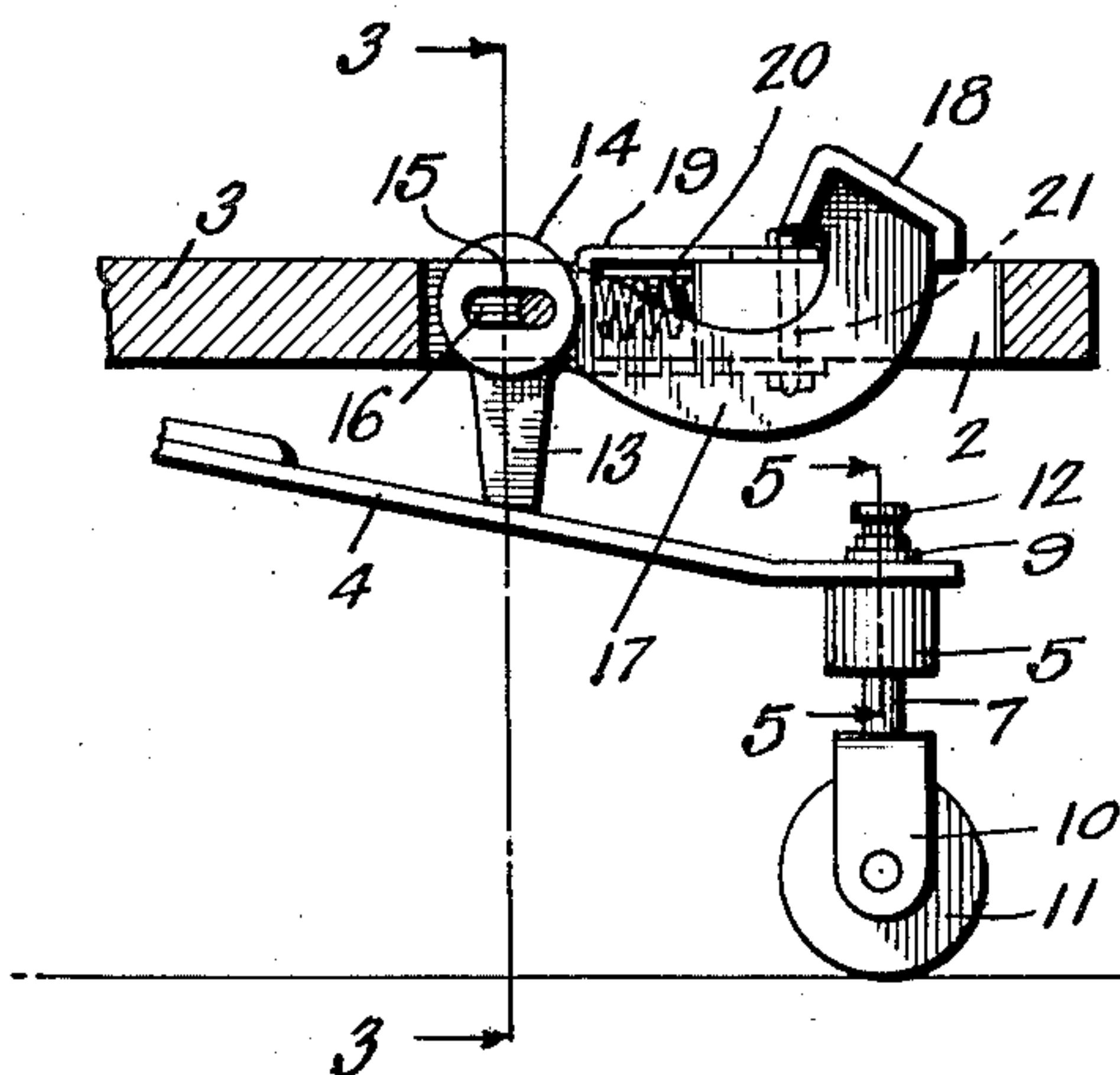


Fig. 3.

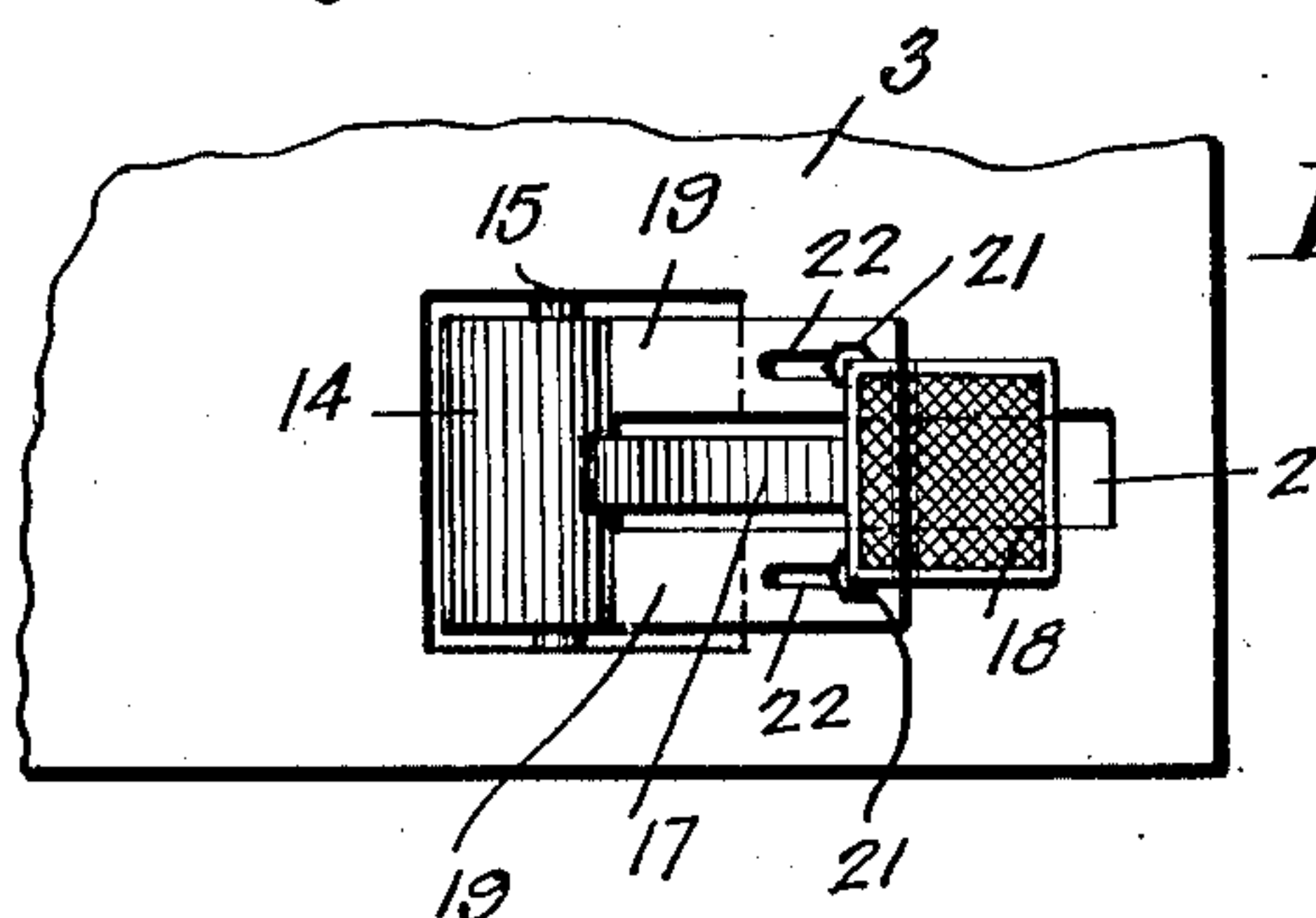
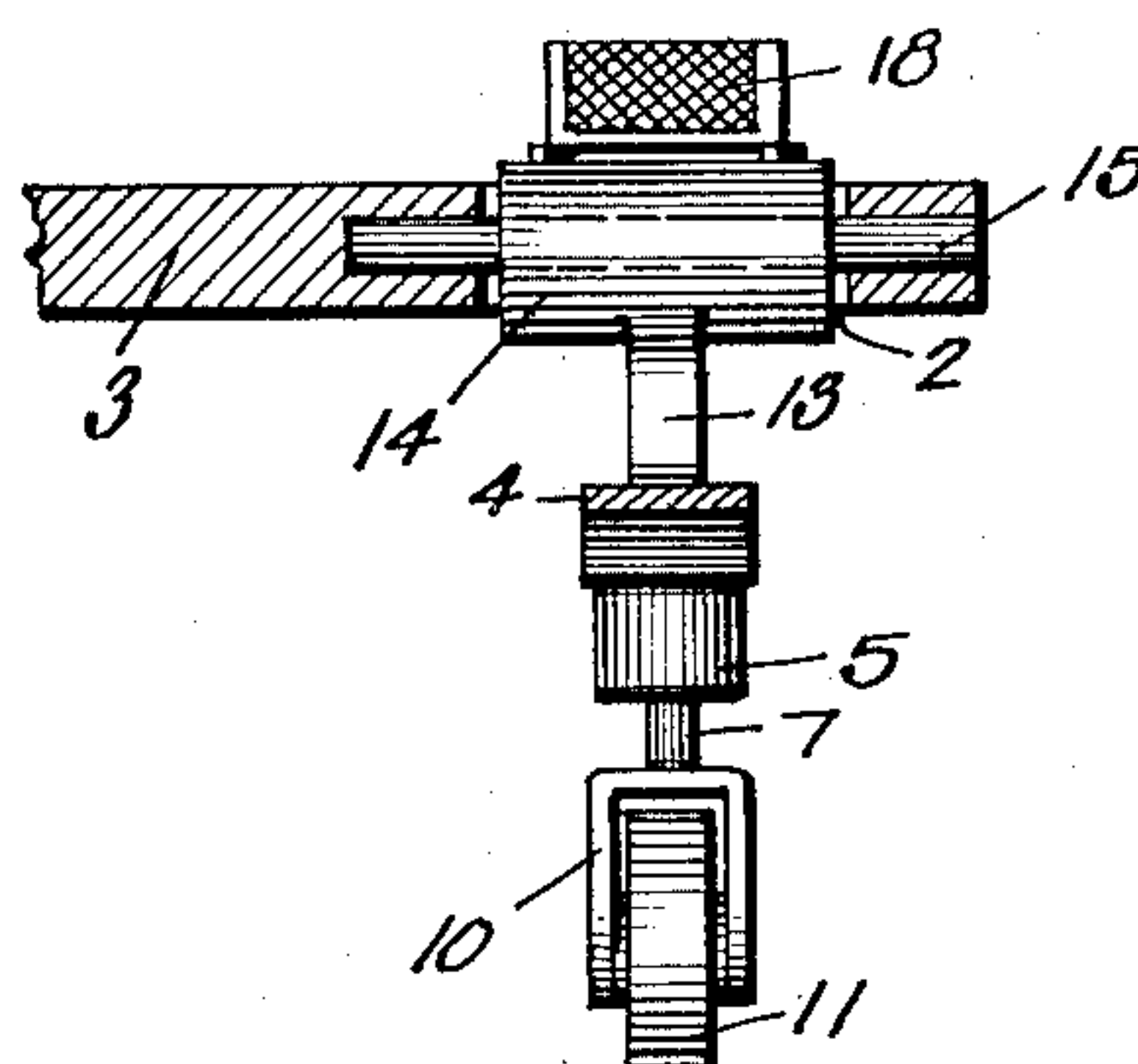


Fig. 4.

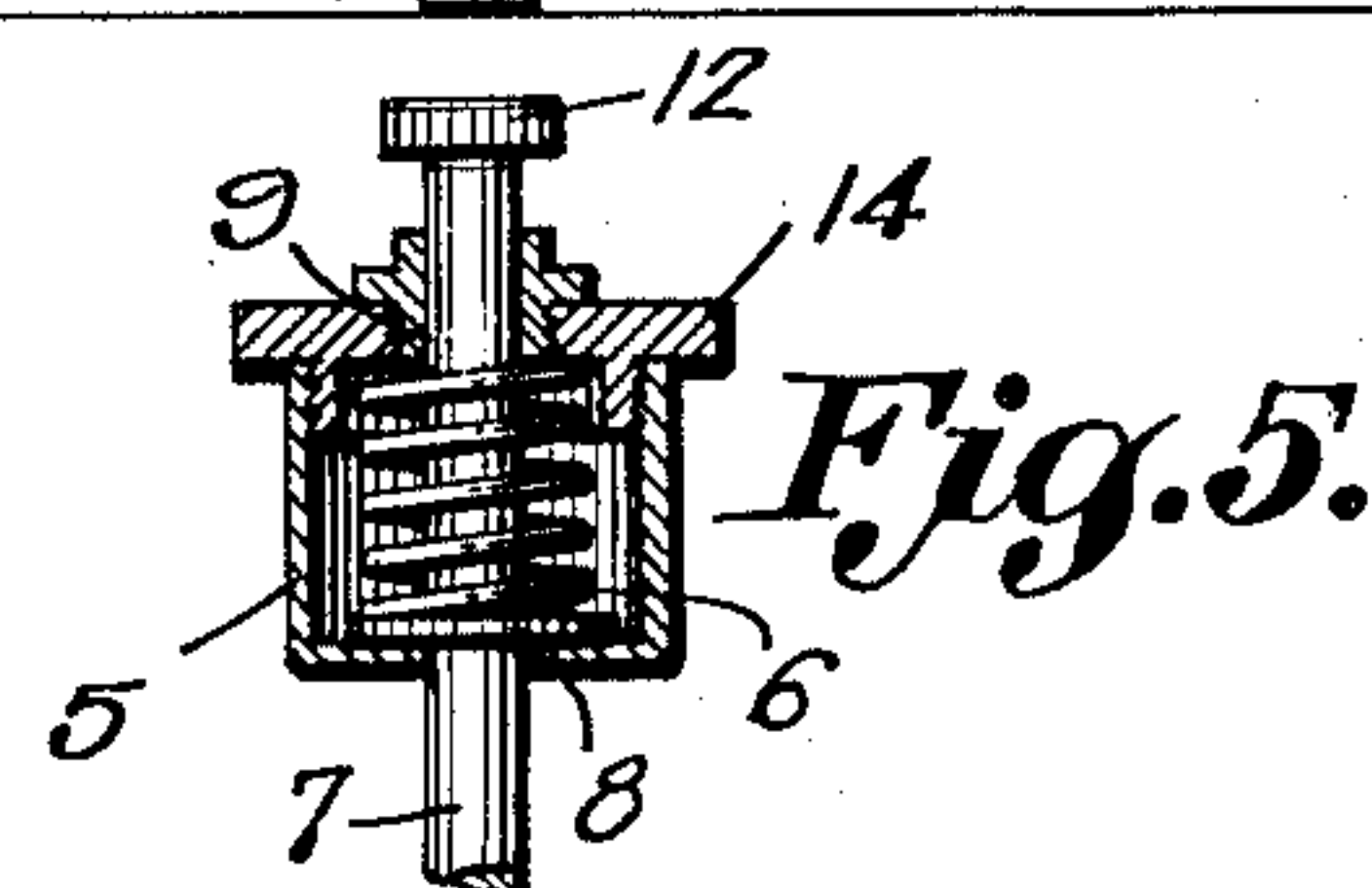


Fig. 5.

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2,022,604

SAFETY DEVICE

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3 Claims. (Cl. 208—78)

This invention has for its object the provision of an accessory which may be readily mounted on the running board of a motorcycle and operated to prevent toppling of the vehicle when at rest or when running at a low speed. It is also an object to provide a device for the stated purpose which will be normally yieldably held in inoperative position, may be readily locked in operative position, and which will absorb the shock of the support impinging upon the ground. These several objects are attained in such a device as is illustrated in the accompanying drawing and will be hereinafter fully described, and the invention resides in certain novel features which will be particularly defined in the appended claims.

In the drawing:

Figure 1 is an elevation showing the device mounted on a motorcycle.

Figure 2 is a view on a larger scale, partly in elevation and partly in longitudinal section.

Figure 3 is a section on the line 3—3 of Figure 2.

Figure 4 is a plan view of the parts shown in Figure 2.

Figure 5 is a section on the line 5—5 of Figure 2.

The motorcycle, indicated at 1, may be of any known or approved form and construction. In practicing the present invention, an opening 2 is formed through the rear end portion of each foot board 3, it being understood that a foot board is mounted on each side of the vehicle. Firmly bolted to the underside of each foot board, at the front end thereof, is a leaf spring 4 which has its rear free end disposed under the opening 2 and tends constantly to lie against the underside of the board as shown in Figure 1. At its rear end, the spring has a threaded opening formed therethrough and a cylindrical box 5 is secured upon the underside of the spring concentric with said opening, said box housing an expansion spring 6 which is coiled around a plunger or rod 7 passing centrally through the top and bottom of the box and slidable therein. A shoulder or abutment washer 8 is secured upon the plunger within the box and a collar or ferrule 9 is secured in the opening in the end of the spring 4 to guide the plunger, as shown in Figure 5, the spring 4 forming the top of the box 5 and the coiled spring 6 bearing at one end against said spring 4 and at its opposite end against the abutment 8. The lower end of the plunger carries a yoke 10 in which is mounted a roller 11 adapted to at times run upon the

ground. On the upper end of the plunger is a knob 12 which constitutes a stop to limit the downward movement of the plunger and the knob also provides a handle whereby the plunger may be raised, if necessary or rotated to set the roller or wheel 11 at a desired angle.

Mounted in the forward end portion of the opening 2 is a crank or locking arm 13 having a circular head or hub 14 disposed within the opening and held therein by a fulcrum pin or axle 15 passing through a diametrical slot 16 in the hub or head and having its ends secured in the walls of said opening as shown clearly in Figure 3. Extending centrally from the hub 14 is a pedal 17 having an expanded foot rest 18, the pedal normally projecting upwardly, as shown in Figure 1, but adapted to lie within the opening 2 when depressed, it being noted that the opening 2 is T-shaped to accommodate the pedal and the hub. Extending through the opening 2 at the sides of the pedal are the stirrups 19 adapted to bear against the hub 14 and held thereto by expansion springs 20 seated in sockets provided therefor in the foot board, as will be understood. The stirrups are slidably mounted on the top and bottom of the foot board and held thereon by bolts 21 passing through the foot board and through longitudinal slots 22 in the stirrups.

Normally, when the vehicle is in use, the parts are in the positions shown in Figure 1, the rollers or wheels 11 being held up from the ground by the spring 4. In this position, the pedal 17 extends upwardly and the pressure exerted by the springs 20 upon the hub through the stirrups holds the hub upward relative to the fulcrum pin 15 so that the pin is off center and the pedal will be locked in the raised position with the arm 13 disposed within the opening 2. When the vehicle is stopped or is traveling at low speed, the rider by pressing upon the pedal causes it to swing downwardly to the position shown in Figure 2, thereby rocking the arm 13 into engagement with the spring 4 and depressing the same to carry the wheel or roller 11 to the ground, the arm 13 assuming the vertical position and the springs 20 shifting the hub so that the fulcrum pin is at the rear end of the slot 16 and off center thereby locking the roller 11 in the lowered ground-engaging position. The same action is effected at both sides of the vehicle so that the vehicle may be left standing without likelihood of falling. When the vehicle is again set in motion, the pedals are raised whereupon the leaf

springs at once lift the ground-engaging rollers. When said rollers are lowered, the springs 6 cushion the impact, and they absorb the shock of traveling over rough ground if they be lowered when the vehicle is in motion.

The device does not add appreciably to the dead weight of the vehicle and, when in operative position, maintains the vehicle in stable equilibrium.

10 Having described my invention, what I claim is:

1. An apparatus for the purpose set forth comprising a leaf spring, means for securing the spring to the foot board of a vehicle, a box on the free end of the spring, a plunger passing vertically through the box, a spring within the box yieldably holding the plunger in lowered position, a ground-engaging roller carried by the lower end of the plunger, said roller being normally held from the ground by the leaf spring, means 15 for depressing the leaf spring to hold the roller to the ground and including a crank pivoted to the board for engagement with the spring, a pedal for operating the crank and means for automati-

cally locking the crank in or out of engagement with the spring.

2. In an apparatus for the purpose set forth, a leaf spring, a ground-engaging roller carried by said spring and normally held from the ground 5 thereby, a crank pivotally mounted above the spring to bear thereon and hold the roller to the ground, and means for locking the crank in or out of engagement with the spring.

3. In an apparatus for the purpose set forth, a 10 leaf spring, a ground-engaging roller carried by said spring and normally held from the ground thereby, a crank pivotally mounted for normal disposal above the spring and to bear thereon when lowered for holding the roller to the ground, 15 a hub for the crank and provided with a slot receiving the pivot to slide on the latter, a pedal extending from the hub to rock the crank on its pivot to raised or lowered position, and slidably-mounted spring-pressed stirrups bearing upon 20 the hub whereby to lock the crank in raised or lowered position.

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