

No. 753,264.

PATENTED MAR. 1, 1904.

J. B. HOWARD.
HUB GUARD FOR WHEELS.
APPLICATION FILED JUNE 26, 1903.

NO MODEL.

FIG. 1.

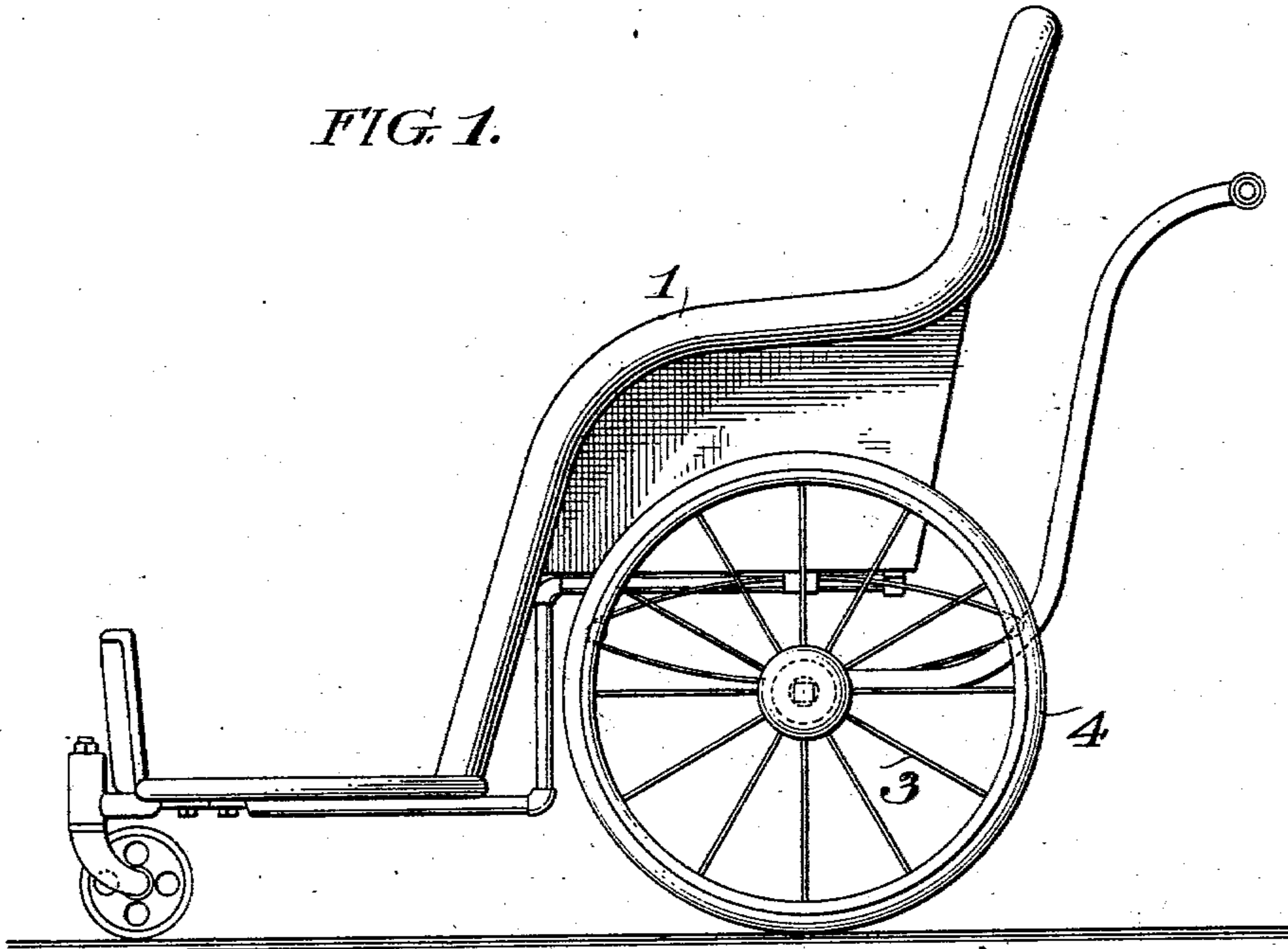


FIG. 2.

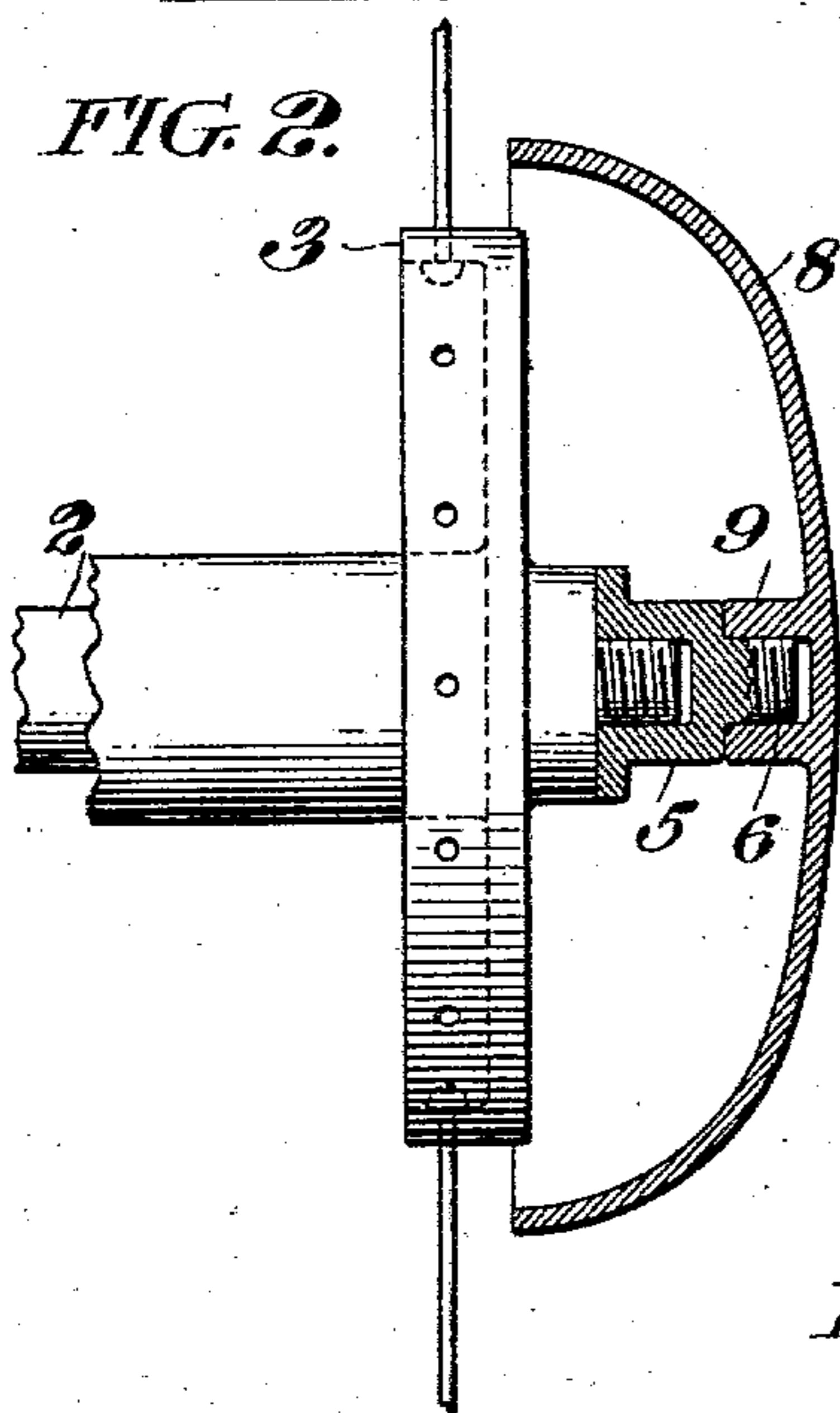


FIG. 3.

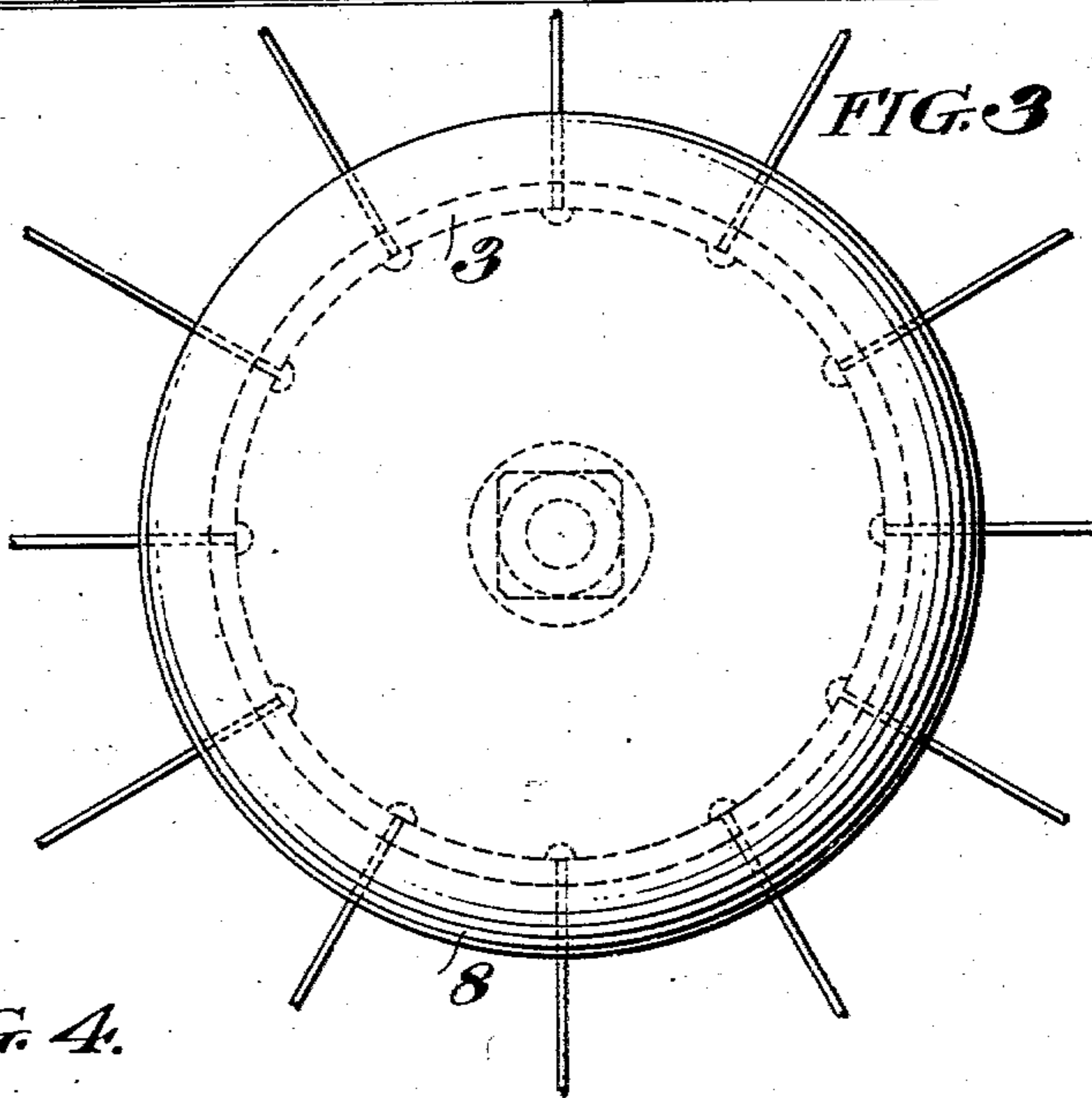
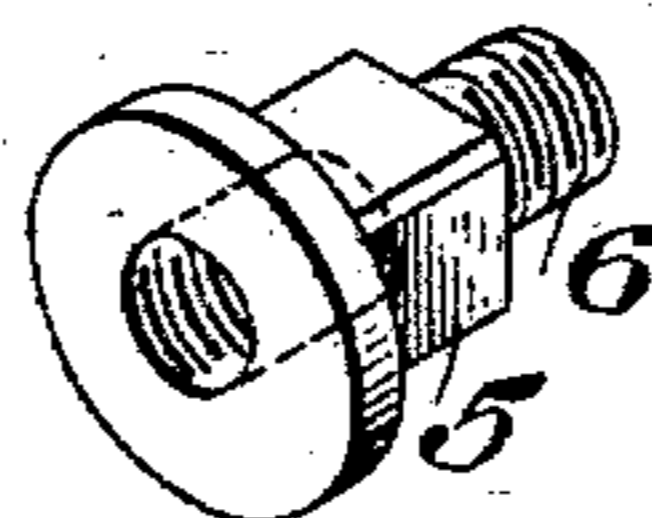


FIG. 4.



WITNESSES:

Henry D. Dwyer
Edw. W. Vaill Jr.

INVENTOR

James B. Howard

BY

James B. Howard
ATTORNEY.

UNITED STATES PATENT OFFICE.

JAMES B. HOWARD, OF ATLANTIC CITY, NEW JERSEY.

HUB-GUARD FOR WHEELS.

SPECIFICATION forming part of Letters Patent No. 753,264, dated March 1, 1904.

Application filed June 26, 1903. Serial No. 163,176. (No model.)

To all whom it may concern:

Be it known that I, JAMES B. HOWARD, a citizen of the United States, and a resident of Atlantic City, State of New Jersey, have invented certain new and useful Improvements in Hub-Guards for Wheels, of which the following is a full, clear, and complete disclosure.

The object of my invention is to provide a guard for wheels of rolling chairs and similar vehicles whereby contact is prevented between the hub of the wheel and garments of persons who may occupy the chair or those who may be in proximity thereto while the same is being propelled along walks, corridors, road and other thoroughfares.

A further object of my invention is also to prevent foreign materials—such as sand, dust, and dirt—from coming in contact with the hub and its bearing, thereby preserving the same in good condition.

The particular advantage of the construction hereinafter described resides in the fact that grease and other lubricants which are used in reducing the friction of the wheel upon its axle are prevented from coming in contact with the garments of persons who may be in the chair or in proximity thereto.

Broadly, my invention consists in providing an attachment for the end of the axle or stationary part of the support of the wheel or the running-gear such that the hub is completely inclosed, while at the same time the said guard may be easily removed when it is necessary to detach the wheel from the axle.

For a full, clear, and exact description of my invention reference may be had to the following specification and to the accompanying drawings, forming a part thereof, in which—

Figure 1 is a side elevation of a rolling chair having my improved guard applied thereto; Fig. 2, a central sectional view taken substantially through the axis of the axle, showing the parts somewhat enlarged from those shown in Fig. 1; Fig. 3, a view showing the guard in elevation as it is in position upon the end of the axle, and Fig. 4 a view of the nut for holding the wheel on the axle-journal and to which the guard is attached.

In the drawings the numeral 1 indicates a rolling chair or similar vehicle, which is supported by the main axle 2, upon which are mounted the usual wheels 3, having rubber or

other suitable tires 4. The wheel 3 is held in position upon the axle by the nut 5, which is similar in form to those ordinarily used, except that it has a projection 6, which is screw-threaded and adapted to support the hub-guard 8. The hub-guard 8 has a central boss or projection 9, which has a screw-threaded recess, forming a socket for the screw-threaded projection 6. The hub-guard 8 preferably has a form of a shallow bell-shaped shell or cap; but any other shape may be used which may suit individual choice or convenience, the essential requirement being that the outer end of the hub be inclosed as much as possible. In other ways I do not wish to be limited to the exact arrangement and form of parts set forth, for the same may be varied and yet come within the spirit and scope of my invention—for example, if deemed desirable the nut 5 may be dispensed with and the shell 8 may be attached directly to the end of the axle, serving the function of both that of the nut and of a guard for the hub.

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

1. A hub-guard for vehicles, comprising a shell or cap extending over and inclosing the hub and spoke flange on their outer sides, a nut for retaining the wheel upon the axle, and means for securing said shell or cap to said nut.

2. A hub-guard for vehicles, comprising a shell or cap extending over and inclosing the hub and spoke flange on their outer sides, a nut for securing the wheel upon the axle, said nut having a screw-threaded projection and means carried by said shell for engaging said screw-threaded projection.

3. A hub-guard for vehicles, comprising a shallow bell-shaped shell or cap having a central interior projection within which is a screw-threaded socket, a nut having a screw-threaded projection adapted to enter said socket, said nut being adapted to retain the wheel upon its axle and also to support said guard.

In witness whereof I have hereunto set my hand this 19th day of June, A. D. 1903.

JAMES B. HOWARD.

Witnesses:

HORACE PETTIT,

LEWIS H. VAN DUSEN.