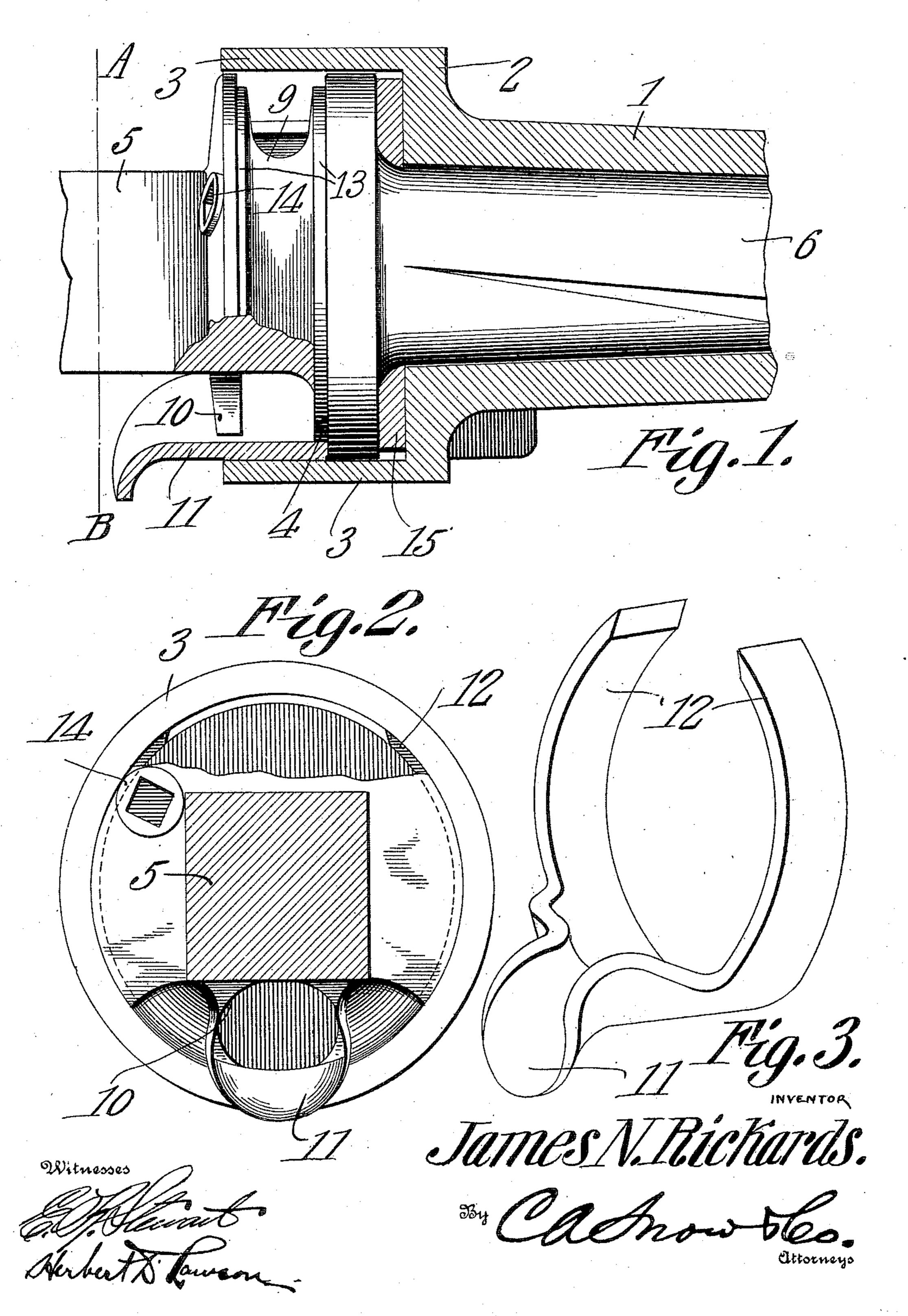
J. N. RICKARDS. SAND BAND FOR VEHICLE WHEELS. APPLICATION FILED SEPT. 17, 1909.

982,994.

Patented Jan. 31, 1911.



UNITED STATES PATENT OFFICE.

JAMES NELSON RICKARDS, OF RIDGELY, MARYLAND.

SAND-BAND FOR VEHICLE-WHEELS.

982,994.

Specification of Letters Patent.

Patented Jan. 31, 1911.

Original application filed May 6, 1908, Serial No. 431,216. Divided and this application filed September 17, Serial No. 518,224.

To all whom it may concern:

Be it known that I, James N. Rickards, a citizen of the United States, residing at Ridgely, in the county of Caroline and State 5 of Maryland, have invented a new and useful Sand-Band for Vehicle-Wheels, of which the following is a specification.

This invention relates to vehicle axles and more particularly to sand bands for use in 10 connection therewith. The invention is a division of an application filed by me on May 6, 1908, Serial Number 431,216.

One of the objects of the invention is to provide a dust cap of novel form for preventing the admission of dust, etc., to the interior of the box in the hub from the inner end thereof, said cap having simple means for scraping accumulations of grease, grit, etc., from the inner surface thereof, the 20 loosened material being designed to fall into a receiving channel and to be directed therefrom into a discharge spout carried by the axle.

With these and other objects in view the 25 invention consists in certain novel details of construction, and the combinations of parts hereinafter more fully described and pointed out in the claims.

In the accompanying drawings the pre-30 ferred form of the invention has been shown.

In said drawings: Figure 1 is a view partly in elevation and partly in section of a portion of an axle having the present improvement applied thereto. Fig. 2 is a section on 35 line $a-\bar{b}$ of Fig. 1. Fig. 3 is a detail view of the sand band and spout detached.

Referring to the figures by characters of reference, 1 designates a portion of a tapered box of the usual or any preferred construc-40 tion and one end of which is enlarged as at 2 and provided with an annular flange 3 constituting a dust cap. This cap is designed to surround a collar 4 formed upon the axle 5 at the inner end of the spindle 6, which 45 spindle is mounted as usual within the box 1. The collar 4 has an annular groove or channel 9 therein, the inner wall of which is cut away at the bottom to form an outlet opening 10 in which is fitted an outlet spout 50 11 which extends under the channel 9. This spout is formed with bowed wings 12, preferably integral therewith, and partly over-

hanging annular shoulders 13 formed by the walls of the channel 9. The terminals of these wings bear outwardly upon the inner 55 surface of the flange 3 and constitute scrapers for the purpose of removing from the inner surface of said flange any dust, grease or other objectionable material which may accumulate therein. The interior of the 60 channel 9 can be readily viewed by removing a plug 14 screwed into the exposed face of the collar 4 and extending into the channel 9. If desired, a washer 15 of any suitable material may be interposed between the col- 65 lar 4 and the enlargement 2, said washer constituting a removable wear device.

It will be apparent that by providing a dust cap such as herein described, any grit passing from the box 1 and over the collar 4, 70 will be prevented from accumulating within the cap and will, instead, be promptly scraped into the channel 9 so as to pass freely through the spout 11.

It is of course to be understood that vari- 75 ous changes may be made in the construction and arrangement of the parts without departing from the spirit or sacrificing the advantages of the invention.

What is claimed is:— 1. The combination with a hub element having an annular flange at one end constituting a dust guard, of an axle, a collar thereon surrounded by said flange, there being an annular channel in the collar, one 85 wall of the channel being cut away transversely to constitute an outlet extending in

the direction of the length of the axle. 2. The combination with a hub element having an annular flange at one end consti- 90 tuting a dust guard, of an axle, a collar thereon surrounded by said flange, there being an annular channel in the collar, one wall of the channel being cut away to constitute an outlet, and scraping devices car- 95 ried by the collar and yieldingly contacting with the flange.

3. The combination with a hub element having an annular flange at one end constituting a dust guard, of an axle, a collar 100 thereon surrounded by said flange, there being an annular channel in the collar, one wall of the channel being cut away to constitute an outlet, spring scraping devices

carried by the collar and normally contacting with the inner face of the flange at points above the outlet, and an outlet spout extending from the channel and through the outlet.

4. A sand band formed of a spout having opposed resilient bowed scraping wings integral therewith.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature 10 in the presence of two witnesses.

JAMES NELSON RICKARDS.

Witnesses:

M. B. LAWTON, HERBERT D. LAWSON.