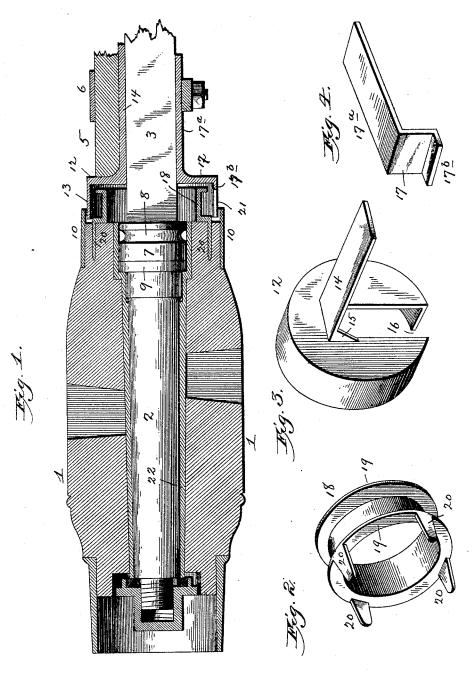
## S. HEFFLEY. SAND BAND.

No. 459,232.

Patented Sept. 8, 1891.



WITNESSES: F. L. Ourand. Semult Anls. Samuel Heffley, Samuel Heffley, Junes Gagger Ba

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

## UNITED STATES PATENT OFFICE.

SAMUEL HEFFLEY, OF ROCHESTER, INDIANA.

## SAND-BAND.

SPECIFICATION forming part of Letters Patent No. 459,232, dated September 8, 1891.

Application filed April 29, 1891. Serial No. 390,951. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL HEFFLEY, a citizen of the United States, and a resident of Rochester, in the county of Fulton and State of Indiana, have invented certain new and useful Improvements in Sand-Bands; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in 10 the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to sand-bands for the 15 hubs of vehicles, the object being to provide an improved construction of device for this purpose, whereby superior advantages are ob-

The invention consists in the novel construc-20 tion and combination of parts hereinafter fully described, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a sectional elevation of a vehicle hub and axle, showing my improved device applied thereto. Fig. 2 is a view of the annulus detached. Figs. 3 and 4 are detail perspective views of the sand-band.

In the said drawings, the reference-numeral 30 1 designates a vehicle-hub; 2, the axle, having a squared or angular body portion 3 and spindle, as usual.

The numeral 5 designates the wooden portion of the axle, clipped thereto by means of 35 the clip 6. At the junction of the squared portion and the spindle the axle is provided with a collar 7, having a peripheral groove 8, and is also provided with a leather washer 9. The collar  $\bar{7}$  and the washer 9 fit in a recess 40 in the hub, the latter being provided on its inner end with an annular ring 10, which projects a short distance beyond said end.

The numeral 12 designates the sand-band, consisting of a metallic disk with a central 45 aperture, a peripheral band or flange 13, and an inwardly - projecting shank 14, with strengthening-ribs 15 at its junction with said band. Upon the opposite side the band is formed with a recess or cut-away portion 16, 50 extending from the central aperture to the periphery, as seen in Fig. 3. The numeral I or shank and formed with a recess extending

17 denotes an angular plate which fits in said recess, having one end bent inwardly, forming a shank or arm 17°, which rests upon the under side of the portion 3 of the axle. These 55 shanks 14 and 17<sup>a</sup> are secured to the axle by means of the clip 6. The opposite end of the plate 17 is bent outwardly, forming a short arm 17<sup>b</sup>. When these parts are placed in position and secured to the axle, they form, as 60 it were, an annular band with inwardly-projecting arms and a slot 21 in its under side, through which any dust or dirt may escape.

The numeral 18 designates a metallic annulus or ring provided at each end with out- 65 wardly-extending annular flanges 19, one of which is provided with a series of horizontal prongs or fingers 20, which are designed to be driven into the inner face of the hub, whereby the device is securely held in place. 70

The numeral 22 denotes the box.

In carrying the invention into effect the prongs are driven into the hub until the flange of which they form a part abuts against the inner face thereof, and the axle then is passed 75 through the central aperture in the hub, as usual, the sand-band forming a housing for the annulus or ring 7. The device forms an effectual barrier against the entrance of dust, dirt, and other substances between the axle 8c and the hub, and the annulus being held to the hub by means of the prongs or fingers, which are driven therein, can be rapidly and efficiently applied to any ordinary hub, dispensing with the use of screws, nails, or other 85 fastening devices.

Having thus described my invention, what I claim is—

1. The combination, with a vehicle-hub, the axle, and the sand-band secured thereto, of 90 the metallic annulus having outwardly-extending annular flanges at each end and one of said flanges provided with prongs or fingers adapted to be driven into said hub, substantially as described.

2. The combination, with a vehicle-hub having an outwardly-projecting band on its inner end, the annulus having outwardly-extending flanges at each end, and prongs or fingers which are driven into the hub, of the 100 sand-band having an inwardly-projecting arm

from the central aperture to the periphery, the angular plate fitting in said recess, having one end bent inwardly, forming an arm or shank, and the other end bent outwardly, and the clip for securing said arms or shanks to the axle, substantially as described.

In testiment, that I claim the foregoing as

In testimony that I claim the foregoing as

JACOB VAN TRUMP.