

E. P. BROWN.
SAND-BANDS FOR VEHICLE HUBS.

No. 195,746.

Patented Oct. 2, 1877.

FIG. 1.

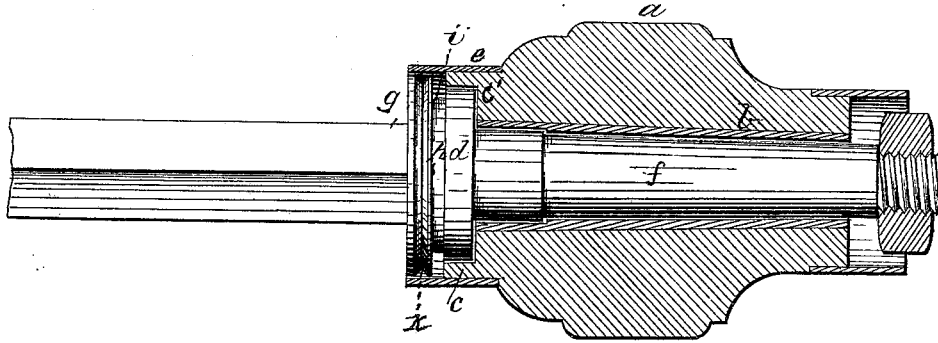


FIG. 2.

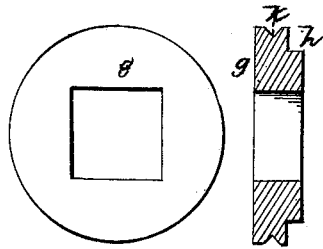
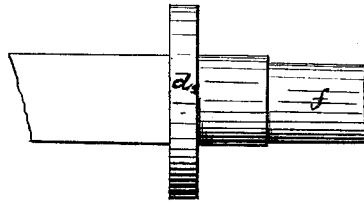


FIG. 3.



WITNESSES
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ERASTUS P. BROWN, OF FARWELL, MICHIGAN.

IMPROVEMENT IN SAND-BANDS FOR VEHICLE-HUBS.

Specification forming part of Letters Patent No. **195,746**, dated October 2, 1877; application filed August 25, 1877.

To all whom it may concern:

Be it known that I, ERASTUS P. BROWN, of Farwell, in the county of Clare and State of Michigan, have invented certain new and useful Improvements in Sand-Stops; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

The object of my invention is to provide a suitable protection to the axle-arms of vehicles, the details of which will be hereinafter fully described.

In the accompanying drawing, Figure 1 is a section of a hub and axle-arm with my sand-stop attached, and Figs. 2 and 3 are detail views of the same.

a is the hub. It is constructed with an extension, *c*, on its inner end, forming a recess or chamber, *c'*, into which is fitted snugly the collar *d* on the axle-arm *f*. *e* is the hub-band. It is secured to the inner end of the hub *a*, and on the outer side of the extension *c*. *f* is the axle-arm. *g* is the sand-stop, which is a disk placed upon the axle-tree behind the collar *d*, and is separated from the latter by the narrow flange *h*, so as to provide an intermediate dirt-chamber, *i*. It has a groove, *k*, on its periphery. It is larger in diameter than the collar *d*, and fits snugly into the end of the hub-band *e*, as shown.

In the operation of my device the groove *k* is a receptacle for dirt or other foreign matters that may pass the outer periphery of the sand-stop.

The chamber *i* extends from the flange *h* outward. It passes the circumference of the collar *d*, and along the end of the extension *c* to the hub-band *e*.

Any dirt that passes beyond the groove *k* will find its way into the outer portion of this chamber, will come in contact with the ends of the extension *c*, and will be forced downward into the lower portion of the chamber, and onto the flange *h*, where it will remain, being lower than the collar *d*.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

The combination, with the axle-arm *f*, constructed with a collar, *d*, hub *a*, constructed with the extension *c*, providing a chamber, *c'*, and hub-band *e*, of the disk *g*, fitting snugly within the end of the hub-band *e*, and constructed with the groove *k* and flange *h*, and secured to the axle-tree, so as to provide a chamber, *i*, between it and the collar *d* and ends of the extension *c*, substantially as set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

ERASTUS P. BROWN.

Witnesses:

THEODORE W. SAWYER,
HENRY TREVIDICK.