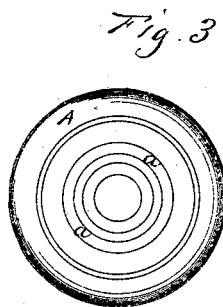
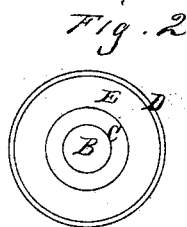
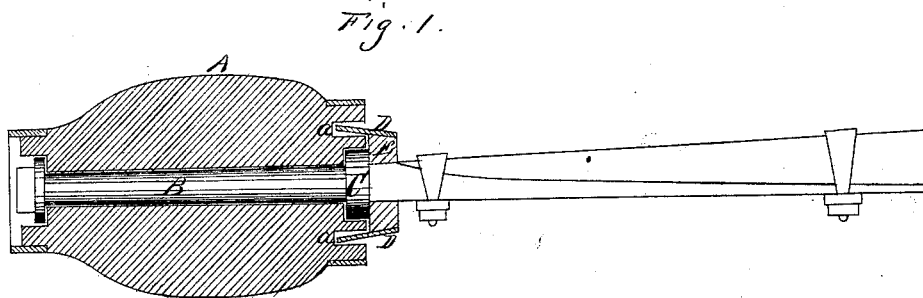


G. H. NEVENS.
SAND CAP FOR HUBS OF VEHICLES.

No. 114,324.

Patented May 2, 1871.



Witnesses.
Geo. M. Strong
Wm. H. Rimmer

Inventor
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United States Patent Office.

GEORGE H. NEVENS, OF LIVERMORE, CALIFORNIA, ASSIGNOR TO HIMSELF AND R. N. CAUGHELL, OF SAME PLACE.

Letters Patent No. 114,324. dated May 2, 1871.

IMPROVEMENT IN SAND-CAPS FOR HUBS OF VEHICLES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, GEORGE H. NEVENS, of Livermore, county of Alameda, State of California, have invented an Improved Sand-Cap for Axle-Boxes; and I do hereby declare the following description and accompanying drawing are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvements without further invention or experiment.

The object of my invention is to provide an improved sand-cap for the axle-boxes of vehicles; and

It consists of a ring of metal, which is made conical in form, and has its smaller end attached to the axle near the collar. The edge of the larger end projects into a groove which is formed in the inner end of the hub, and thus effectually protects the collar and axle-box from sand and dust.

Referring to the accompanying drawing for a more complete explanation of my invention—

A is the hub of a wheel, and

B the axle, which may be fitted in any of the ordinary ways.

Just behind the collar C is a ring, E, of wood or metal, which may be put on by removing the collar C. In the case of axles already made, or in new work, this ring may be slipped on before the axle is welded up.

The metal cap D may be cast with the ring E if the latter is of metal; or, if the ring is of wood, the cap can be formed of sheet metal and suitably attached. This cap is made conical in form, the longer part opening toward the wheel-hub. This shape causes any sand or dust that may fall on it to slide or fall away from the hub.

A groove, *a*, is made in the end of the hub, and the edge of the cap enters this groove, being extended over the collar C sufficiently for that purpose.

By this arrangement all sand and dust is effectually excluded from the axle-box, and the device is easily applied to any wagon.

Having thus described my invention,

What I claim, and desire to secure by Letters Patent, is—

The conical cap D with the ring E, in combination with the grooved hub A, substantially as and for the purpose set forth.

In witness whereof I have hereunto set my hand and seal.

GEORGE H. NEVENS. [L. s.]

Witnesses:

O. S. LIVERMORE,
J. M. WARTH.