D. W. BAIRD.

Hub-Band.

No. 167,970 Patented Sept. 21, 1875.

Fig. 1.

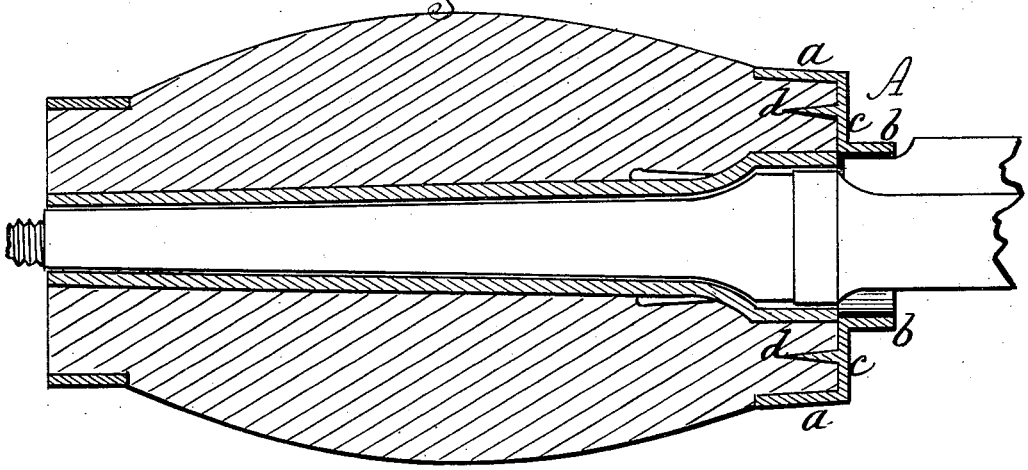


Fig. 2.

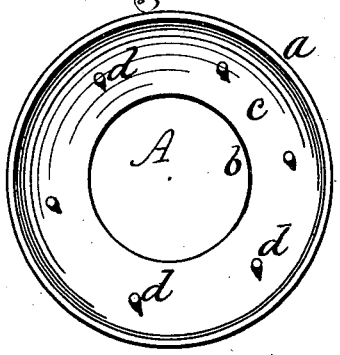
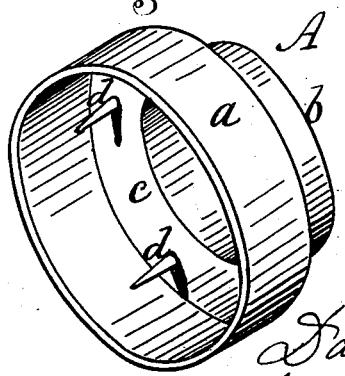


Fig. 3.



Witnesses.
E. B. Scott
Louis Spahn.

Inventor.
David W. Baird
per R. F. Osgood,
Atty.

UNITED STATES PATENT OFFICE.

DAVID W. BAIRD, OF GENEVA, NEW YORK.

IMPROVEMENT IN HUB-BANDS.

Specification forming part of Letters Patent No. **167,970**, dated September 21, 1875; application filed August 16, 1875.

To all whom it may concern:

Be it known that I, DAVID W. BAIRD, of Geneva, in the county of Ontario and State of New York, have invented a certain new and useful Improvement in Hub-Bands; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a central vertical section of a hub, showing my improvement applied thereto. Fig. 2 is an end view of the band looking from the inside. Fig. 3 is a perspective view of the same.

My improvement relates to a combined hub-band and sand-band formed in one piece, and is designed to fit all-sized hubs, but especially small ones, where separate sand-bands cannot be secured to the end of the hub owing to its small diameter. The invention consists, as a new article of manufacture, of the device hereinafter described.

A represents the device. *a* is the hub-band. *b* is the sand-band or flange that projects over and covers the enlargement of the axle. *c* is the vertical web, which fits the end of the hub. The device is formed in a single piece, and is preferably made of malleable iron. On the inner face of the web *c* are a series of studs or points, *d d d*, which are driven into the end of the hub in applying the band in place.

The object of this invention is to produce a simple and cheap device, which will take the place of the separate hub-band and sand-band which have heretofore been in use, and which is specially adapted to small-sized hubs for light wagons, and to which the old-style separate bands cannot be applied. In such small hubs there is no difficulty in applying the hub-band, as it fits on the outside of the hub; but the end of the hub is so small that the separate sand-band cannot be attached, and consequently, in the smallest-sized hubs the axle, next to the hub, is necessarily left uncovered and exposed to sand, mud, water, &c., which enter and grind out the journal.

In my device the whole is formed in one piece, and this difficulty is obviated, as the sand-band forms a permanent part of the hub-band itself.

The great reduction in cost is another consideration, as I can furnish these devices at much less expense than the old style made in two parts, and also save labor and time in applying them in place.

Another important feature in my invention is the spurs or points *d d*, which serve to center the band and enable it to be driven accurately in applying; also giving a double hold of the band in and upon the wood, and preventing, in a great degree, twisting of the band, which frequently occurs when the hold is only the surface contact with the wood. The spurs, furthermore, help to hold the band to the wood.

I am aware that devices are known having a flange forming a part of the hub-band and projecting out over the axle; but in all such cases, so far as I am aware, the band forms a part of, or is specially constructed to connect with, the interior box by a screw or other expensive connection for the purpose of securing the box or wheel on the axle. Such is not the equivalent of my invention, which consists simply of a hud-band and sand-band forming one piece, as before described, and capable of being applied directly upon the end of the smallest hub. The spurs *d d* have never been used upon a band of this kind, so far as I am aware.

I claim—

As a new article of manufacture, the combined hub-band and sand-band, consisting of the reverse flanges *a b*, vertical web *c*, and spurs *d d*, as and for the purpose specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

DAVID W. BAIRD.

Witnesses:
CHAS. H. RUSH,
HENRY F. BRICKLEY.