W. GALLAN.

Hubs for Vehicles.

No. 162,813. Patented May 4, 1875.

Fig. 1

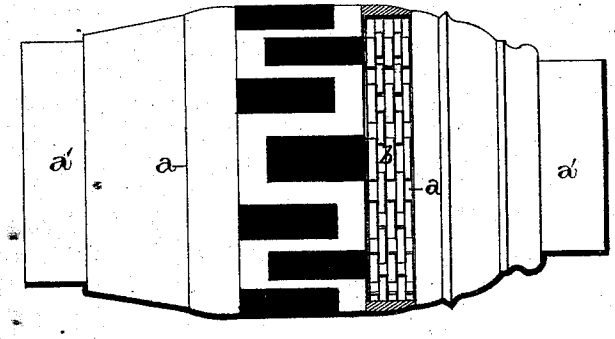


Fig. 2



WITNESSES.

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UNITED STATES PATENT OFFICE.

WILLIAM GALLAN, OF NEWARK, NEW JERSEY.

IMPROVEMENT IN HUBS FOR VEHICLE-WHEELS.

Specification forming part of Letters Patent No. **162,813**, dated May 4, 1875; application filed September 8, 1874.

To all whom it may concern:

Be it known that I, WILLIAM GALLAN, of the city of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Process to Prevent Hubs from Splitting; 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 drawings, and to the letters of reference marked thereon, which form a part of this specification.

Figure 1 is a plan view of a hub, showing my improvement. Fig. 2 is a detached view of one of the tacks.

The object of this invention is to prevent a hub from splitting, either before or after the spokes have been driven, or while they are being driven, and, at the same time, not to impair the beauty and symmetry of the hub. This device is rendered important from the fact that if a hub splits while the spokes are being driven, or after they have been driven, and the wheel has been finished and painted, the wheel is spoiled, and, as a general rule, a new one has to be substituted; or, if not, its beauty is marred by iron bands which have to be driven on the hub to protect it from splitting further. This invention consists in sewing the fibers of the wood together and covering up the stitches by a celluloid band, as will be hereinafter more fully set forth.

Two grooves, *a*, three-fourths of an inch wide, by one-eighth of an inch deep, more or less, according to the size of the hub *a'*, is made therein, one in front of the spokes and the other behind them, as shown; and in said grooves are driven two or more rows of double-pronged staple-shaped tacks, *b*, (Miles' patent carpet-tacks serve the purpose admirably,) each row breaking joints, as it were, or overlapping the other alternately, thus actually sewing the fibers together and rendering it almost impossible to split the hub. This being done, the grooves are filled up with bands made from "celluloid," patented by J. W. and I. S. Hyatt. These bands, being elastic, will not break, and, if the wood shrinks, will shrink or contract with it.

Hubs have heretofore been prevented from splitting by annular bands, which have been placed around them, and this I disclaim.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination of the hub *a'*, with the bent double-ended tacks *b*, the tacks being driven into the hub and made to overlap each other, substantially as and for the purposes described.

2. The combination of the hub *a'*, having one or more annular grooves in its surface, the bent double-ended tacks *b*, and filling-bands *a*, substantially as set forth.

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

WILLIAM GALLAN.

Witnesses:

GEO. H. WILSON,

CHARLES W. ROGERS.