

D. ALLEN.
Plow-Wheel.

No. 161,193.

Patented March 23, 1875.

Fig 1

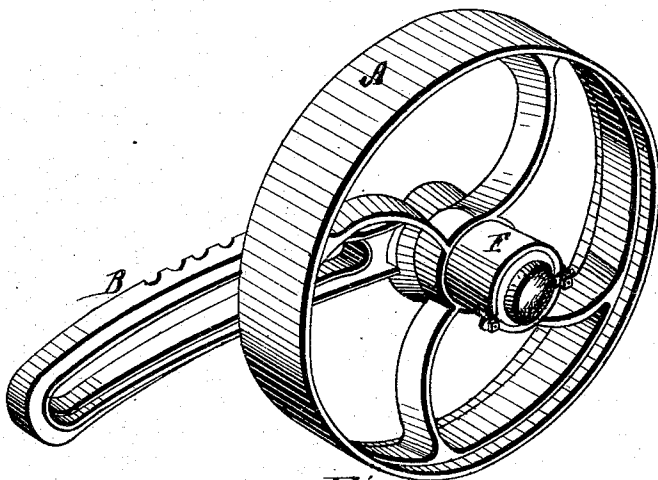


Fig 2

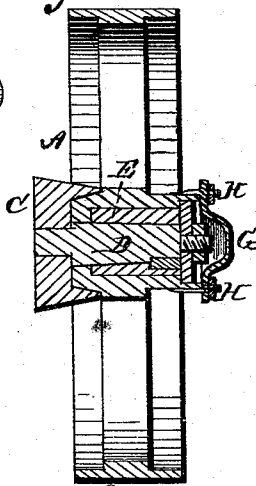
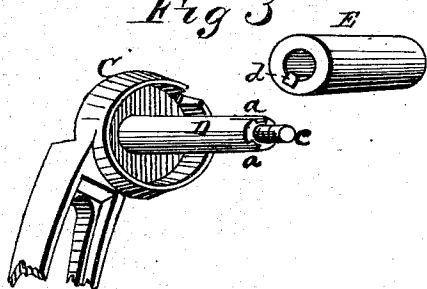


Fig 3



WITNESSES

Frank L. Ourand.
W. L. Everh.

INVENTOR

David Allen.
Alexander M. Mott.

Attorneys.

UNITED STATES PATENT OFFICE.

DAVID ALLEN, OF ALLEGAN, MICHIGAN, ASSIGNOR TO JOHN M. HEATH,
OF SAME PLACE.

IMPROVEMENT IN PLOW-WHEELS.

Specification forming part of Letters Patent No. **161,193**, dated March 23, 1875; application filed
June 18, 1874.

To all whom it may concern:

Be it known that I, DAVID ALLEN, of Allegan, in the county of Allegan and in the State of Michigan, have invented certain new and useful Improvements in Plow-Wheel; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the peculiar construction of the hub of a plow-wheel and the axle-arm which enters it, and also of the parts immediately connected with both, as will be set forth.

In the annexed drawings, Figure 1 represents a perspective of the wheel and standard. Fig. 2 is a cross-section in the line of the hub, and Fig. 3 a perspective of the standard and chill.

In the drawings, A represents a skeleton-wheel, which has a hub, which projects on each side of it. B represents a slotted curved standard, which has an arm or axle at its lower end, projecting at right angles from it. Outside of this arm is formed on the standard a flange, C, which fits over the inner portion of the hub of the wheel. Fitting within the hub is a chill-skein, into and through which passes the arm D. This chill is made slightly tapering both outside and inside, and the opening in hub to receive it, as also the arm D, are made with a corresponding taper. A lug at one end of the chill, marked *d*, is formed, which passes into a groove, *a*, on the end of the arm, to keep said chill from turning, except when desired, and to enable me to change

the position of the chill when it wears on one side. This chill, when placed over the arm, answers the place of an axle, and the wheel turns around it. On the outer end of the arm is a screw-thread, over which passes a suitable nut, but between the nut and the chill is placed a washer. From the hub project two short arms, H, upon which are screw-threads. G represents a metallic cap, which fits snugly on the end of the hub, having lugs upon it, through which pass the arms H H. Suitable nuts pass over the threads upon the arms, to confine the cap in place. This cap is for the purpose of keeping out dust, and preventing the wheel from wearing toward the standard. It will be seen that there is a shoulder in the hub, which allows the chill to enter only so far. The eye of the hub is chilled in casting, and thus I have two chilled surfaces wearing together.

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

In combination with the curved and slotted standard B, with flange C and recessed arm D rigidly attached thereto, the chill E, extending partially through the hub, and having spur *d*, wheel-hub F, and cap G, attached to, and revolving with, the hub, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 4th day of June, 1874.

DAVID ALLEN.

Witnesses:

LYMAN H. BABBITT,
J. E. BABBITT.