

R. SCHNELL.
Sand-Guard.

No. 214,459.

Patented April 15, 1879.

Fig. 1.

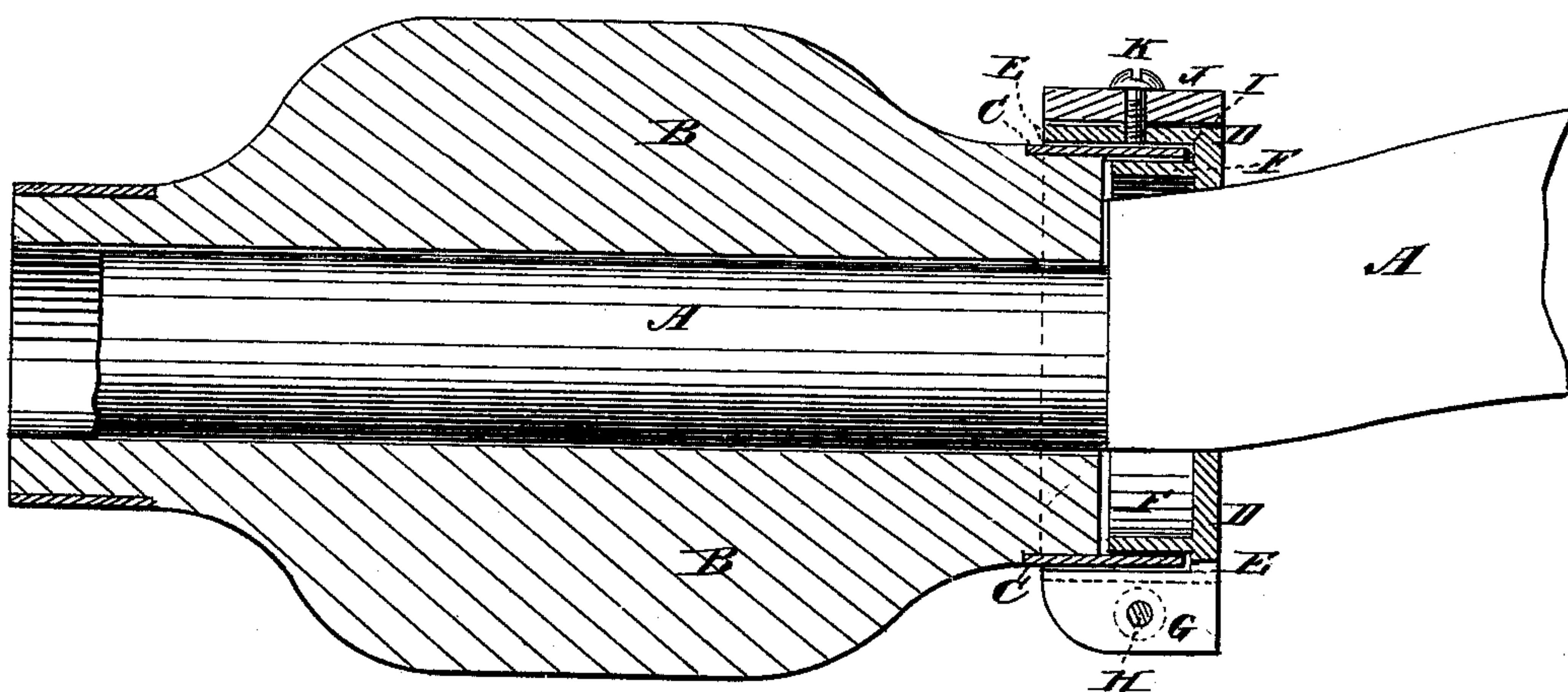
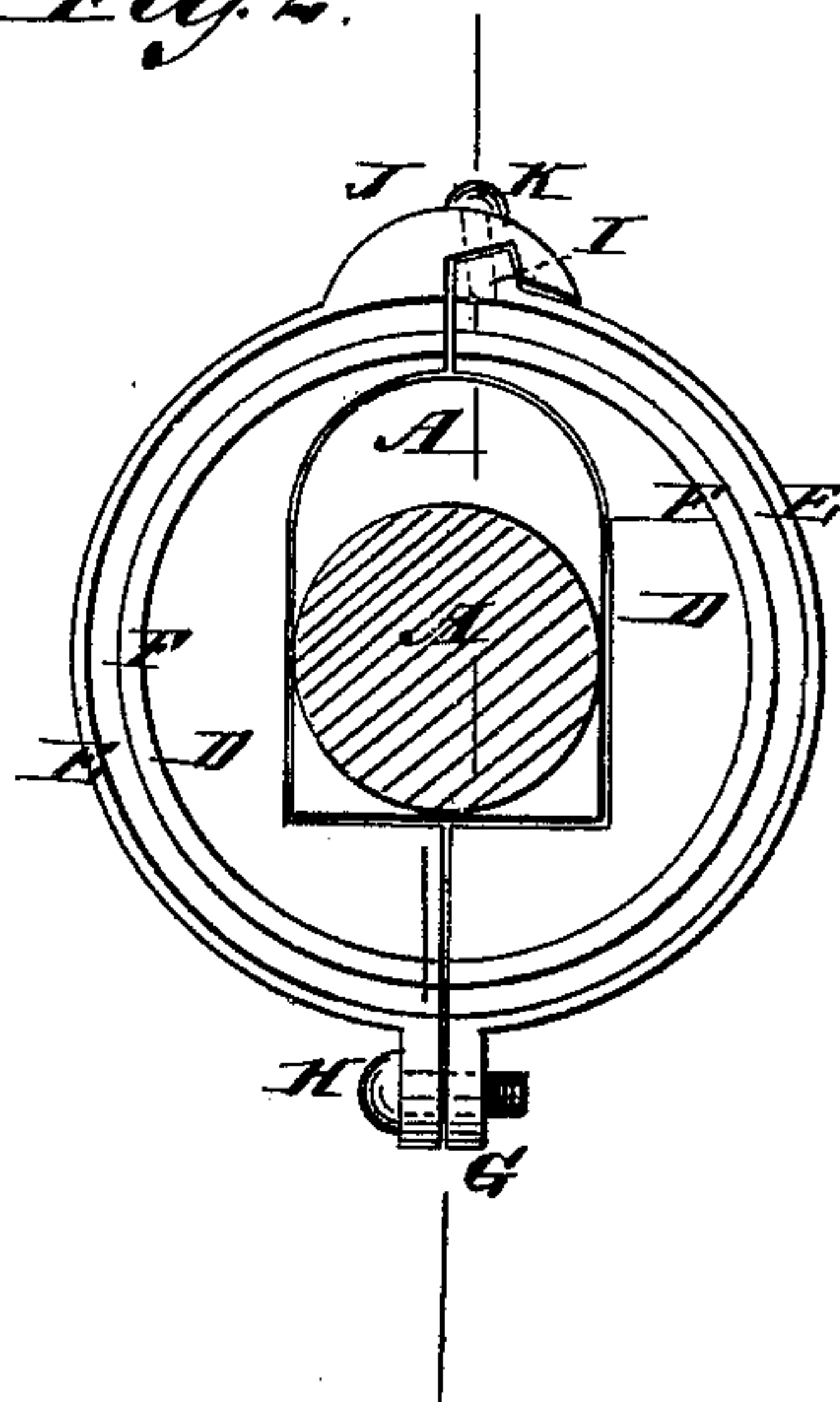


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ROBERT SCHNELL, OF ST. PAUL, MINNESOTA, ASSIGNOR TO HIMSELF AND
SEBASTIAN V. HANFT, OF SAME PLACE.

IMPROVEMENT IN SAND-GUARDS.

Specification forming part of Letters Patent No. **214,459**, dated April 15, 1879; application filed
May 24, 1878.

To all whom it may concern:

Be it known that I, ROBERT SCHNELL, of St. Paul, in the county of Ramsey and State of Minnesota, have invented a new and useful Improvement in Sand-Guards for Vehicle-Wheels, of which the following is a specification.

Figure 1 is a detail section of my improved guard, shown as applied to the axle and hub of a vehicle-wheel. Fig. 2 is a front view of the same, the hub being removed and the axle-arm shown in section.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved device to prevent sand and dust from working in at the inner end of the hub of a wheel and cutting and wearing the axle-box and axle, and which will also prevent the grease or oil used for lubricating the axle-arm from escaping at the inner end of the said hub.

The invention will first be described in connection with the drawings, and then pointed out in the claim.

A represents the axle of a vehicle, and B represents the hub of the wheel, which is provided with a band, C, at its inner end, in the usual way.

D is my improved guard, which is placed upon and secured to the shoulder of the axle at the inner end of its arm or journal, and is made with an outer ring-flange, E, to overlap the band C of the hub, and with an inner ring-flange, F, to underlap the band C of the hub, the projecting part of the said band C fitting into the space between the two ring-flanges E F, as shown in Fig. 1.

The inner flange, F, is made of such a height that its edge may be close to the end of the hub.

By this construction sand and dust will be unable to pass in and wear the bearing-surfaces of the axle-arm and axle-box, and at the same time grease and oil will be unable to find their way out to smear and soil the hub and axle.

For convenience in applying the guard D to an axle, A, it may be made in two parts, as shown in Fig. 2, having downwardly-projecting lugs G formed upon their lower ends, which are clamped together by a bolt or screw, H.

Upon the upper end of one of the parts of the guard D is formed a rib or tongue, I, and upon the upper end of the other part of the sand-guard is formed a thicker portion or rib, J, which overlaps the end of the first part of said guard, and has a groove formed in its inner side to receive the tongue I. The upper ends of the parts are then secured to each other by a bolt or screw, K, passing in through the rib J and tongue I, as shown in Figs. 1 and 2.

With this construction the guard may be easily and conveniently attached to an axle in such a way that it will be held firmly in place.

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

The combination, with hub having band C, of the flanged sand-guard D E F, formed in two parts, held together at the top by tongue I, under-grooved rib J, and screw K, and secured at bottom by screw-clamp or hinge, for the purpose specified.

ROBERT SCHNELL.

Witnesses:

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