(No Model.)

J. R. HERSH & J. M. STALEY.

SPROCKET WHEEL.

No. 402,448. Patented Apr. 30, 1889.

Fig. 2.

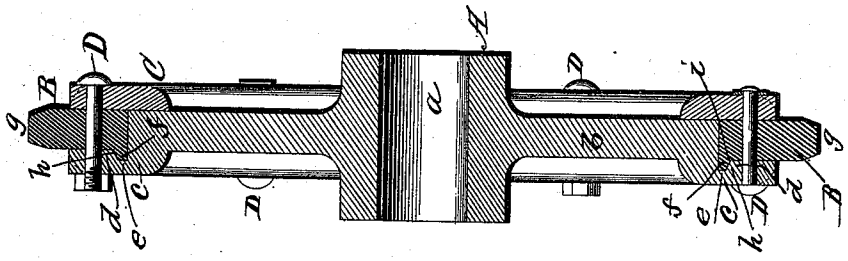
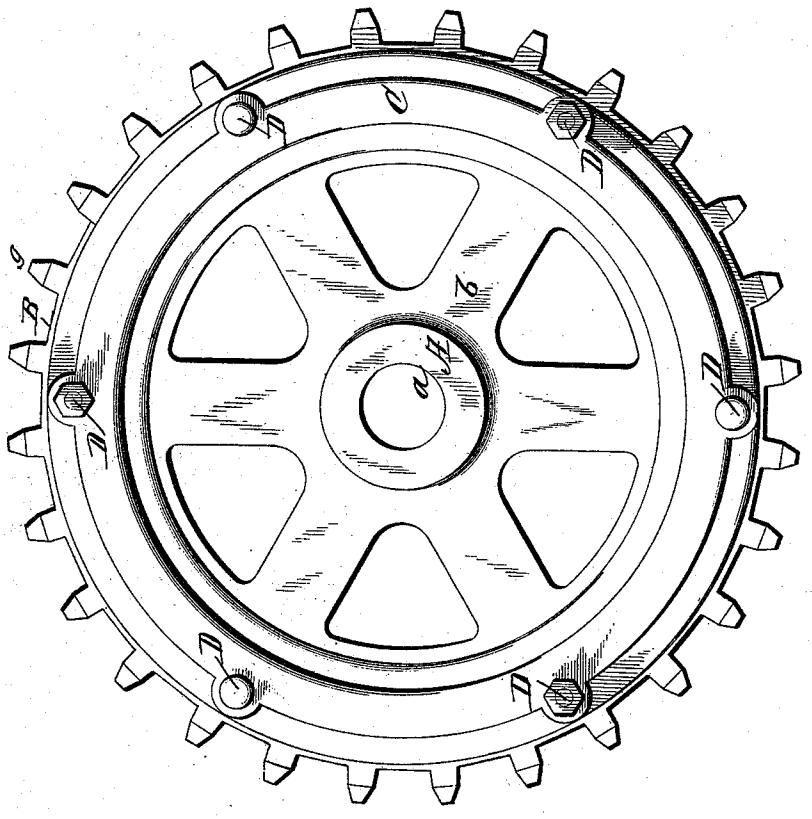


Fig. 1.



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UNITED STATES PATENT OFFICE.

JOHN R. HERSH AND JAMES M. STALEY, OF DAYTON, OHIO.

SPROCKET-WHEEL.

SPECIFICATION forming part of Letters Patent No. 402,448, dated April 30, 1889.

Application filed February 12, 1889. Serial No. 299,605. (No model.)

To all whom it may concern:

Be it known that we, JOHN R. HERSH and JAMES M. STALEY, citizens of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Sprocket-Wheels; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

This invention relates to certain new and useful improvements in sprocket-wheels, and has for its object to provide a wheel of this character in which the teeth are removably secured to the other parts of the wheel in such a manner that the teeth may be readily removed and replaced by new ones when they become worn or broken; and the novelty in the present instance resides in the peculiarities of construction and the combinations, arrangement, and adaptation of parts, all as more fully hereinafter described, shown in the drawings, and then particularly pointed out in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a plan view of a sprocket-wheel embodying our invention. Fig. 2 is a central section through the same.

Referring now to the details of the drawings by letter, A designates a hub of suitable size and provided with a central opening, *a*, to receive the shaft. From this hub extend the spokes *b*, terminating at the outer ends in the rim *c*, which is formed with the shoulder *d* and an inwardly-extending annular recess, *e*, adapted to receive the toe or lug *f* of the ring B, which is provided with the teeth *g*, the inner edge of said ring resting on and bearing against the outer face of the rim and against the shoulder *d*, as shown clearly in Fig. 2.

C is a detachable ring corresponding in shape to the rim *c*, and is secured in place by the bolts or rivets or other analogous fastenings, D, which extend through said ring, the ring B, and the rim *c*. The ring C bears against the side of the ring B and also against the side of the rim, and when drawn tight by the bolts or rivets securely holds the ring B in place and forces the toe of the ring B into the recess in the rim *c* of the web, and the said toe thus serves to hold the ring B against displacement. The said recess has an inclined side, *h*, and the toe an inclined side, as shown at *i*, in order to enable the parts to readily assume the desired position as they are drawn together.

It will be seen that a wheel constructed as above described can be readily made up of the parts forming the same, and should the teeth become worn or any of them be broken a new ring can be easily and quickly put in place of the broken one.

What we claim as new is—

1. The combination, with the hub and its rim formed with shoulder *d* and recess *e*, of the ring B, formed with a toe, *f*, the retaining-ring, and the securing-bolts, substantially as described.

2. The combination, with the hub and its rim formed with shoulder *d* and recess *e*, provided with inclined side, of the ring provided with teeth and with a toe having an inclined side, the retaining-ring bearing against the toothed ring and the side of the rim, and the bolts or rivets passed through the retaining-ring, the ring, and the rim of the hub, substantially as shown and described.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

JOHN R. HERSH.
JAMES M. STALEY.

Witnesses:
S. RUFUS JONES,
CHAS. A. WALTMIRE.