(No Model.)

C. S. KNIGHT.

LOOM GEAR.

No. 259,554. Patented June 13, 1882.

Fig. 1.

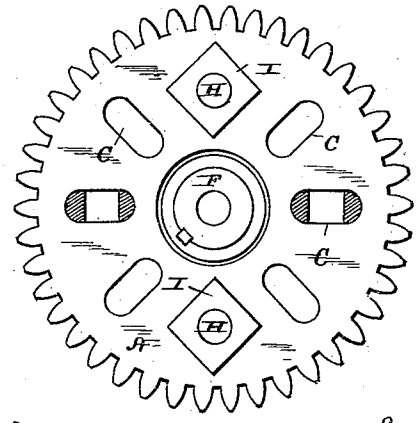


Fig. 2.

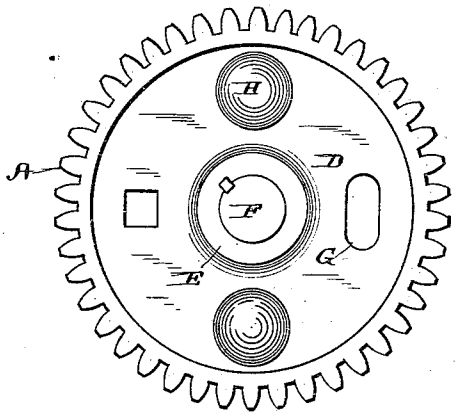


Fig. 3.

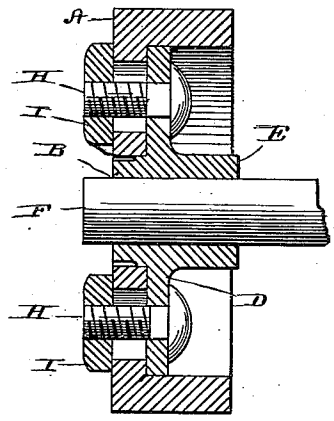
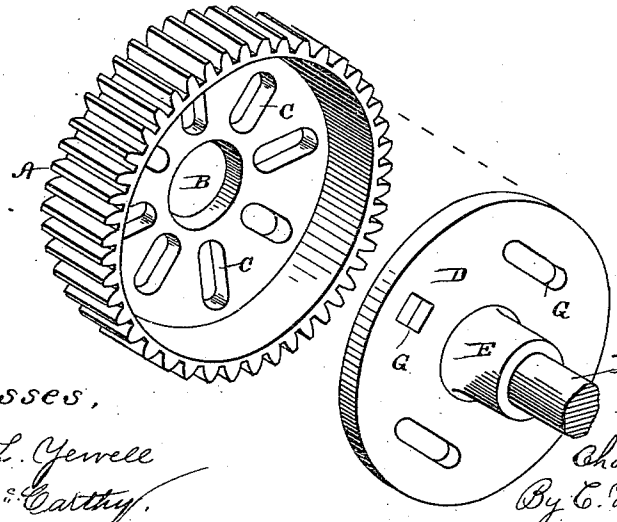


Fig. 4.



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UNITED STATES PATENT OFFICE.

CHARLES S. KNIGHT, OF SELMA, ALABAMA.

LOOM-GEAR.

SPECIFICATION forming part of Letters Patent No. 259,554, dated June 13, 1882.

Application filed May 1, 1882. (No model.)

To all whom it may concern:

Be it known that I, CHARLES S. KNIGHT, of Selma, in the county of Dallas, and in the State of Alabama, have invented certain new and useful Improvements in Loom-Gears; and I 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.

This invention relates to certain improvements in gear-wheels, and it is specially designed to provide an improved crank-shaft gear for looms; and it has for its objects to equalize the wear upon the teeth of the wheel and to provide for readily replacing a broken gear, as more fully hereinafter specified.

It is a well-known fact that most of the wear upon the teeth of the crank-shaft gear in looms is at the point of contact with the comb-shaft gear at the time the loom makes its "pick." When the few teeth at this point are worn the gear has to be taken from the shaft, re-key-seated, and fitted on in a new position, which consumes much time and incurs great expense, as the gear is often broken in removing it.

By my invention the above-enumerated objections are obviated, and when the teeth are worn at one point the wheel may be readjusted without removing it from the shaft, and when required the gear may be removed and replaced, as will more fully hereinafter appear.

In the drawings, Figure 1 represents an elevation, showing one side of my improved gear; Fig. 2, a similar view of the opposite side; Fig. 3, a diametrical section of the gear; and Fig. 4, a perspective view, showing the parts detached.

The letter A indicates a wheel recessed at one side and provided with cogs on its periphery. The said wheel is also formed with a central aperture, B, and a series of radial slots, C, for the purpose hereinafter described. The letter D designates a disk provided with a hub, E, which is bored in order that it may be fitted upon the crank-shaft, (indicated by the letter F.) The said disk is adapted to fit within the recess in the cog-wheel, one end of the hub fitting within the central opening of the wheel. The disk is provided with slots or openings G, which may be brought opposite the openings in the cog-wheel, so as to permit the insertion of the bolts H through said slots in order to fasten the two parts of the gear together, the bolts being provided with nuts I for the purpose.

As thus constructed it will be perceived that when the cogs become worn at one point, by removing the bolts, the part A may be shifted upon the part D and the parts again secured by the bolts without removing the gear from the shaft. When worn it is evident that the part A may be readily and easily removed and replaced.

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

In combination with the wheel A, provided with cogs on its periphery, recessed on one side, and having a central and a series of radial openings, the disk D, adapted to fit in the recess of the wheel A, having a hub, E, and apertures G, and adapted to be secured to the wheel by means of screw-bolts, substantially as specified.

In testimony whereof I affix my signature, in presence of two witnesses, this 8th day of April, 1882.

CHARLES S. KNIGHT.

Witnesses:
W. P. PARRISH,
E. S. HOBBS.