

(No Model.)

2 Sheets—Sheet 1.

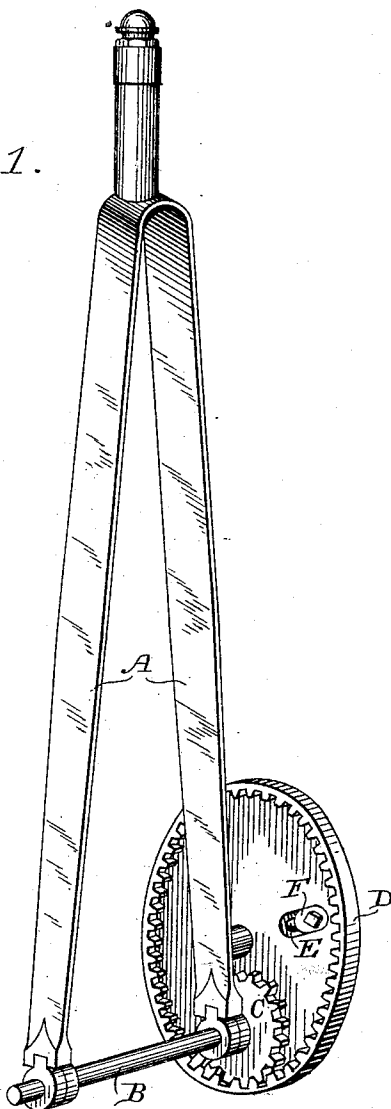
C. A. PRESCOTT.

BICYCLE.

No. 341,389.

Patented May 4, 1886.

Fig. 1.



Witnesses
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(No Model.)

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2 Sheets—Sheet 2.

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Fig. 2.

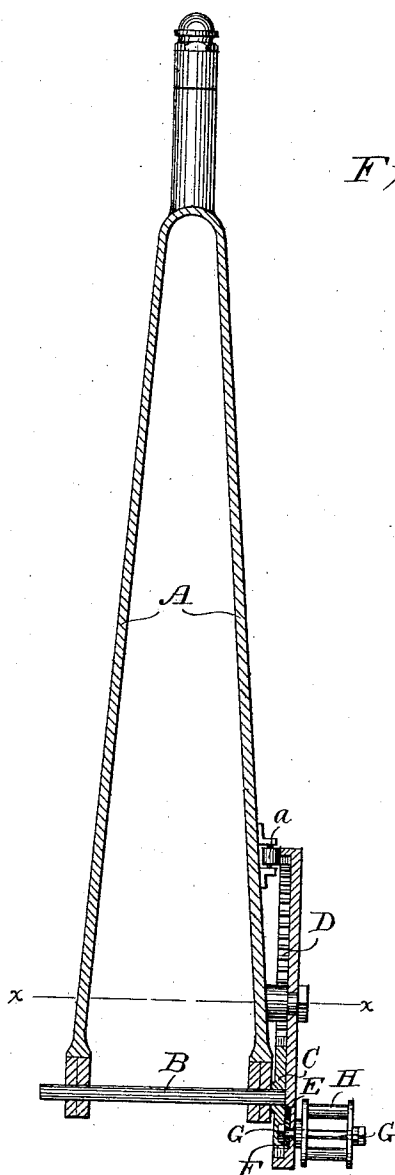
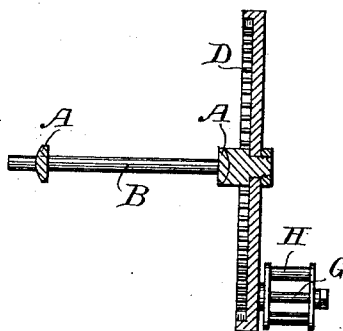


Fig. 3.



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UNITED STATES PATENT OFFICE.

CHARLES AUSTEN PRESCOTT, OF COBOURG, ONTARIO, CANADA.

BICYCLE.

SPECIFICATION forming part of Letters Patent No. 341,389, dated May 4, 1886.

Application filed January 23, 1886. Serial No. 189,497. (No model.)

To all whom it may concern:

Be it known that I, CHARLES AUSTEN PRESCOTT, a subject of the Queen of Great Britain, residing at Cobourg, in the Province of Ontario and Dominion of Canada, have invented certain new and useful Improvements in Bicycles; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to bicycles, the object being to provide improved gearing for imparting increased speed to the large wheel with but a minimum expenditure of power and revolutions of the pedals.

A further object of the invention is to provide gearing of the character mentioned which shall be simple in its construction, strong and durable, cheap, and readily and easily applied.

With these ends in view the invention consists in the improved construction and combinations of parts hereinafter fully described, and pointed out in the claims.

In the drawings, Figure 1 is a perspective view of the fork of a bicycle, showing my improved gearing applied to one end of the driving shaft or axle. Fig. 2 is a vertical section, and Fig. 3 is a transverse section.

Corresponding parts in the several figures are denoted by the same letters of reference.

Referring to the drawings, A represents the fork, and B the axle, having bearing therein. Upon one end of the axle, outside the fork, is mounted a pinion or spur-wheel, C.

D represents an internal gear-wheel, which is journaled on a stub-shaft which projects from the fork A. It will be obvious that if desired said internal gear-wheel might be journaled at a point below the spur-wheel, in which case the machine would be of the pattern known as a "safety-bicycle."

Anti-friction rollers *a* are journaled in the sides of the fork at a point above and below the axle, so that the face of the wheel adjacent to the edge thereof will bear against said rollers and prevent undue friction.

A slot, E, is made in the internal gear-wheel near the edge thereof, and adjustably secured in said slot is a block, F, from which projects a pedal-axle, G, carrying a pedal, H, said pedal being raised and lowered, as desired, by adjusting the block in the slot.

It will be understood that in use a spur-wheel and internal gear-wheel will be located on each side of the fork. In the present case they are shown as applied to only one end of the axle.

By the use of my improvement increased speed is attained with but a minimum expenditure of power, and with but few revolutions of the large wheel to those of the spur-wheel on the axle.

My improvements are simple in their construction, may be manufactured and supplied at a slight cost, are effective in their operation, and may be applied to bicycles now in use with but slight changes.

I do not limit myself to the exact construction shown and described, but reserve to myself the right to make all such slight changes and alterations in the details of construction as may properly fall within the scope of my invention.

Having thus described my invention, I claim—

1. The combination, with the main axle of a bicycle, of a spur-wheel, an internal gear-wheel, anti-friction rolls, and an adjustable pedal carried by the latter, as set forth.

2. The combination, with a bicycle, of a spur-wheel mounted on the main axle thereof, an internal gear-wheel, and anti-friction rolls journaled to the fork and bearing against the inner edge of wheel D, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES AUSTEN PRESCOTT.

Witnesses:

JOHN HENRY DUMBLE,
JOHN CARSON.