

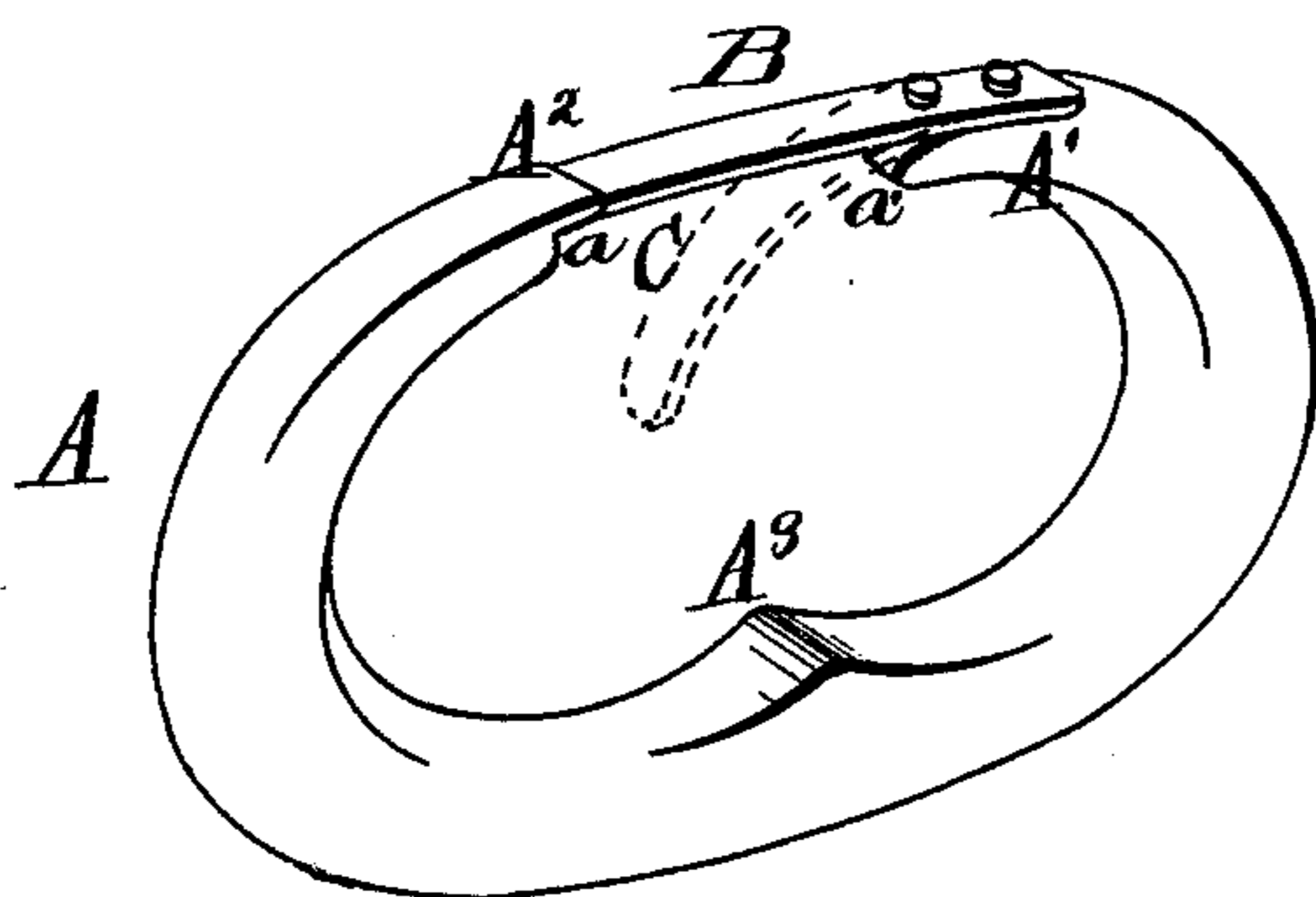
W. W. CAMPBELL.

SPRING-LINK.

No. 188,101.

Patented March 6, 1877.

*Fig. 1.*



WITNESSES

*Robert Everett*  
*George E. Upham.*

INVENTOR.

*William W. Campbell.*  
*Gilmore, Smith & Co.*

ATTORNEYS

# UNITED STATES PATENT OFFICE.

WILLIAM W. CAMPBELL, OF FRANKFORT, INDIANA.

## IMPROVEMENT IN SPRING-LINKS.

Specification forming part of Letters Patent No. **188,101**, dated March 6, 1877; application filed December 9, 1876.

*To all whom it may concern:*

Be it known that I, WILLIAM W. CAMPBELL, of Frankfort, in the county of Clinton and State of Indiana, have invented a new and valuable Improvement in Spring-Links; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing, making a part of this specification, and to the letters and figures of reference marked thereon.

The figure of the drawing is a perspective view of my spring-link.

This invention has for its object to facilitate the attachment and detachment of links in a chain or similar connection; and it consists in the novel construction of a link, as will be hereinafter fully set forth.

The annexed drawing shows one of my links, A, which may be of any desired size, and which is constructed so as to leave a gap or opening, C, on one side, said gap being filled ordinarily by a flat spring, B. On one side of said gap the outer periphery of said link is curved slightly inward at A<sup>1</sup>, where the fixed end of spring B is attached. On the opposite side of said gap the inner side of said link is recessed at a, so as to leave a tongue, A<sup>2</sup>, against the inside of which the free end of spring B rests. To admit another link, rod, loop, or their equivalent, spring B is bent into the shape indicated by dotted lines, leaving an entrance for such admission. The construction of link A above described leaves a shoulder, a<sup>1</sup>, on one side of the space covered by spring B, and another shoulder, a<sup>2</sup>, on the

opposite side of said space, both of said shoulders being on the inside of said link. Their function is to partly protect the said spring B from injury without interfering with its operation. Opposite to said spring, on the inside of said loop, is an enlargement or bulge, A<sup>3</sup>, which is also designed to protect the said spring B from being injured by links, rings, or rods received into said link A.

The curved part A<sup>1</sup> of said link furnishes a smooth rolling fulcrum for spring B, and thereby preserves it from being unnecessarily worn in bending inward to admit a link or its equivalent.

I am aware of the snap-hooks shown in the patents of A. Hagney, dated June 19, 1866, and S. Reynolds, dated March 3, 1874, and do not claim such inventions, as such snap-hooks are impracticable for the attachment of links in a chain; but

What I claim as new, and desire to secure by Letters Patent, is—

As an improved article of manufacture, the link A, having enlargement A<sup>3</sup>, opening C, and flat spring B opening inward, fastened at one end of the link, and closing the said opening, its free end, when closed, resting in a recess, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM W. CAMPBELL.

Witnesses:

JAMES E. COWAN,  
JAMES McCARTER.