C. J. E. THOMPSON.
ADJUSTABLE-LINKS.

No. 193,295. Patented July 17, 1877.

Fig. 1.

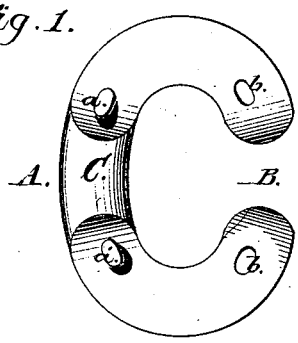


Fig. 2.

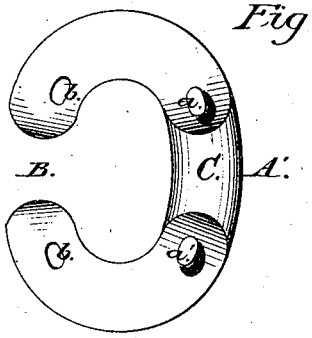


Fig. 3.

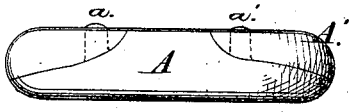
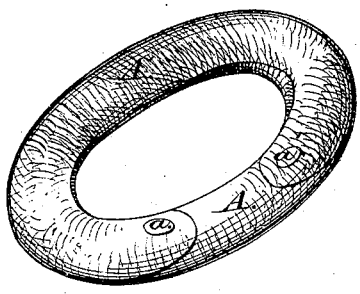


Fig. 4.

Fig. 5.



Witnesses:
[illegible]
Louis Bagger.

Inventor:
Charles J. E. Thompson.
By Parker & Sweet Jr. & Co.
Attys.

UNITED STATES PATENT OFFICE.

CHARLES J. E. THOMPSON, OF PROVIDENCE, RHODE ISLAND.

IMPROVEMENT IN ADJUSTABLE LINKS.

Specification forming part of Letters Patent No. **193,295**, dated July 17, 1877; application filed July 5, 1877.

To all whom it may concern:

Be it known that I, CHARLES J. E. THOMPSON, of Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Adjustable Links; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to adjustable links for connecting broken chains, for repairing and making chains of any length, and for other similar purposes; and is designed as an improvement upon the adjustable link for which Letters Patent of the United States were granted to me under date of August 5, 1862, and numbered 36,118, in which the link is formed similar to splitting an ordinary link longitudinally and also centrally through its sides, thus forming two parts, each being provided with a raised central portion or lug, and two smaller lugs and two recesses at or near the ends, which are adapted to fit into corresponding parts when the two portions are fitted together to form the complete adjustable link.

It has been found in practical use and experiment that the above-described construction has certain defects which it is the object of the present improvement to obviate. In the first place the complete link, being formed of two equal halves, cut longitudinally, and provided with central lugs having straight faces at right angles to the split surfaces, presents the defect of causing an unequal distribution of the wear and strain consequent upon the sharp angles in its construction; and this defect is further increased by sinking the slots in each separate part to receive the lugs of its corresponding part, thereby tending to weaken the link, and to cause breaks and flaws in the metal at those points.

In the construction of my present improvements the two parts forming the complete link are so formed and adapted to operate in relation to each other as to thoroughly equalize and distribute the strain throughout the whole link, and also to provide ready means for permanently attaching the link to broken chains, &c., all as will be hereinafter more fully described and pointed out in the claim.

Referring to the drawings, Figures 1 and 2 are perspective views of the two parts forming my improved link. Fig. 3 is a side view of the completed link. Fig. 4 is a view of the rear of one of the parts, and Fig. 5 is a perspective view of the complete link.

Similar letters of reference occurring on the several figures indicate like parts.

The two parts A A′ of my improved link are made separately, but are constructed similar in shape to that of cutting the ends of an ordinary oval link in a spiral direction, thus forming two equal parts, each part having a portion of the circumference of the link at the center left whole at one side, as shown at C, while at the opposite side an opening, B, is provided, the metal at that point being thinned to an edge, as fully shown in Figs. 1 and 2 of the drawings. The two parts thus formed are provided near the larger central portion with two lugs, *a a′*, while openings *b b* are provided in the thinned edges of the opposite open side B, so that when the two parts A A′ of the complete link are placed or fitted together, the lugs *a a′* project through the openings *b b*, as shown in Fig. 3, thus holding the two parts together and protecting the complete link from all longitudinal strain or pull to which it may be subjected.

By means of my present construction I am enabled to produce an adjustable link possessing great strength, and one which equalizes and distributes the strain consequent upon its use throughout the entire link, the two parts of which, being of an equal size and snugly fitted together, form a compact and efficient connection for the purposes intended. When desired to be used as a permanent connection, the lugs *a a′* can be riveted down upon the link, but when desired to be used temporarily, the lugs can be left without riveting, the two parts A A′ being held together by their connection with the ordinary link or staple.

Having thus described my invention, I claim as new and useful—

As an improved article of manufacture, the

hereinbefore-described adjustable link, consisting of the two equal parts A A′, each having the metal cut away in a spiral direction, as shown, leaving a central portion, C, of the full size of the metal at one side, and an opening, B, with thinned edges at the opposite side, and provided with lugs *a a′* and openings *b b*, the two parts being adapted to fit together to form an entire link, substantially as and for the purpose specified.

In testimony that I claim the foregoing as my own invention I affix my signature in presence of two witnesses.

CHARLES J. E. THOMPSON.

Witnesses:
PARKER H. SWEET, Jr.,
W. B. ACKER.