

(No Model.)

F. F. ELLIS.
SWIVEL.

No. 422,194.

Patented Feb. 25, 1890.

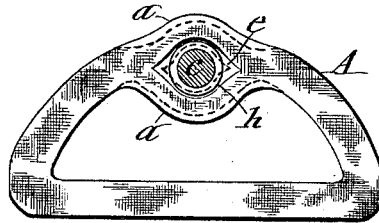


Fig. 1

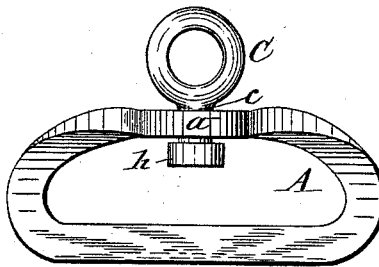


Fig. 2

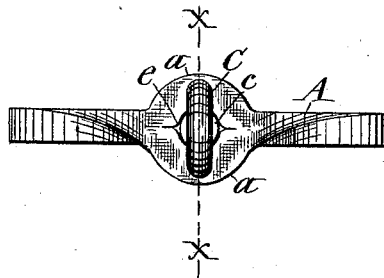


Fig. 3

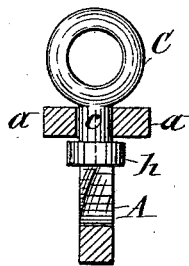


Fig. 4

WITNESSES:

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UNITED STATES PATENT OFFICE.

FERRAND F. ELLIS, OF ONEIDA, ASSIGNOR TO THE ONEIDA COMMUNITY,
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SWIVEL.

SPECIFICATION forming part of Letters Patent No. 422,194, dated February 25, 1890.

Application filed October 17, 1889. Serial No. 327,316. (No model.)

To all whom it may concern:

Be it known that I, FERRAND F. ELLIS, of Oneida, in the county of Madison, in the State of New York, have invented new and useful
5 Improvements in Swivels, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

10 This invention consists in a novel construction of a swivel-link or eyed member of a swivel and the connection of said member with the headed member of the swivel, as hereinafter fully described, and set forth in the claim.

15 The invention is fully illustrated in the annexed drawings, in which—

Figure 1 is a plan view of a blank from which the eyed member of the swivel is formed, and showing also the method of connecting
20 the headed member thereto. Fig. 2 is a side view of a swivel embodying my invention. Fig. 3 is a top view of the same; and Fig. 4 is a transverse section on line *x x*, Fig. 3.

25 Similar letters of reference indicate corresponding parts.

A represents the eyed member of the swivel, which member is usually of the form of a link or loop by which to connect it to one of the two parts to be swiveled to each other.
30 This eyed member or link I form of a plate stamped out of sheet metal, in which I punch an opening at or near the center of the plate, so as to completely surround said opening by the marginal portion of the plate, as shown
35 in Fig. 1 of the drawings. The main portion of this plate I preferably maintain with its flat sides in one uniform plane, and the portion *a* of the marginal portion of the plate is

enlarged in width and perforated at its center, as shown at *e*, and is turned with its flat
40 sides at right angles to the plane of the main portion of the plate, as shown in Figs. 2, 3, and 4 of the drawings. The eye or perforation *e* is of a size to receive through it the head *h* of the member C, which is to be swiveled to the link A. The two members C and A
45 are coupled to each other by passing the head *h* through the eye *e* until the neck *c* is brought into said eye and then compressing the enlarged portion *a* laterally, so as to contract
50 the eye *e* and cause the same to embrace the neck *c* in such a manner as to allow said neck to turn in the eye and at the same time prevent the head *h* from being withdrawn through
55 said eye. The axis of the swivel is thus brought into a position central of and parallel with the planes of the sides of the link.

Having described my invention, what I claim as new, and desire to secure by Letters
60 Patent, is—

A swivel-link consisting of a plate of sheet metal the main portion of which is maintained with its flat sides in one uniform plane and formed with a central aperture, and a portion of said plate standing with its flat sides
65 at right angles to the plane of the aforesaid main portion and joined thereto by twists of the plate and perforated in its center, substantially as described and shown.

In testimony whereof I have hereunto
70 signed my name this 5th day of October, 1889.

FERRAND F. ELLIS. [L. s.]

Witnesses:

C. CARSKADDAN,
F. WAYLAND-SMITH.