(No Model.)

M. MAUTHNER.

CHAIN SWIVEL.

No. 302,509. Patented July 22, 1884.

Fig. 1.

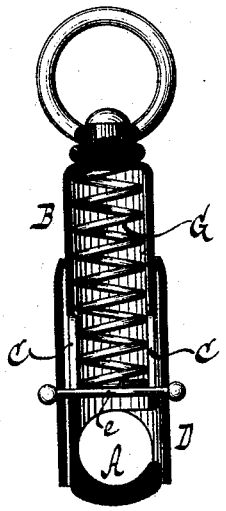


Fig. 3.

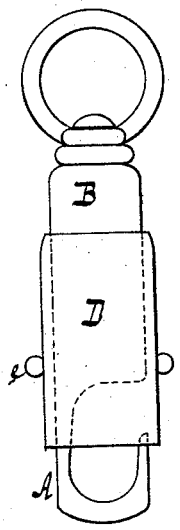


Fig. 2.

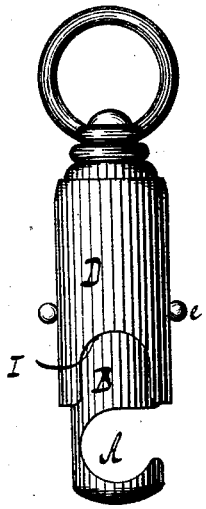
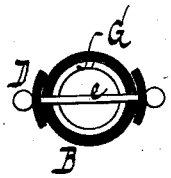


Fig. 4.



WITNESSES:

Otto Hufeland

Wm. Miller

INVENTOR

Max Mauthner

BY Van Santvoord & Hauff

ATTORNEYS

UNITED STATES PATENT OFFICE.

MAX MAUTHNER, OF VIENNA, AUSTRIA-HUNGARY, ASSIGNOR TO DAVIDSON BROTHERS, OF NEW YORK, N. Y.

CHAIN-SWIVEL.

SPECIFICATION forming part of Letters Patent No. 302,509, dated July 22, 1884.

Application filed May 29, 1884. (No model.)

To all whom it may concern:

Be it known that I, MAX MAUTHNER, of Vienna, Austria-Hungary, a citizen of Austria-Hungary, at present residing at New York, in the county and State of New York, have invented new and useful Improvements in Chain-Swivels, of which the following is a specification.

This invention relates to swivels for attachment to watch and other chains; and it consists in the novel features of construction hereinafter described, whereby an article of superior utility is obtained.

In the accompanying drawings, Figure 1 is a longitudinal section of a swivel embodying my invention as it appears in use. Fig. 2 is a side view showing the parts in position to connect the article with the ring of a watch. Fig. 3 shows a modification. Fig. 4 shows another modification.

Similar letters indicate corresponding parts.

The letter A designates a hook adapted to receive the ring of a watch or other article, and constructed with a hollow shank, B, which is plain on the outer surface, and in which are formed two longitudinal slots, C, one opposite to the other. On this hook-shank B is arranged a sliding shutter, D, the purpose of which is to cover the mouth of the hook, as shown in Fig. 1, thereby holding in position the ring to which the hook may be connected, and in the example shown this shutter consists of a tube having a cross-bar, *e*, which passes through the slots C of the hook-shank, thereby guiding the tube on the shank, and also regulating its motion by contact with the ends of the slots.

Within the hook-shank B is arranged a spiral spring, G, which acts on the cross-bar *e* of the tube with a tendency to force the latter in the direction of the end of the hook, thereby holding it in the position shown in Fig. 1, which is its closed position, the spring at the same time allowing the tube to be displaced, as shown in Fig. 2, for exposing the mouth of the hook.

In the example shown in Figs. 1 and 2, the tube composing the shutter D extends approximately to the outer end of the hook when in a closed position; and it is constructed with two notches, I, one opposite to the other, which coincide with the hook when the tube is in a closed position, leaving the hook open in lateral directions. This construction improves the appearance of the swivel, but, if desirable, the bight of the hook may be enlarged, and the tube arranged to meet or slightly overlap the hook-point, as shown in Fig. 3, which is a side view of the swivel, in which case the notches may be omitted. The shutter D, moreover, may be composed of segments, instead of a tube, as shown in Fig. 4, which is a cross-section of the swivel, one segment serving to cover the mouth of the hook and one of the slots C, while the other segment simply serves to cover the other slot; or any other suitable form of a sliding shutter may be used.

It is evident that the hook-shank B and tube D may be made round, square, or of any other desired shape in cross-section.

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

1. The combination, substantially as hereinbefore described, of the hook having the transversely-slotted shank, the shutter, arranged to slide on the hollow shank, and having a transverse bar engaging the slotted portion thereof, and a spring arranged within the hollow hook-shank and acting on the transverse bar.

2. The combination, substantially as hereinbefore described, of the hook having a plain hollow shank provided with longitudinal slots, the tube composing the shutter arranged on the hook-shank to cover the mouth of the hook, the cross-bar of the sliding tube passing through the slots of the hook-shank, and the spiral spring arranged within the hook-shank, to act on the cross-bar for retaining the tube in a closed position.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

MAX MAUTHNER. [L. S.]

Witnesses:
W. HAUFF,
CHAS. WAHLERS.