K. VÖLLER.

LIMBER HOOK.

APPLICATION FILED JUNE 30, 1914.

1,119,667. Patented Dec. 1, 1914.

*Fig. 1.*

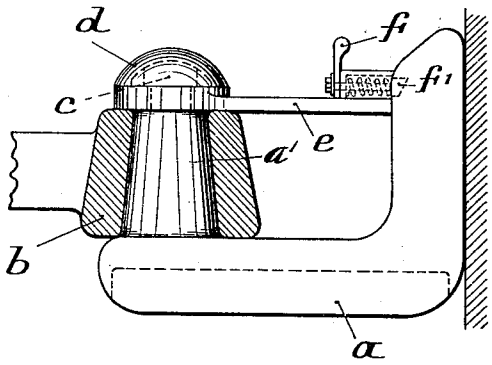



*Fig. 2.*

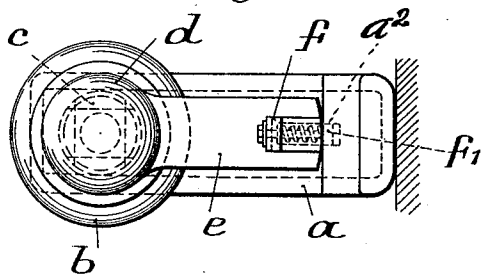



*Fig. 3.*

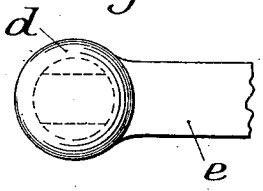
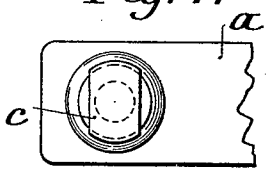



*Fig. 4.*




WITNESSES

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# UNITED STATES PATENT OFFICE.

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## LIMBER-HOOK.

1,119,667. Specification of Letters Patent. Patented Dec. 1, 1914.

Application filed June 30, 1914. Serial No. 848,277.

*To all whom it may concern:*

Be it known that I, KARL VÖLLER, engineer, a subject of the German Emperor, residing at 12 Scharnhorststrasse, Dusseldorf, Germany, have invented certain new and useful Improvements in Limber-Hooks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention is a lock for a limber hook having a tightly fitting eye which lock can be rapidly closed and opened and also greatly minimizes the risk of any unintentional breaking apart or release of the hook and eye.

According to the invention the part of the hook projecting above the eye is connected to a cap employed for preventing the eye from coming off the hook, by means of a bayonet joint. The cap, after it has been applied to the hook above the eye is locked in position on the hook end by simply turning the cap relatively to that part of the hook projection above the eye. In order further to prevent an unintentional opening of the lock, the cap is provided with a lever like projection, which carries a catch. This catch in a certain position prevents a rotation of the cap and therefore a release of the lock.

The invention is illustrated in the accompanying drawing.

Figure 1 is a view in side elevation, the eye being in section. Fig. 2 is a top plan view. Fig. 3 is a plan view of a portion of the locking cap. Fig. 4 is a similar view of the limber hook.

*a* is the limber hook usually spring mounted on one of the vehicles to be connected together, which hook is adapted to engage with the eye *b* on the other vehicle. In order that the engagement of the two parts may be easily effected the engaging part *a'* of the hook is made conical while the eye is of a size to fit it closely. The hook has a part projecting above the eye on the head *c* of which a cap *d* can be fitted whereby the eye is prevented from being lifted off the hook. The connection between the head *c* and the cap *d* is made by means of a bayonet joint.

Fig. 4 shows the construction of the hook and Fig. 3 the construction of the cap. After the cap has been placed on the head it is rotated through 90° so that the projections of the cap pass under the projections on the head, as indicated in Fig. 2.

In order to facilitate the operation of rotating the cap into the locked position, it is provided with an arm *e* which can be held by the hand. In order to prevent an unintentional rotation of the cap when closed the arm *e* is provided with a spring locking pin *f'* which in this position snaps into a notch $a^2$ in the hook but can be released from this position by means of the finger *f*.

I claim as my invention:

1. In a device of the character described, a limber hook having a lateral projection, and a cap designed to interlock with said projection for retaining a coupling eye on said hook.

2. In a device of the character described, a limber hook having a lateral projection, and a cap for retaining a coupling eye on said hook, said cap having a projection thereon for interlocking with the projection on said hook.

3. In a device of the character described, a limber hook having a lateral projection, a rotatable cap for retaining a coupling eye on said hook, said cap having a projection thereon for interlocking with the projection of said hook, and means carried by said cap for locking it as against rotation.

4. In a device of the character described, a limber hook having a lateral projection, a rotatable cap for retaining a coupling eye on said hook, a projection on said cap for interlocking with the projection of said hook, a handle for said cap, and spring-pressed locking means carried by said handle for locking said cap against rotation.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

KARL VÖLLER.

Witnesses:

AUGUST FUGGER,

ADA MARIA BERGER.

**Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."**