No. 831,803. PATENTED SEPT. 25, 1906.

F. SCHINDEWOLF.

SPRING FASTENING.

APPLICATION FILED JAN. 11, 1906.

Fig. 1.

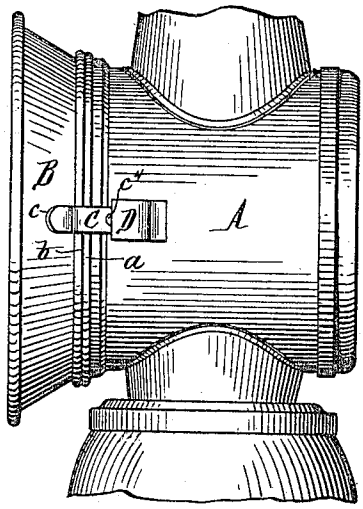


Fig. 2.

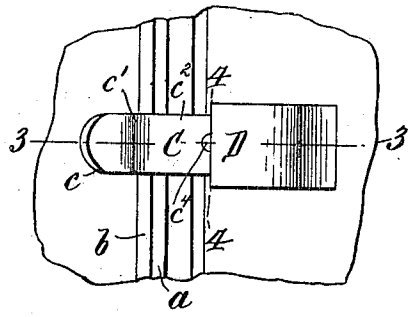


Fig. 3.

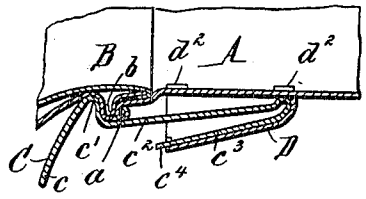


Fig. 4.

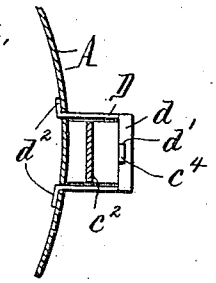


Fig. 5.

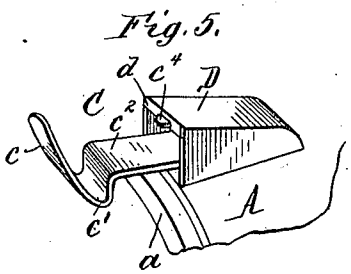


Fig. 6.

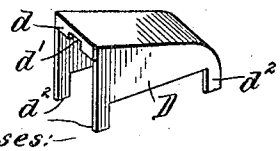
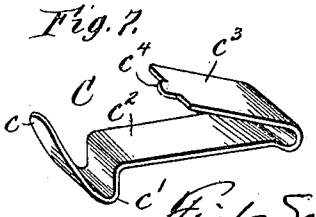


Fig. 7.



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SPRING-FASTENING.

No. 831,803. Specification of Letters Patent. Patented Sept. 25, 1906.

Application filed January 11, 1906. Serial No. 295,517.

To all whom it may concern:

Be it known that I, FRITZ SCHINDEWOLF, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented a new and useful Improvement in Spring-Fastenings, of which the following is a specification.

This invention relates to a spring catch or fastening which is more particularly designed for use on vehicle-lamps and other lamps or lanterns for releasably attaching a front glass frame or other movable part to the body of the lamp or lantern. This catch comprises a holding or locking spring which engages with its head the rim of the glass frame or other movable part and which is secured in a socket on the lamp-body.

The object of the invention is to construct the spring and socket in such manner that the spring can be securely attached to the socket in a very simple and efficient manner and so as to be readily removable from the socket.

In the accompanying drawings, Figure 1 is a fragmentary side elevation of a vehicle-lamp provided with my improved spring-catch. Fig. 2 is a side elevation of my improved spring-catch on an enlarged scale. Fig. 3 is a horizontal section in line 3 3, Fig. 2. Fig. 4 is a vertical section in line 4 4, Fig. 2. Fig. 5 is a perspective view of the spring-catch. Fig. 6 is a detached perspective view of the socket. Fig. 7 is a detached perspective view of the spring.

Like letters of reference refer to like parts in the several figures.

A represents the body of a vehicle-lamp, and B the front glass-frame thereof, which is movably attached to the body on one side by the usual hinge and the other side by the spring-catch. The circular front opening of the body, to which the glass-frame B is applied, is provided with the usual annular beaded rim *a*, and the rear edge of the glass-frame, which fits into and against this rim, is provided with the usual annular bead or shoulder *b*.

The spring-catch comprises the holding or locking spring C and the attaching-socket D, which latter is secured to the lamp-body near the front rim *a* and in which the spring is detachably secured.

The locking-spring has a locking-head *c*, which engages with its shoulder *c'* over the rim *b* of the glass-frame or other movable part and which serves as a thumb-piece for releasing the head from the glass-frame. The spring is made of a flat bar or plate which is doubled upon itself, forming a long arm or body c^2, which carries the locking-head *c*, and a short arm c^3, by which the spring is secured in the socket. This attaching-arm c^3 engages against the rear side of a stop flange or shoulder *d*, formed at the open front end of the socket, whereby the spring is retained in the socket, and this flange is provided with a notch *d'*, through which projects a lip c^4, formed on the attaching-arm of the spring. By pressing against this lip the attaching-arm is readily released from the shoulder *d* of the socket and the spring detached from the latter.

The socket is preferably made open at the bottom, as shown, and secured to the lamp-body by feet or extensions d^2, which are passed through slits in the lamp-body and clenched against the inner side of the latter.

Both the spring and its socket are very simple in construction and can be produced at comparatively small cost. The spring is securely attached to the socket by simply inserting it into the socket and operates in all respects like a spring which is permanently secured in place. The riveting or soldering usually resorted to for securing spring-catches in place is avoided, thereby reducing the cost accordingly and also improving the appearance of the catch. If a spring should be broken or bent, so as to be unserviceable, it can readily be removed from the socket and replaced by a new spring without disturbing the socket or defacing the socket or the lamp.

While my improved spring-fastening is particularly desirable for connecting a glass-frame or other movable part to the body of a lamp or lantern, it may also be employed for connecting the movable parts of other structures.

I claim as my invention—

1. A spring-catch comprising a spring having a locking-arm provided with a locking-head for releasably engaging one of two relatively movable parts and having an attaching-arm, and an attaching-socket which is secured to the other part and with which said attaching-arm is removably interlocked; said spring being securely retained in posi-

tion for use in said socket by its attaching-arm, although removable from said socket, and said locking-arm of the spring projecting from said socket and having its head capable of movement for engagement with and disengagement from the opposing part, substantially as set forth.

2. A spring-catch comprising an attaching-socket and a locking-spring removably secured therein and having a short arm which is removably interlocked with said socket and a long arm which projects from the open end of the socket and carries a locking-head adapted to releasably engage the opposing movable part, substantially as set forth.

3. A spring-catch comprising an attaching-socket having at its open end a shoulder provided with a notch, and a locking-spring having a short arm which is removably interlocked with said shoulder and provided with a lip projecting through said notch and having a long arm which projects from the open end of said socket and carries a locking-head adapted to releasably engage the opposing movable part, substantially as set forth.

4. The combination of a lamp-body having a movable frame, an attaching-socket secured to said body and arranged with its open end toward said frame, and a locking-spring having a short arm which is removably interlocked with said socket and a long arm which projects from the open end of the socket and carries a locking-head which releasably engages said frame, substantially as set forth.

5. The combination of a lamp-body having a movable frame, an attaching-socket secured to said body and provided at its open end with a locking-shoulder having a notch, and a locking-spring having a short arm which is interlocked with said shoulder and provided with a lip projecting through said notch and having a long arm which projects from the open end of the socket and carries a locking-head which releasably engages said frame, substantially as set forth.

Witness my hand this 5th day of January, 1906.

FRITZ SCHINDEWOLF.

Witnesses:
OSCAR WARNER,
A. E. LUERSSEN.