# W. S. TAPPAN.

## Safety-Hooks or Suspenders for Ear-Rings, &c.

No. 148,390. Patented March 10, 1874.

Fig. 3.

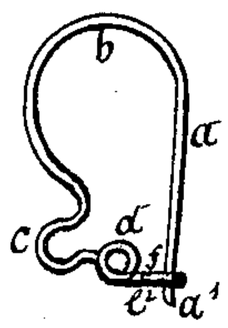



Fig. 4.

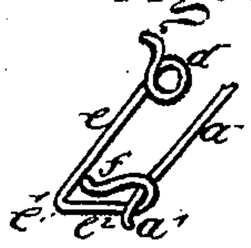



Fig. 1

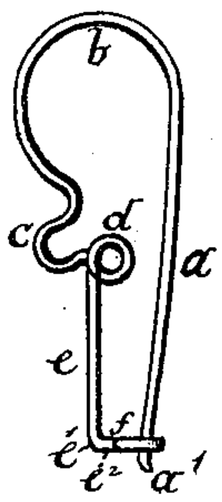
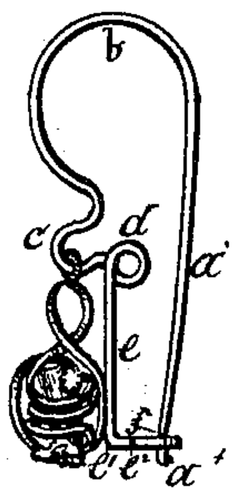



Fig. 2.




Witnesses
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# UNITED STATES PATENT OFFICE.

WILLIAM S. TAPPAN, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO LEWIS MYERS, OF KANSAS, MISSOURI.

## IMPROVEMENT IN SAFETY-HOOKS OR SUSPENDERS FOR EAR-RINGS, &c.

Specification forming part of Letters Patent No. **148,390**, dated March 10, 1874; application filed January 22, 1874.

*To all whom it may concern:*

Be it known that I, WILLIAM SWAINE TAPPAN, of the city of Washington, in the District of Columbia, have invented certain new and useful Improvements in Safety-Hooks or Suspenders for Loops, Drops, Ear-Rings, &c.; 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

Hooks or suspenders for ear-rings, loops, drops, &c., as generally constructed, offer to the wearer of that class of jewelry no protection against loss, which is of freqent occurrence. I am aware that safety-hooks have been manufactured, but they are either cumbrous and ungraceful or difficult of adjustment, while at the same time no perfect safeguard is offered to the wearer.

My invention has for its object to remedy these defects, and produce a hook or suspender for ear-rings, loops, drops, &c., at once light, graceful, and adaptable to all descriptions of jewelry of the kind referred to, and at the same time perfectly secure from becoming unlocked, and even when unlocked prevent the loss of the article suspended from it.

Figure 1 is a side elevation of my safety-hook without the ear-ring. Fig. 2 is a similar view with the ear-ring inserted. Fig. 3 is a similar view, showing the construction of the safety-hook when drops or small ear rings or loops are to be suspended from it; and Fig. 4 is a perspective view of part of the hook, showing the construction of the spring-hook *f*.

These figures are all drawn on an enlarged scale.

The hook or suspender is constructed of one piece of wire of any desirable and suitable material, and has a straight part, *a*, slightly bent at its lower extremity *a'* and forming a curve, *b*, or a loop, in such manner as to receive the lobe of the ear, and at the end of this curve *b* a loop or semicircle, *c*, is formed at right angles to such loop *b*. In this loop *c* the ear-ring is suspended, and the wire at the lower end of such loop *c* is bent round in the shape of a circle, *d*, thus preventing the ear-ring or other object suspended therein from slipping downward. From the under side of the circle or loop *d* the wire forms a straight shank or arm, *e*, bent at $e^1$ at right angles, and forming a horizontal arm, $e^2$, having a spring-hook, *f*, Fig. 4, formed thereon. This hook *f* is so constructed that the lower end of the vertical arm *a*, in order to lock it, has to be forced through the space between the point *f'* of the hook *f* and the arm $e^2$, the point *f'* of the hook *f* acting as a spring, and partially closing the aperture when the arm *a* has passed through; hence, in order to remove the arm *a* from the hook *f* it has to be forced or pressed out by hand, thus guarding effectually against the slipping out of such arm *a*.

When ear-rings, loops, drops &c., of very small size are used, the wire, instead of forming a straight shank or arm *e*, is bent at right angles immediately at or under the loop or circle *d*, as shown by Fig. 3, and the spring-hook *f* is formed on the arm $e^2$, as above explained. Thus the safety-hook has no projecting ends beyond the ear-ring, loop, or drop, however small they may be.

The operation of the device is as follows: The ear-ring, loop, or drop, &c., is slipped onto the safety-hook at *a'*; passed along *a* and *b* to the loop *c*; then the part *a* is passed through the aperture in the lobe of the ear until the curve *b* is in position to cause the ear-ring and the safety-hook to hang vertically, when the arms *a* and $e^2$ are locked by means of the spring-hook *f*, which holds the arm *a* securely locked, owing to the peculiar construction of the spring-hook *f*, as above fully explained.

Another great advantage and safeguard in my safety-hook is that the ear-ring or other object suspended from loop *c* cannot come in contact with the locked parts *a* and $e^2$, being isolated from such parts on one side by the circle *d*, on the other by the lobe of the ear; hence, should the locked portions by any means become unlocked, the object suspended from my safety-hook could not slip out.

This safety hook or suspender is adaptable to

ear-rings, loops, drops, &c., of every description of form and material, as well as any size, as the lower extremities *a* and *e* may be made of any length to suit the size of the ear-ring to be suspended from it.

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

The combination, with an ear-ring, loop, or drop, of the loops *b c d*, shank *e*, spring-shank *a*, and the spring-hook *f*, substantially as and for the purposes shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 20th day of January, 1874.

WILLIAM SWAINE TAPPAN.

Witnesses:
M. CONNOLLY,
J. H. STEWARD.