

J. PARMELEE.
Watch-Case Springs.

No. 157,291.

Patented Dec. 1, 1874.

Fig. 1.

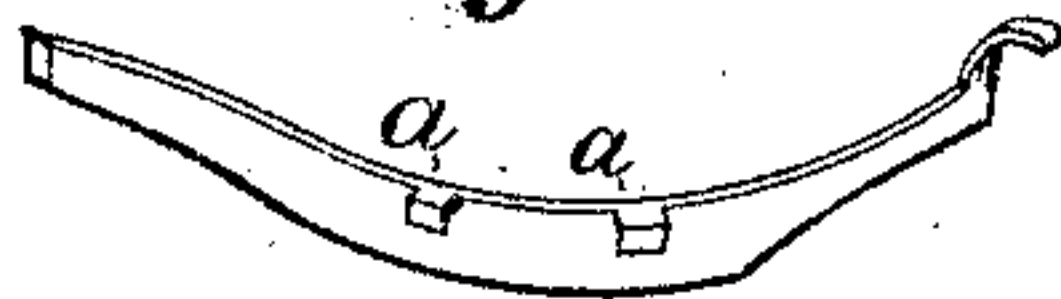


Fig. 2.

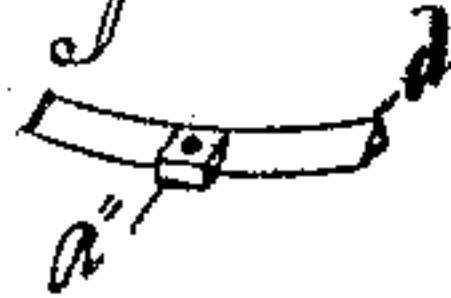
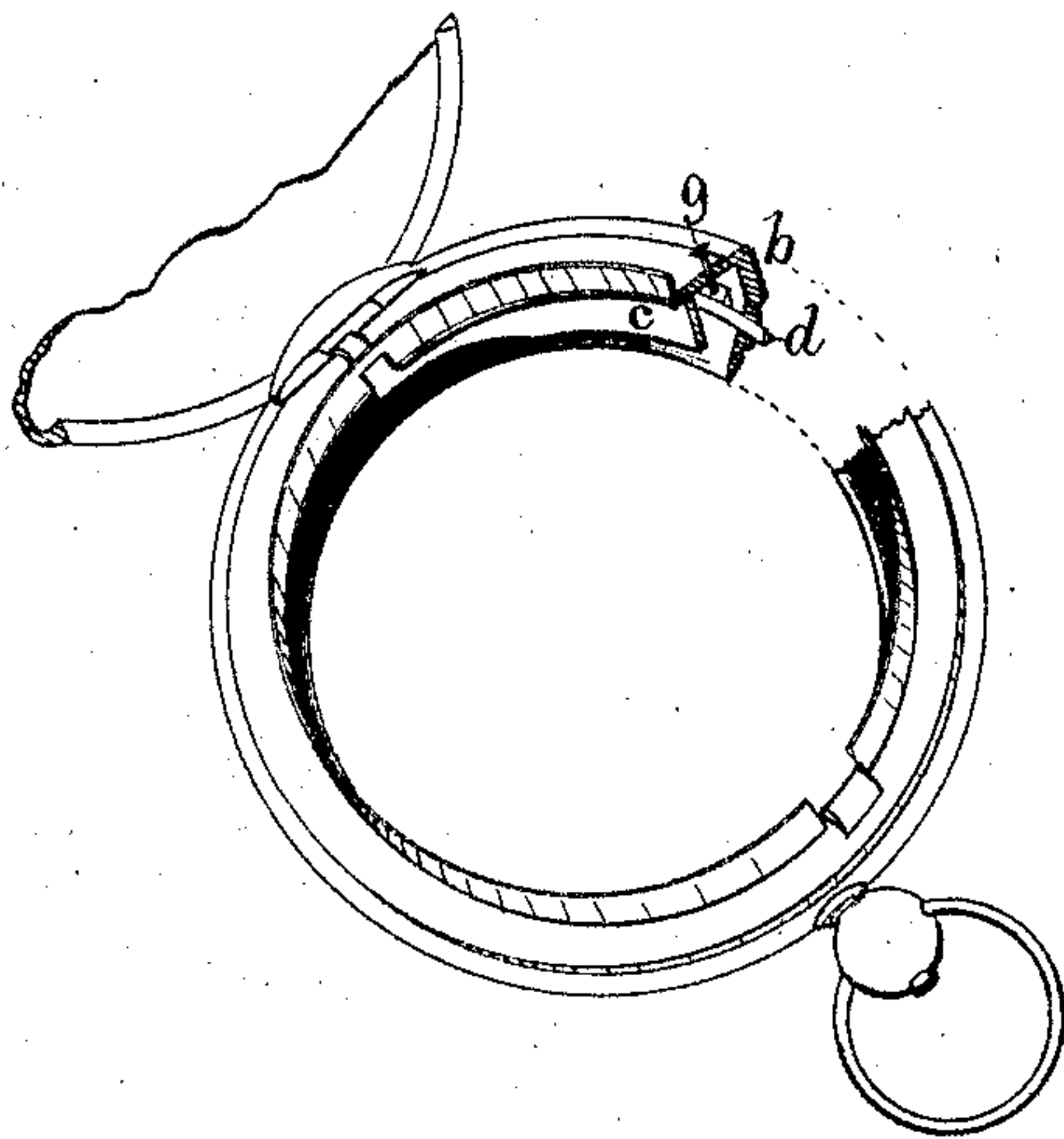


Fig. 3.



Witnesses.

N. J. Case,
G. W. Cowan.

Inventor.

Julius Parmelee,
Thomas G. Orrig, Atty.

UNITED STATES PATENT OFFICE.

JULIUS PARMELEE, OF DES MOINES, IOWA.

IMPROVEMENT IN WATCH-CASE SPRINGS.

Specification forming part of Letters Patent No. **157,291**, dated December 1, 1874; application filed February 5, 1874.

To all whom it may concern:

Be it known that I, JULIUS PARMELEE, of Des Moines, in the county of Polk and State of Iowa, have invented an Improved Watch-Case Spring and Fastener, of which the following is a specification:

The object of my invention is to provide a simple and convenient means of clamping and holding a watch-case spring in the rim of a case in such a manner that the spring can be inserted, adjusted, and secured in an instant by turning a screw, and also instantly freed and removed by turning the screw in a reverse way. It consists in hooks or projections on the spring, and a clamping device that engages the hooks, and is retained and operated in the hollow of the rim by a set-screw, that enters from the outside of the rim, as hereinafter fully set forth.

Figure 1 in my drawing is a perspective view, illustrating the construction of my improved spring.

a a represent the hooks or projections on the top and rear and convex side of the central part of the spring. They may be formed solid with the spring by swaging, or they may be made and attached in any suitable manner. The space between the hooks is about half an inch, for the purpose of allowing longitudinal adjustment of the spring when the hooks have engaged the clamping device in the rim.

In Fig. 2, *d* represents the clamping device, and is a perspective view from the rear or convex side. It conforms with the shape of the spring and the hooks *a*, which it is to engage, and has a swell or enlargement, *a''*, in its center on the rear or convex side. A female screw is cut into this central enlargement, to receive the set-screw, which enters through the rim of the case.

Fig. 3 is a perspective view of a section of a watch-case, and illustrates the relative positions and operations of the several parts of my invention.

b is the rim of the case; *c*, a section of the spring; *d*, the clamping device; *g*, the set-screw.

In the practical use of my improvement, the clamp *d* is first placed in the hollow of the rim *b*, and the set-screw *g* then passed through the rim, and into the place provided for it in the enlarged center of the clamp. In this position the clamp can always be retained, and needs only to be adjusted vertically by means of the screw *g* to hold or free the spring *c*. To insert the spring, lower the clamp *d* by turning the screw *g*, and allow the hooks *a* to pass over its top edge; adjust the spring *c* longitudinally, as may be required, and then raise the clamp *d* by drawing it up with the screw *g*, and the top edge of the spring will be pressed firmly against the roof of the rim *b*, and securely held in its proper position to perform its function. To free and remove the spring, turn the screw in the reverse way, and lower the clamp, so that the hooks will disengage and allow the spring to drop out.

The hooks *a* may stand upward from the lower edge of the spring, and the clamp *d* may be pressed upon them, to accomplish the results contemplated by my invention.

I claim as my invention—

The combination of the watch-case spring having the hooks *a a*, the clamping device *d*, and fastening device *g*, with a watch-case, substantially as described, and for the purposes specified.

JULIUS PARMELEE.

Witnesses:

L. A. CRANE,

E. W. ATTMORE.