

D. P. FOSTER.
Watch-Case Springs.

No. 154,030.

Patented Aug. 11, 1874.

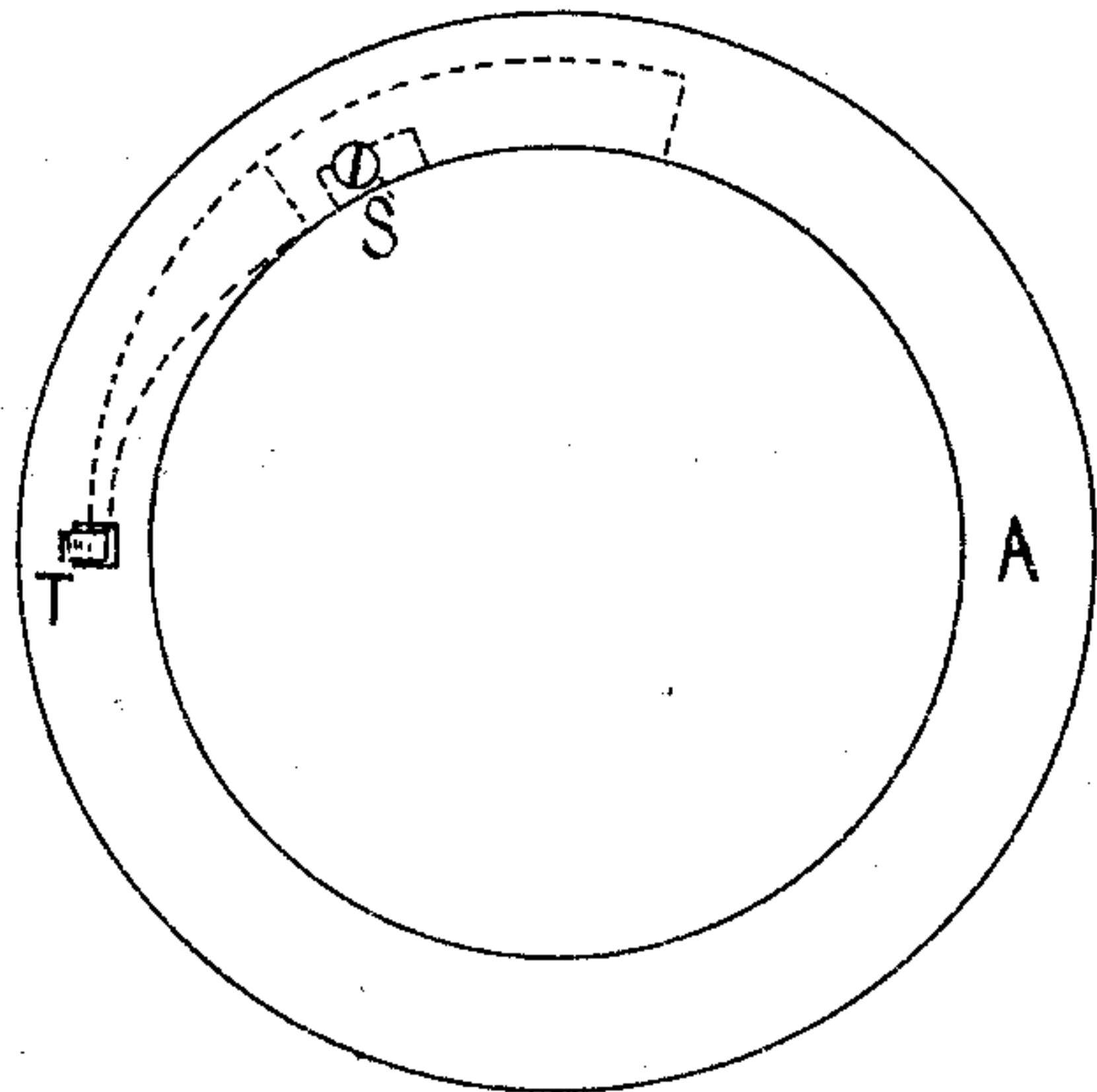


Fig. 1.

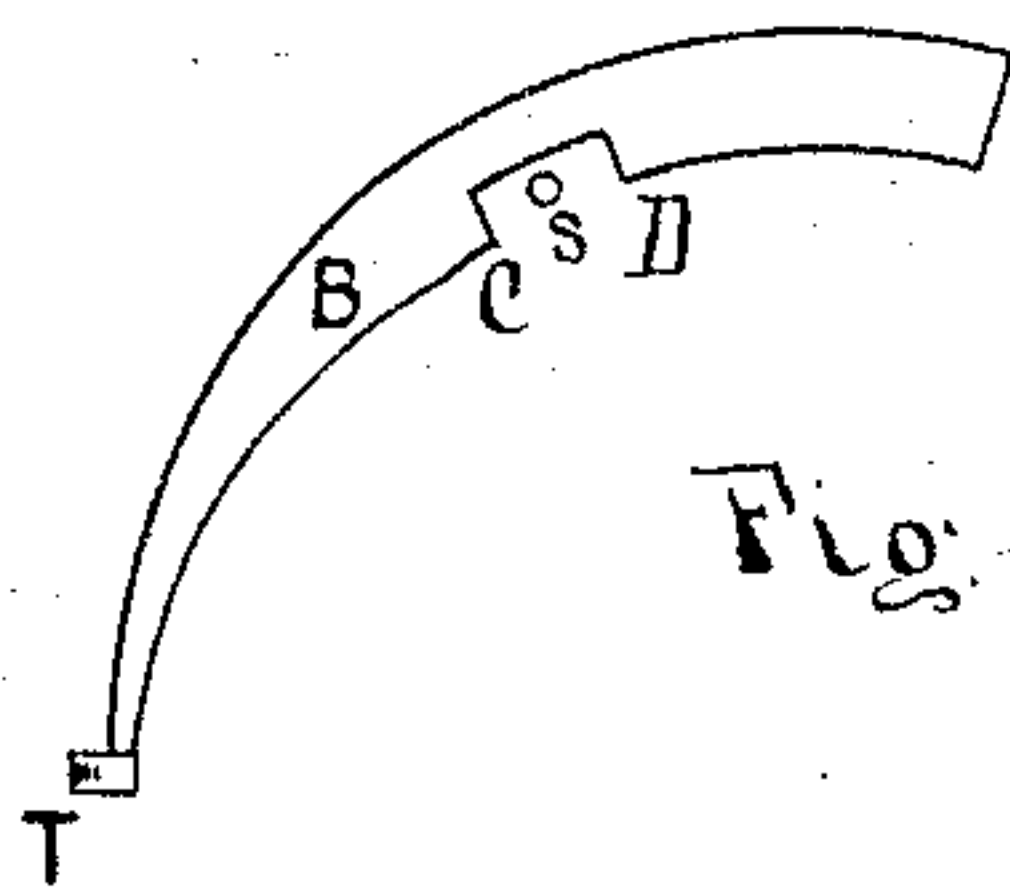


Fig. 2.

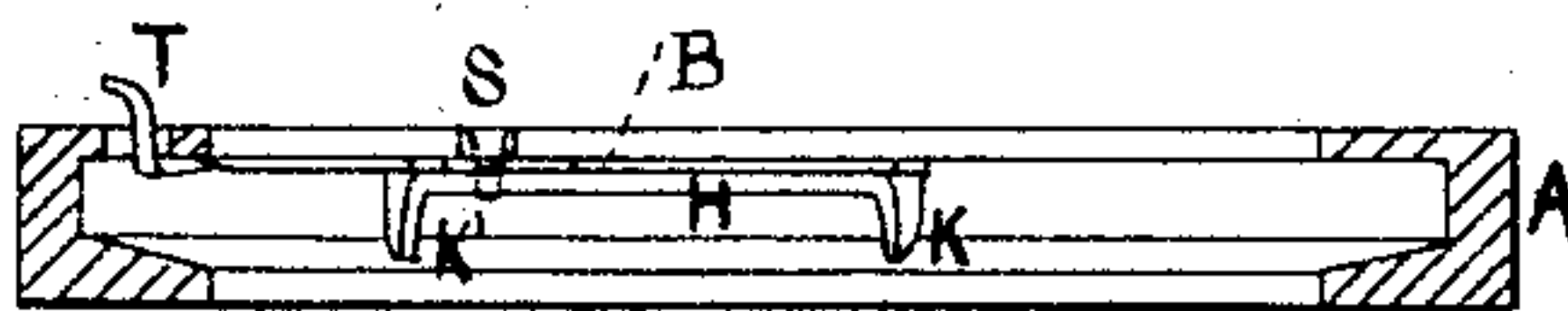


Fig. 3.

Witnesses

Alfred Odway.
Frank G. Parker.

Inventor.

Saml P Foster
per William Edson

UNITED STATES PATENT OFFICE.

DAN P. FOSTER, OF WALTHAM, MASSACHUSETTS, ASSIGNOR OF ONE-HALF
HIS RIGHT TO THOMAS J. ALEXANDER, OF SAME PLACE.

IMPROVEMENT IN WATCH-CASE SPRINGS.

Specification forming part of Letters Patent No. **154,030**, dated August 11, 1874; application filed
February 11, 1873.

To all whom it may concern:

Be it known that I, DAN P. FOSTER, of Waltham, in the county of Middlesex and State of Massachusetts, have invented a certain new and useful Improved Watch-Case-Lifting Spring, of which the following is a specification:

The nature of my invention consists in constructing the case-spring of a watch of a piece of plate metal, forming a curve, the plane of the plate coinciding with the plane of the circle, the plate being notched into in such a manner that it may be easily adjusted to any watch. The notch being of considerable length allows for the different positions of the holding-screw in different watches, then combining the same with a supporting piece or block, which, together with the screw, serves to hold the spring securely.

Figure 1 is a plan, showing the position of my spring, the spring being indicated by dotted lines. Fig. 2 shows the spring in plan. Fig. 3 is a section, showing the rim of the watch-case, the spring, and supporting-piece.

Let A represent the rim of a watch-case. S represents the spring-holding screw; T, the end of the spring, which bears against the lifting-cover of the face of a hunter-case watch, and serves to throw it open when released.

In different watches the distance between the screw S and the bearing-point T of the spring varies, so that in fitting an ordinary case-spring to a watch the operator has to measure the distance carefully and drill a hole in the spring for the screw S.

In my device the screw S passes through a

long recess, C D, Fig. 2, in the spring B, (this spring being perfectly flat, and cut from sheet metal, as shown in Fig. 2,) and into a supporting piece or block, H K K', Fig. 3, the ends K and K' fitting against and upon the lower part of the rim, as shown in Fig. 3, thus transferring the main strain of the spring B to the rim of the watch and relieving the screw S from any strain, it having simply to hold the block H in position.

By this construction and arrangement I make a very permanent spring, which is cheaper in first cost than any other, and can be more readily applied in repair work.

From the above it may be seen that my spring is made from plate metal, and that it lies flat under one of the inwardly-projecting rings of the case, and is held in position by a support that rests upon the other inwardly-projecting ring, the screw S simply serving to hold the support in place.

I claim as my invention—

The combination of the rim A and the spring B, when said spring is made of plate metal, forming a curve, the plane of the plate coinciding with the plane of the circle, with the screw S and support H, the spring B lying flat under one of the inwardly-projecting rings of the case-rim, and held in position by the support H, which rests upon the other ring, all substantially as described, and for the purpose set forth.

DAN P. FOSTER.

Witnesses:

DANL. F. VILES,
W. C. WILCOX.