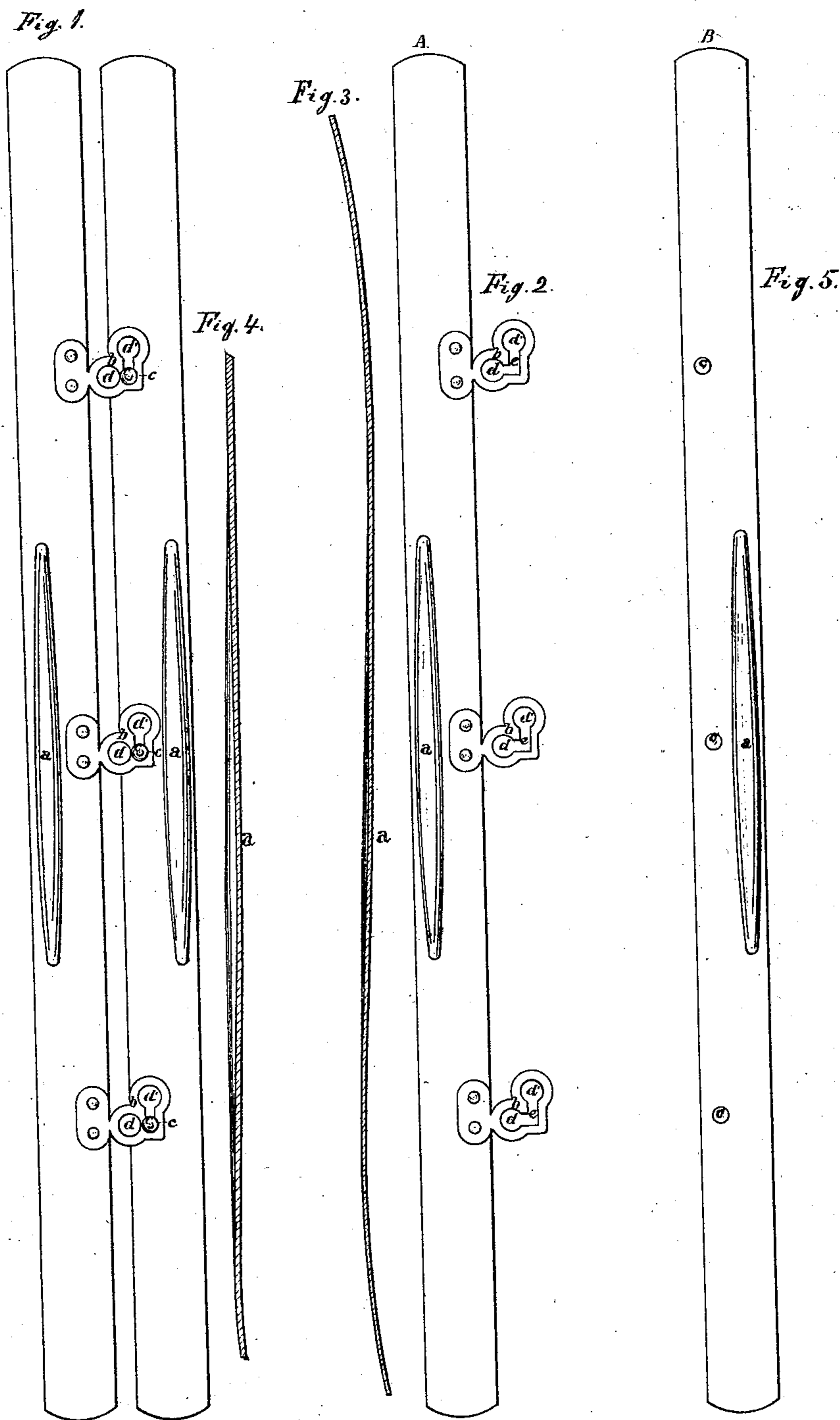


P. H. Niles, Clasp & Spring

No. 110,273.

Patented Dec. 20, 1870.



Witnesses. { John B. Babcock
John W. Portledge.

Inventor.
P. H. Niles

United States Patent Office.

PETER H. NILES, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 110,273, dated December 20, 1870; antedated December 9, 1870.

IMPROVEMENT IN CORSET-CLASPS AND SPRINGS.

The Schedule referred to in these Letters Patent and making part of the same.

Be it known that I, PETER H. NILES, of the city of Boston, county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Corset-Clasps and Springs; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Upon the accompanying drawing—

Figure 1, A, is an elevation of a corset-spring (right) having a local graduated corrugation, *a*. It is provided with spring-clasps *b b b*, which are attached to and form part of said corset-springs. The corrugations *a* are enlarged at the center, laterally, and are also deeper at the center, longitudinally, tapering gradually to the ends; this strengthens the corset-spring at the exact spot where a stay is required, for corrugations at the end do not accomplish this purpose, having no effect, as they do not come where the strain is received.

Figure 1, B, is an elevation of a corset-spring (left) having a local graduated corrugation, and is provided with buttons *c c c*.

Figure 2 is an elevation of a pair of corset-springs (corrugated) connected by the spring-clasps *b b b*, and showing the buttons *c c c* retained in the angle of the two-way slots by the spring of the clasps.

Figure 3 is a longitudinal section of my corset-spring, showing corrugation; and

Figure 4, a similar view enlarged.

I construct corset-springs of any suitable material, with local graduated corrugations *a*, for the purpose of strengthening and equalizing the strain upon the various portions of the length of the springs.

Each of the clasps *b* is provided with two circular orifices, *d d'*, which orifices are connected by the right-

angled slots *e*; said clasps are located at suitable points along the spring A, and at corresponding points on spring B are the projecting studs C, which have enlarged heads which enter orifices *d d'* simultaneously, and the spring is then moved in either direction vertically if the studs C enter the upper orifices, and laterally if they enter the lower orifices, until said studs are in the angle of slots *e*, where they are firmly held, the clasps forming double-acting springs with sufficient strength to prevent them from detaching themselves, a fault common to many corset-clasps.

The clasps are detached by reversing the clasping operation, that is moving the studs C simultaneously into either of the orifices *d d'*.

The corset-spring of Wallace Fowler differs from mine in the fact that it has corrugations at the ends of the spring, which corrugations are of the same depth to their whole extent, which form does not accomplish the purpose of my corrugation, as it comes upon that part of the spring which does not require a back stay, while my spring has a corrugation deeper and broader in the center, gradually diminishing in width and depth each way, said corrugation being located at the center of the spring where the most strength is needed.

Claims.

I claim—

1. The double-acting corset-clasps, having the orifices *d d'*, and connected by the right-angled slots *e*, substantially as described.
2. A corset-spring, having graduated corrugations *a*, when the corrugation is situated at the center curve of the spring, substantially as described.

P. H. NILES.

Witnesses:

JOHN B. BABCOCK,
JOHN W. PARTRIDGE.