## A. BENJAMIN. Corset-Spring.

No. 223,214.

Patented Jan. 6, 1880.

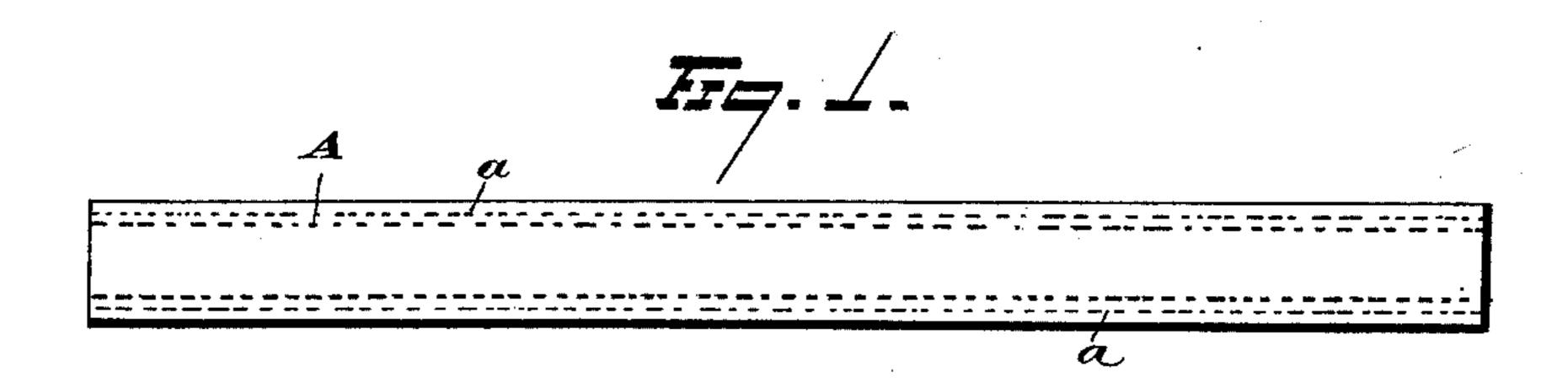
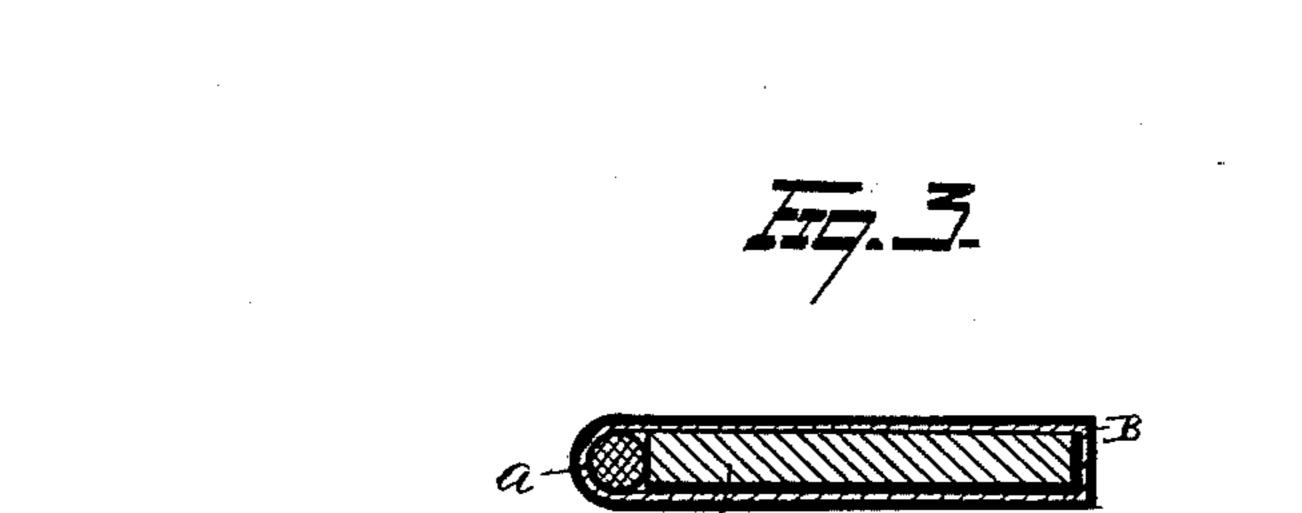
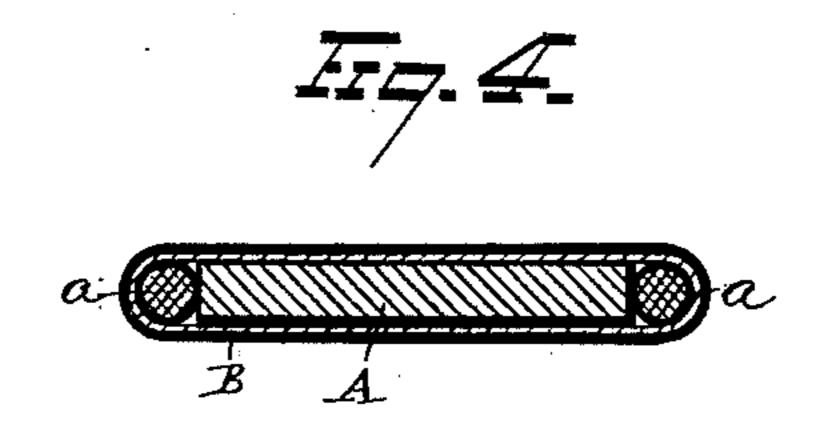


Fig. Z.





E. Aottingham
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Reference Petitionen By A. A. Seymour ATTORNEY

## United States Patent Office.

ALFRED BENJAMIN, OF NEW YORK, N. Y.

## CORSET-SPRING.

SPECIFICATION forming part of Letters Patent No. 223,214, dated January 6, 1880.

Application filed May 6, 1879.

To all whom it may concern:

Be it known that I, Alfred Benjamin, of New York, in the county of New York and State of New York, have invented certain new 5 and useful Improvements in Corset-Springs; 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.

My invention relates to an improvement in stiffeners or stays for corsets or dresses, the object being to provide a stiffener or stay of 15 such construction that it shall be of sufficient strength to withstand the desired strain without breakage—one which shall be thoroughly protected against undue wear, and also prevented from deterioration by reason of damp-20 ness or perspiration, and which may be manufactured at a small initial cost; and to this end my invention consists in stiffeners or stays for corsets or dresses consisting of a flat steel spring furnished with a cord woven on one or 25 both edges thereof, and provided with a coating of japan or other equivalent material, which will harden and render the fibrous woven covering impervious to water or perspiration.

In the accompanying drawings, Figure 1 is a plan view of my improved corset spring or stay. Fig. 2 is a longitudinal section of the same, and Fig. 3 is an enlarged view, in cross-section, of the spring, showing one edge of the spring provided with a cord; and Fig. 4 is a similar view, showing cords applied to both edges.

A represents the flat steel spring of my improved corset spring or stay, and B is a fibrous covering woven upon the steel spring A. In the process of weaving I firmly bind upon one edge of the spring a cord, a, of suitable size and material, as shown in Fig. 3; or, if desired, both edges of the spring may be furnished with corded edges a a, as illustrated in Fig. 4.

After the spring has been woven in the manner above described, which process may be carried into operation substantially in the manner shown and described in Letters Paters on No. 191,641, granted me June 5, 1877, the complete spring is then coated with japan

or other equivalent material, which will harden and render the covering of the spring impervious to water or perspiration.

A corset stiffener or stay constructed in accordance with my invention possesses many important and valuable features not existing in corset-stiffeners of ordinary manufacture. The flat steel springs may be comparatively narrow in width, and yet posses the desired tension for the purpose in view, but if inserted in the pockets of a corset are liable to become twisted and become broken, and also to wear and abrade the fabric.

By securing a cord to one or both edges 65 of the spring increased width is given the spring, which adds to its bearing-surface on the corset, and thereby insures a firm bearing therein. Again, the corded edges serve to protect the thin edges of the spring, and thus 70 prevent the abrasion and wear both of the corset and the fibrous woven covering of the spring.

By coating the completed spring with japan or other equivalent material the corset-spring 75 is rendered impervious to water and perspiration, thereby preventing the oxidation of the steel spring, and hence materially increasing the durability and effectivenes of the same. Further, the coating of japan or similar substance becomes thoroughly incorporated in the woven covering of the spring, and increases its stiffness by preventing the stretching or displacement of the woven covering or corded edge or edges, thereby constituting a rigid 85 and compact corset-spring of great durability and of small initial cost in manufacture.

I do not restrict myself to any particular process or machine for the manufacture of my improved stiffener or stay. Further, instead 90 of applying the japan or equivalent coating after the cord or cords have been applied and secured in place, I may apply such coating before the cords have been secured, and, if desired, may apply another coating after the 95 cords have been applied.

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

As a new article of manufacture, a stiffener roo or stay for corsets or dresses consisting of a narrow flat steel spring covered with fabric,

which is braided thereon, and provided with cords secured to one or both edges of the spring by the braided covering, a portion of the threads of which pass between the cord and edge of the spring, said braided and corded spring provided with a coating of japan or equivalent material, which impregnates the braided covering and corded edge, substantially as set forth.

In testimony that I claim the foregoing I 10 have hereunto set my hand and seal this 24th day of April, 1879.

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ALFRED BENJAMIN. [L. s.]

Witnesses:
RUFUS K. McHARG,
FRED. BAYHA.