A. J. F. BOWER.

SEWING MACHINE BELT.

APPLICATION FILED APR. 14, 1916. RENEWED NOV. 17, 1917.

1,271,014. Patented July 2, 1918.

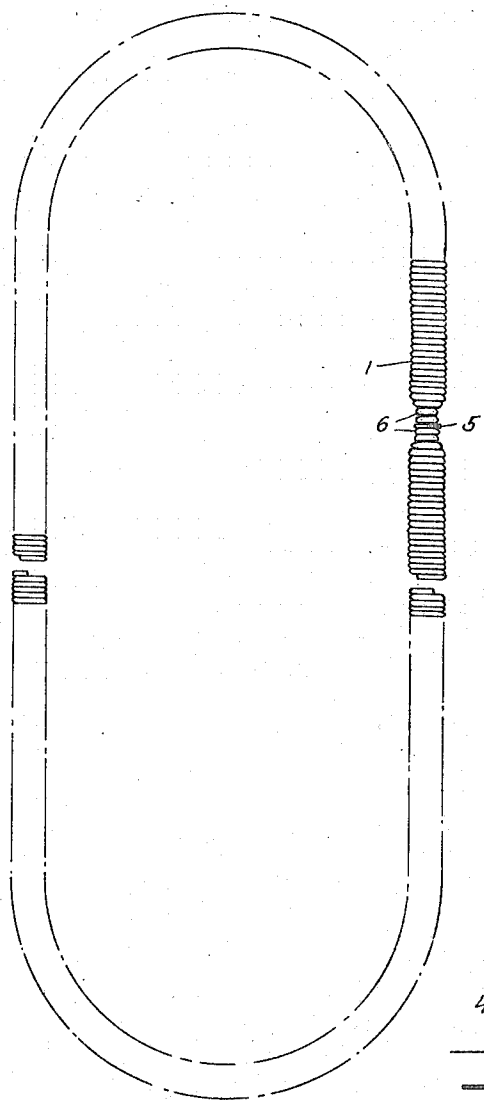


Fig. 1.

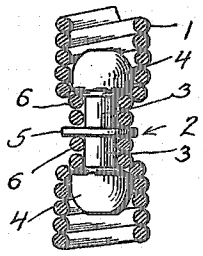


Fig. 2.

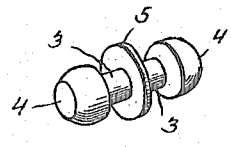


Fig. 3.

Witness

R. M. Jones

H. J. Perry

Inventor

A. J. F. Bower

By A. Rudolph & Co.,

Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

AMELIA J. F. BOWER, OF BRECKENRIDGE, MINNESOTA.

SEWING-MACHINE BELT.

1,271,014. Specification of Letters Patent. Patented July 2, 1918.

Application filed April 14, 1916, Serial No. 91,133. Renewed November 17, 1917. Serial No. 202,647.

To all whom it may concern:

Be it known that I, AMELIA J. F. BOWER, a citizen of the United States, residing at Breckenridge, in the county of Wilkin and State of Minnesota, have invented certain new and useful Improvements in Sewing-Machine Belts; 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 appertains to make and use the same.

The invention relates to improvements in sewing machine belts.

The object of the present invention is to improve the construction of sewing machine belts, and more especially sewing machine belts consisting of a spirally coiled wire or spring, and to provide a simple, practical and efficient device adapted to be readily applied to the ends of the spring, and capable of being securely engaged by the terminal coils thereof and of permitting free movement of the ends while the same are passing around a pulley or wheel.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawing, and pointed out in the claims hereto appended, it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claims, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing,

Figure 1 is a side elevation of a sewing machine belt constructed in accordance with this invention,

Fig. 2 is an enlarged detail sectional view of the ends of the belt, the coupling member being in elevation,

Fig. 3 is a detail perspective view of the coupling member.

Like numerals of reference designate corresponding parts in all the figures of the drawing.

In the accompanying drawing in which is illustrated the preferred embodiment of the invention, 1 designates a sewing machine belt consisting of a spirally coiled wire constructed of resilient material, preferably steel, and forming a spiral spring having closely wound coils which are arranged contiguous to one another. A resilient extensible belt which is designed particularly for use on sewing machines may of course be employed for a variety of other purposes, and the ends of the belt are connected by a coupling member 2, consisting of a central longitudinally disposed stem 3, terminal spherical heads or balls 4, and a central transversely disposed disk or annular flange 5. A stem, which is preferably round or circular in cross section, is designed to be formed integral with the central disk and the terminal heads or balls, and it receives the terminal coils 6, which embrace the heads 4 of the coupling member and surround the stem. The terminal coils are reduced in diameter and form sockets for the reception of the balls or heads 4. The central disk 5 is interposed between the terminal coils of the two ends of the belt, and the said terminal coils and the spherical heads or balls form a yieldable coupling or connection between the ends of the spring belt and permit free movement of the parts while the ends of the belt are passing around the pulley or wheel. The spring belt, while maintaining a frictional engagement with the pulley or wheel of a sewing machine or other device, is adapted to be readily extended or expanded to enable it to be easily arranged on and removed from the pulleys or wheels without requiring the unfastening of the ends of the belt, and without affecting the length of the same, as the spring belt will regain its tension as soon as it is released by the operator when placing the belt in position.

What I claim is:

1. A belt of the class described including a spirally coiled spring provided at its terminals with a plurality of end coils of less diameter than the other coils, and a coupling member composed of a cylindrical stem extending through the end coils of the spring and terminal substantially spherical heads arranged at the ends of the stem and fitting within the spring at the inner sides of the reduced terminal coils and engaged by the same.

2. A belt of the class described including a spirally coiled spring provided at its terminals with a plurality of end coils of less diameter than the other coils, a coupling

member composed of a cylindrical stem extending through the end coils of the spring and terminal substantially spherical heads arranged at the ends of the stem and fitting within the spring at the inner sides of the reduced terminal coils and engaged by the same, and a centrally arranged disk carried by the stem and interposed between the reduced coils of the spring and being of greater diameter than the same.

In testimony whereof I affix my signature in presence of two witnesses.

AMELIA J. F. BOWER.

Witnesses:
J. C. MILLER,
E. THOMPSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."