W. T. SONDLEY.

ELASTIC CORD FOR GARMENT SUPPORTS.

APPLICATION FILED DEC. 4, 1909.

1,006,014. Patented Oct. 17, 1911.

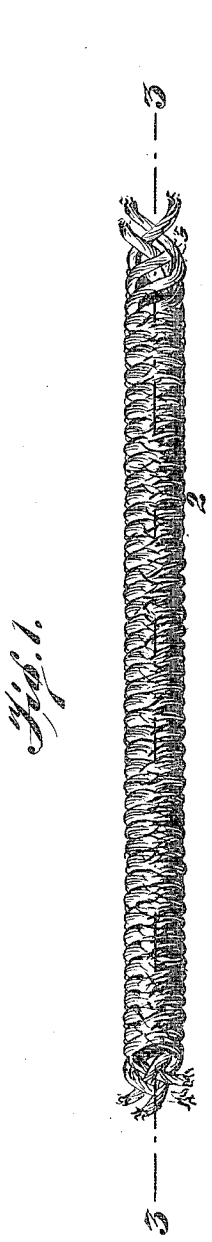

Fig. 1.

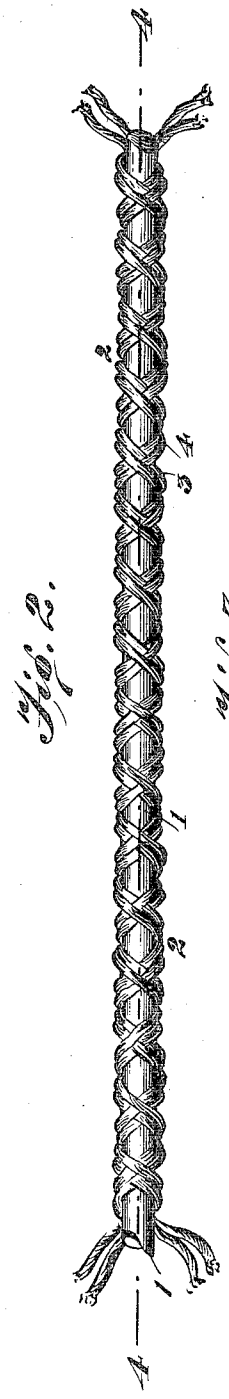

Fig. 2.

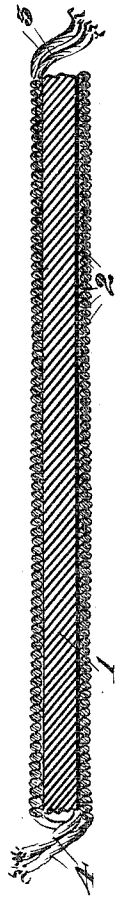

Fig. 3.

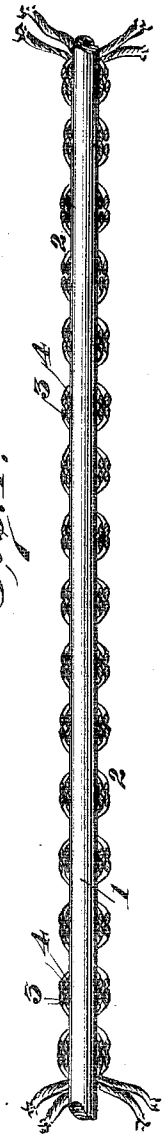

Fig. 4.

Witnesses

D. C. Wilson.

A. O. Parker

Inventor

William Tully Sondley

Attorney

# UNITED STATES PATENT OFFICE.

WILLIAM TULLY SONDLEY, OF HUNTSVILLE, ALABAMA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO J. W. SKINNER AND A. W. MILLER.

## ELASTIC CORD FOR GARMENT-SUPPORTS.

1,006,014. Specification of Letters Patent. Patented Oct. 17, 1911.

Application filed December 4, 1909. Serial No. 531,391.

*To all whom it may concern:*

Be it known that I, WILLIAM TULLY SONDLEY, a citizen of the United States, residing at Huntsville, in the county of Madison and State of Alabama, have invented certain new and useful Improvements in Elastic Cords for Garment-Supports, of which the following is a full, clear, and exact specification.

The present invention is an improvement in elastic cords, and it comprehends and has for its object the production of a cord of that general type which may be manufactured at an exceedingly low cost by reason of its extreme simplicity of construction, and which shall nevertheless possess the requisite elasticity to admit of its being utilized in the manufacture of garters and similar garment supports, for which purpose it is primarily designed.

The invention further comprehends and resides to a material extent in the method by which the cord above described is constructed.

More especially the invention resides, first, in the utilization, as a core, of elastic string, in contradistinction to the cut or molded flat bands or rings ordinarily employed, thereby greatly decreasing the material cost of manufacture; and second, in constructing a cover in such a manner as to insure the requisite elasticity and to permit a single rather than a double thickness to be made use of.

The preferred embodiment of the invention is illustrated in the accompanying drawings, wherein:—

Figure 1, is a view of the improved cord in normal or unstretched condition. Fig. 2, is a similar view of the cord stretched. Fig. 3, is longitudinal sectional view of Fig. 1. Fig. 4, is similar sectional view of Fig. 2.

Similar reference characters indicate corresponding parts throughout the several views in the drawings.

From a consideration of the said drawings, it will be seen that the cord consists merely of a core, designated by the numeral 1, and a cover 2, of a single ply or thickness.

The core is in the form of a rubber string, as opposed to the ordinary construction wherein a flat band or ring of cut or molded rubber is employed for such purposes, the present construction reducing the quantity of material utilized, and in consequence obviating any possibility of waste, thereby decreasing the material cost of the article.

Cover 2, is composed of two strands 3 and 4, of silk, cotton or other suitable material. These strands are wrapped spirally in opposite directions around the core while the latter is untensioned or in other words, in its normal condition. The strands, moreover, are each composed of a plurality of individual threads, as shown in Figs. 2 and 4, and by reason of the fact that they are wrapped or wound about the core in the manner specified they will intersect or cross diagonally, or in criss-cross fashion, this being true of the individual threads as well as of the strands, so that the entire cover may thus be regarded as plaited, as will be apparent. The wrapping or winding operation may be effected by any preferred mechanical means, and the arrangement of the adjacent coils or windings is such that they contact completely with each other throughout their entire extent, as clearly shown in Figs. 1 and 3, thereby concealing the core.

From the disposition of the coils or windings, it will result that there is materially no change in the cross-sectional area of the core at the completion of the winding operation, as under normal conditions. Consequently, there is no strain upon the finished core, when the cord is in its normal condition, and for this reason the length of life of the core is obviously prolonged. On the other hand, the tension of the cord has the effect of decreasing the cross-sectional area of the core, and the specified arrangement of the coils or windings in contact with each other permits the same to yield readily at such times, thereby providing for the requisite elasticity of the core or of the cord as a whole.

Owing to the employment of multi-thread strands, and to the interwinding of the same as above described, they will form a complete cover for the core, and will obviate the necessity for either the use of an additional core, or for repeating the winding one or more times. With respect, further, to the cover, it may be stated that such parts or elements of the cord is capable of yielding or becoming elongated when stretch is applied to the cord, this being due to the loose criss-cross intersection or interweaving of the strands and threads of which the

cover is composed. This yielding or elongation is, however, of limited extent, since the threads themselves are inelastic. Consequently, the cover, for that very reason, limits or checks the tensioning of the core, and thus prevents the latter from becoming stretched to an excessive degree. Moreover when such point is reached a portion of the tension is taken up by the cover, or in other words is transferred to the latter from the core. It may also be stated that by reason of the fact that the strands are wound upon an untensioned core, the use of an excessive amount of cover is avoided, since it is necessary to wind the coils only so close together as to give the desired ornamental effect, whereas where the coils are wound upon a previously tensioned core, the length of the latter is obviously increased, and a much greater quantity of core is therefore requisite.

As originally stated, the cord constructed as above described is especially well adapted for use in the manufacture of a garter or other garment supporter, and it is in fact for this very purpose that the cord is primarily designed.

What is claimed is:—

As a new article of manufacture, a cord comprising a normally untensioned core of circular shape in cross-section throughout its length, and an extensible covering therefor including adjacent pairs of oppositely wound strands, each strand being composed of a plurality of twisted individual threads, one strand of each pair being interlaced with each other in criss-cross manner at diametrically opposite points of the core, the remaining strands of the pairs being reversely interlaced with each other in criss-cross manner adjacent to the interlaced points of said first-named strands.

In testimony whereof, I have hereunto set my hand in the presence of two subscribing witnesses.

WILLIAM TULLY SONDLEY.

Witnesses:
CHAS. T. MAHONEY,
G. L. PARKER.