No. 738,250. PATENTED SEPT. 8, 1903.

J. STANLEY.

FLEXIBLE TUBULAR COVERING.

APPLICATION FILED OCT. 31, 1902.

NO MODEL.

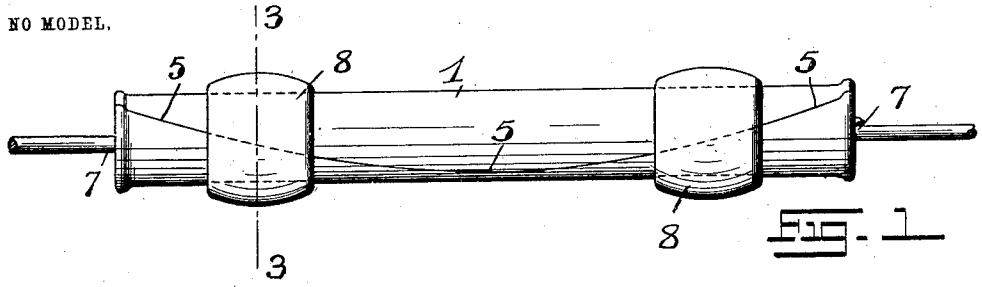


Fig. 1

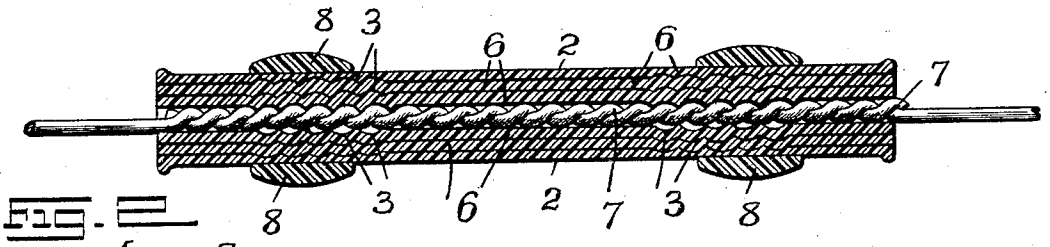


Fig. 2

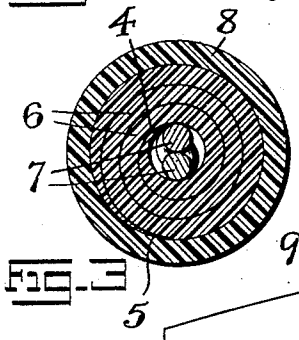


Fig. 3

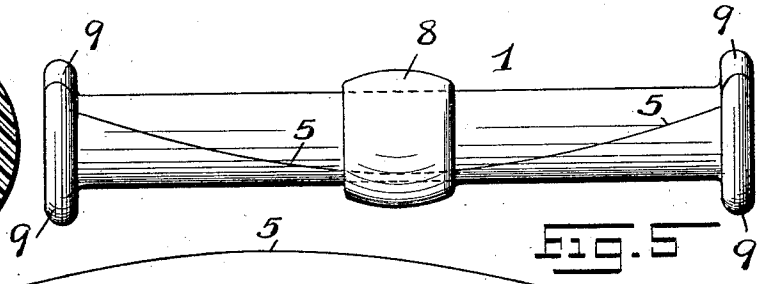


Fig. 5

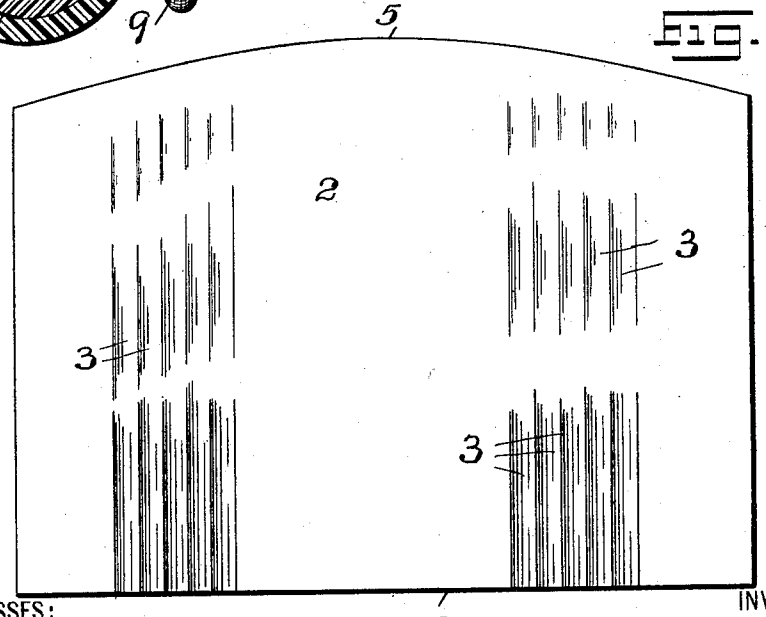


Fig. 4

WITNESSES:

Geo. D. Richards

Geo. Douglass

INVENTOR:

James Stanley,

BY

Fred C. Fraentzel,

ATTORNEY

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

No. 738,250. Patented September 8, 1903.

UNITED STATES PATENT OFFICE.

JAMES STANLEY, OF NEWARK, NEW JERSEY.

FLEXIBLE TUBULAR COVERING.

SPECIFICATION forming part of Letters Patent No. 738,250, dated September 8, 1903.

Application filed October 31, 1902. Serial No. 129,568. (No model.)

To all whom it may concern:

Be it known that I, JAMES STANLEY, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Flexible Tubular Coverings; 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, reference being had to the accompanying drawings, and to numerals of reference marked thereon, which form a part of this specification.

The present invention has reference generally to improvements in flexible tubular coverings made of rubber or other similar material having resilient properties; and the invention relates more particularly to a novel construction of flexible tubular covering employed for the covering of wire joints, links of chains, mouthpiece-cores of bridle-bits, and, in fact, any other article which is adapted to be protected by a covering and to which a covering of the character hereinafter fully described is applicable.

The present invention has for its primary object to provide a covering adapted to be wrapped or rolled about an article to form a tubular covering, the said covering being made from a normally flat sheet of flexible material which will rebound from a flat relation into its wrapped or rolled relation, thereby providing a tubular covering which can be readily applied about the article which is to be covered and by means of its own closing properties will be safely retained against any accidental displacement and that without the use of cement or other fastening means for holding the flexible covering in said place.

Other objects of the invention not at this time more particularly specified will be evident from the following detailed description of the invention.

This invention therefore consists in the novel flexible covering hereinafter described; and the invention consists, furthermore, in the various novel arrangements and combinations of parts set forth in the following specification and then finally embodied in the clauses of the claim, which are appended to and form a part of this specification.

The present invention therefore consists, primarily, in the novel construction of flexible tubular covering comprising a flat sheet of flexible material made by being molded or pressed and having the property of wrapping itself in the form of a roll, a covering for especial use for wire joints, chains, mouth-bars of bridle-bits, and other articles which can easily be placed upon the article and can be quickly removed therefrom.

The invention consists, furthermore, in the novel construction of flexible rubber tube split longitudinally from its center to its cylindrical surface in spiral convolutions, the same producing a sheet adapted to be wrapped about the body to be covered, said sheet having corrugations adapted to fit and correspond to the joints or connecting-links with which the tube is to be employed, so as to prevent lateral movement of the tube when in position upon the article.

The invention is clearly illustrated in the accompanying drawings, in which—

Figure 1 is a face view of a flexible tubular covering embodying the various features of my present invention; and Fig. 2 is a longitudinal vertical section of the same, the covering in both instances being represented in connection with a wire joint. Fig. 3 is a vertical cross-section on an enlarged scale, said section being taken on line 3 3 in Fig. 1 of the drawings. Fig. 4 is a face view of the flexible sheet prior to being rolled into the said flexible and tubular covering, the sheet being provided with one arrangement of grooves or corrugations. Fig. 5 is a face view of a flexible tubular covering of a slightly-modified form of construction, but still embodying the principles of this invention.

Similar numerals of reference are employed in all of the said hereinabove-described views to indicate corresponding parts.

Referring to the several figures of the drawings, the covering is indicated by the reference-numeral 1, and it is formed, preferably, by being molded in the form of a flexible sheet 2, (see Fig. 4,) which is made of rubber or other similar material properly vulcanized, or the covering is first molded or otherwise made in the form of a rubber tubing, which is then turned against the sharp cutting edge of a cutter in the well-known manner of cut-

ting sheets of rubber from a core and cut into the sheet 2. This sheet 2, as is illustrated in said Fig. 4, is preferably provided with any suitable arrangement of grooves or corrugations 3, and the sheet has been treated under pressure in such a manner that its normal tendency is to roll or wrap itself about the edge 4 to its oppositely-located and curved edge 5 in convolutions 6, as illustrated in Fig. 3 of the drawings, and thereby forming a complete tubing or covering 1, which can be readily wrapped about any article or body, as a wire joint 7, (indicated in Figs. 1, 2, and 3,) or about the links of a chain or a mouthpiece of a bit to thoroughly envelop the same, the grooves or corrugations 3 fitting themselves over the joints and the convolutions of two pieces of twisted wire or any other joint or connection to prevent any possibility of the flexible covering slipping longitudinally upon the joint. It will be noticed from an inspection of Fig. 3 of the drawings that the respective marginal edge portions 4 and 5 of the sheet are chamfered, so that a perfect cylindrical covering will be produced when the resilient properties of the sheet cause the same to wrap or roll itself in the manner hereinabove set forth and as illustrated in the several figures of the drawings. In order that the said curved edge 5 of the wrapped sheet will at all times lie closely to and tightly hug the remaining part of the formed tube, a suitably-constructed flexible band or bands 8, made of rubber or other analogous material, may be sprung over the covering when in position upon the joint 7, as indicated in the drawings; but said band or bands are not absolutely necessary and may be dispensed with, if desired. To prevent, however, the opening out or the buckling of this edge 5 when the covering 1 is used with joints which are subject to bending, the use of such band or bands is preferable.

In the construction represented in Fig. 5 I have provided the sheet 2 with large marginal beads or ribs, as 9, which may be desirable in some uses to which the covering is to be put, since such beads or ribs give greater rigidity when the sheet is rolled or wrapped upon itself, as will be clearly evident.

My novel form of covering provides a flexible tubular covering which can be put to many uses and being wrapped many times upon itself produces adequate strength without any necessity of further reinforcing members or devices.

When it is desired to remove the covering, this can be quickly and easily accomplished without destruction of the covering, and it can again be just as readily placed in its position about a joint or the like for the protection of the same.

The covering can be cheaply and easily made and may be put to innumerable uses.

Having thus described my invention, what I claim is—

1. A tubular covering formed from a sheet of flexible material having resilient properties, said sheet having a straight edge and an oppositely-located curved edge, said edges also being chamfered, as set forth, and said sheet being of such character that it will wrap itself about an article and will be held thereon, substantially as and for the purposes set forth.

2. A tubular covering formed from a sheet of flexible material having resilient properties, said sheet having a straight edge and an oppositely-located curved edge, said edges also being chamfered, as set forth, and said sheet being of such character that it will wrap itself about an article and will be held thereon, and corrugations on said sheet, substantially as and for the purposes set forth.

3. A tubular covering formed from a sheet of flexible material having resilient properties, said sheet having a straight edge and an oppositely-located curved edge, said edges also being chamfered, as set forth, and said sheet being of such character that it will wrap itself about an article and will be held thereon, corrugations on the one side of said sheet, and means connected with the wrapped sheet to prevent spreading, substantially as and for the purposes set forth.

In testimony that I claim the invention set forth above I have hereunto set my hand this 30th day of October, 1902.

JAMES STANLEY.

Witnesses:
FREDK. C. FRAENTZEL,
GEO. D. RICHARDS.