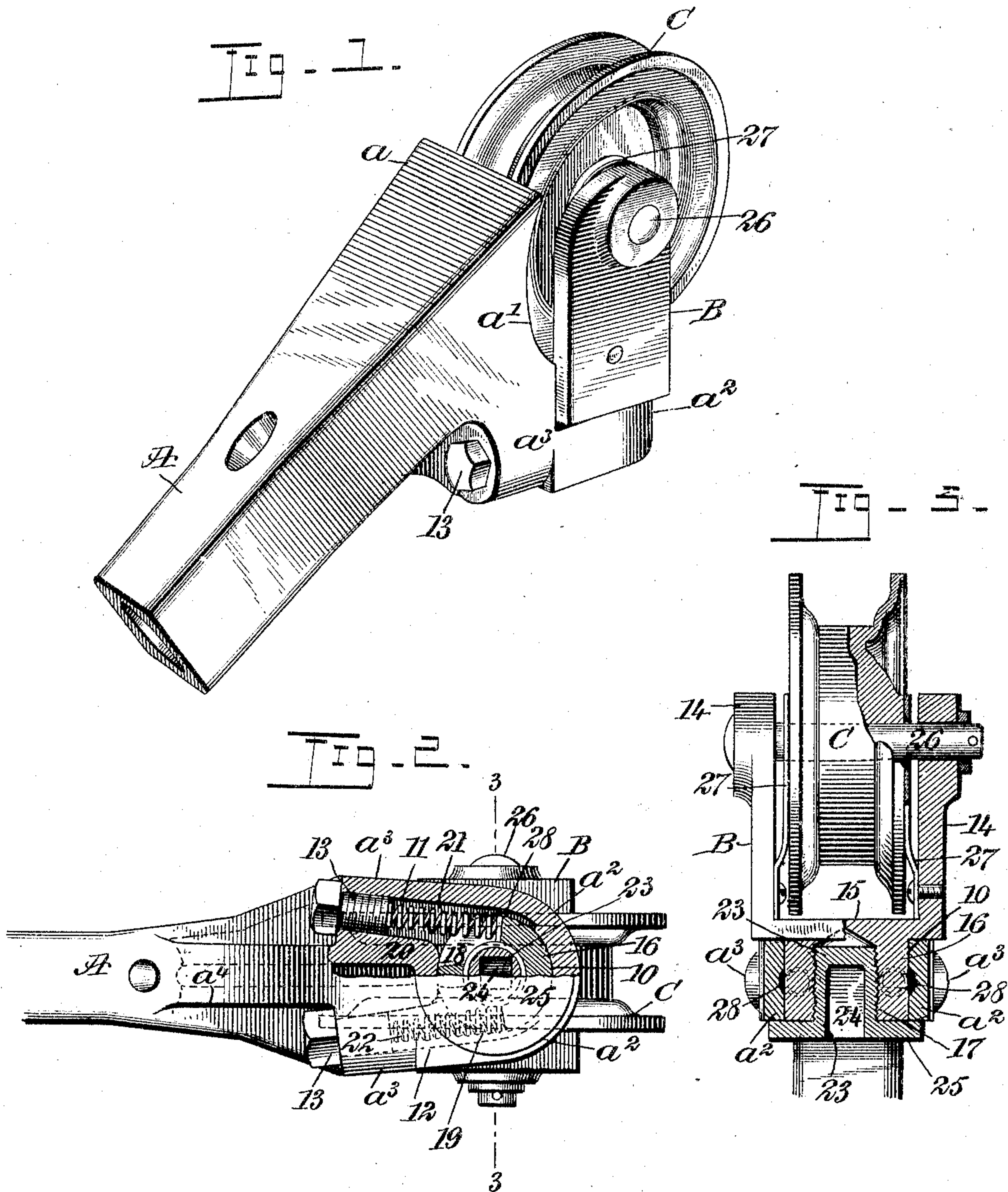


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S. JURADO.
SHEATH FOR TROLLEY WHEELS.

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WITNESSES:

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SHEATH FOR TROLLEY-WHEELS.

SPECIFICATION forming part of Letters Patent No. 780,194, dated January 17, 1905.

Application filed March 25, 1904. Serial No. 199,911.

To all whom it may concern:

Be it known that I, SANTOS JURADO, a citizen of the United States of Venezuela, residing at the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Sheath for Trolley-Wheels, of which the following is a full, clear, and exact description.

The purpose of the invention is to provide a sheath for trolley-wheels and a pivotal support on the said sheath, through which support the bearings for the trolley-wheel extend.

Another purpose of the invention is to provide springs at opposite sides of the said support, connected with the said sheath, whereby the trolley-wheel is held normally in longitudinal alinement with the sheath and whereby the springs will permit the trolley-wheel to move to the right or to the left, as the direction of the trolley-wire may demand, the said springs acting automatically to restore the trolley-wheel to its normal position in longitudinal alinement with the sheath as soon as a straight stretch of wire is reached.

Another purpose of the invention is to provide a means whereby the trolley-wheel will be held centrally on its pin by means of springs attached to the supports of the said pin; and another object of the invention is to provide a construction capable of accomplishing the above-named results which will be simple, durable, and practical and in which the various parts may be quickly and readily assembled or disconnected and wherein should any part break it can be readily substituted by a corresponding perfect part.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of my improved sheath for trolley-wheels. Fig. 2 is a bottom sectional view of the same, and Fig.

3 is a transverse vertical section taken substantially on the line 3 3 of Fig. 2.

The sheath A proper consists of a body 50 which is tubular and adapted to receive the trolley-pole and is made wider and deeper at its forward section a . This forward section at its front edge is given a rearward curvature or concaved surface a' , which leads to a lower straight surface, as is shown in Fig. 1, and this straight surface connects with a segmental forwardly-extending supporting-section a^2 and rearwardly-extending cheek-sections a^3 , which extend in divergent lines from the rear portion of the forward supporting-section a^2 , and a rib a^4 is longitudinally formed at the bottom portion of the said body of the sheath, as is shown in Fig. 2, to strengthen the same at that point. The supporting-section a^2 is provided with a circular opening 10, extending through from the top to the bottom, as is shown best in Figs. 2 and 3, and the extension cheek-sections a^3 , which are on the plane of the sides of the main section of the said sheath, have longitudinal chambers 11 and 12 produced, respectively, therein, as is also shown in Fig. 2, and these chambers connect with the opening 10 and extend out through the rear ends of the cheek extensions a^3 , being closed at the latter point by adjusting-screws 13. (Shown in Figs. 1 and 2.)

The supporting-section a^2 is adapted to pivotally support a carrier B for a trolley-wheel C, and this carrier B consists of upwardly-extending side members 14, a bottom member 15, which rests upon the supporting-section a^2 , and a collar 16, provided with an interior thread 17, which collar extends downward from the bottom portion 15 of the carrier. The collar 16 at what is normally its rear bottom edge is provided with two recesses 18 and 19, separated by a central partition 20, as is shown in Fig. 2. A spring 21 bears against the forward wall of the recess 18, being mainly located in the chamber 11 of one of the cheek extensions a^3 , as is shown in Fig. 2, and the opposite end of the spring has bearing against the adjusting-screw which enters the said

chamber. A second spring 22 is located in the chamber 12 of the opposing cheek-section α^3 , having bearing against the forward wall of the recess 19 and against the adjusting-screw 13, which enters the said chamber 12, as is shown also in Fig. 2. It will be observed that the springs 21 and 22 may be placed under tension or relieved from tension, more or less, by the manipulation of the adjusting-screws 13. These springs serve to normally keep the carrier B, with its side members 14, substantially parallel with the side members of the body portion A of the sheath.

The carrier B is held in its adjusted position on the supporting-section α^2 of the body of the sheath by means of a plug 23, which is adapted to be screwed into the collar 16, as is shown in Figs. 2 and 3, and this plug is provided, preferably, with a polygonal recess 24, whereby it may be readily turned by a suitable instrument inserted in the said recess, and in the further construction of this plug a flange 25 is provided at its bottom portion, which has loose bearing against the bottom of the collar 16 and against the bottom portion of the supporting-section α^2 of the body of the sheath, as is shown in Figs. 2 and 3.

The trolley-wheel C is mounted to turn loosely on a pin 26, which extends through the upper portions of the sides 14 of the carrier B, as is shown in Figs. 1 and 3, and the said trolley-wheel is yieldingly held in a central position on the said pin 26 between the members 14 of the carrier B by means of springs 27, secured to the inner faces of the said members 14, and through the upper portions of which springs the pin 26 for the trolley-wheel passes, the upper ends of the springs having bearing against the sides of the trolley-wheel, as is shown best in Fig. 3.

In order that the springs 21 and 22 shall not have binding action when the carrier B is turned, recesses 28 are made in the outer side walls of the chambers 11 and 12, as is shown in Figs. 2 and 3, so as to enlarge the said channels where the springs will have direct action.

It will be observed from the foregoing description that the body portion of the sheath may be made in one piece or in one casting and that the carrier B will accommodate the wheel C to a curve in any direction, one of the springs in the chambers 11 and 12 being depressed when the carrier is turned and the other spring expanded, so that when a straight stretch of wire is met with the carrier B will assume its normal position and accommodate the trolley-wheel thereto. It is further obvious that under such a construction of trolley-wheel sheath and trolley-wheel support the wheel is not at all liable to leave the wire, and

it is furthermore obvious that the construction is exceedingly simple, durable, and economic, that the parts are readily assembled or disconnected, and that any of said parts which may become unduly worn may be duplicated.

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

1. In a trolley-wheel sheath, a body-section adapted to receive a trolley-pole and provided with a lower forward extension, a carrier for the trolley-wheel mounted to turn on the extension, cheeks at the rear of said extension, said cheeks having internal chambers opening at the rear side of the cheeks, springs carried within said chambers controlling the movement of the carrier and acting to hold the carrier normally transverse of said extension, and removable screw-plugs for closing the open rear ends of said recesses in the cheeks and for regulating the tension of said springs.

2. In a trolley-wheel sheath, a body-section adapted to receive a trolley-pole, a projection at the bottom forward portion of the body-section, a carrier mounted to turn in the said projection, springs regulating the movement of the trolley-wheel carrier, and devices for adjusting the said springs, as described.

3. In a trolley-wheel sheath, a tubular body-section adapted to receive a trolley-pole, having a concaved forward face, a horizontal lower projection from the said forward face, and cheek extensions from the sides of the body adjacent to the said lower projection, the lower projection having an opening therein extending from top to bottom, the said cheek extensions being provided with chambers therein connecting with the opening in the forward extension, a trolley-wheel carrier mounted to revolve in the opening in the said forward extension, springs located in the said chambers, having bearing against the said carrier at diametrically opposite points, and adjusting devices for the springs, located in the said chambers for the purpose described.

4. In a trolley-wheel sheath, a tubular body adapted to receive a trolley-pole and provided at its forward portion with a segmental horizontal projection having an opening therein extending from top to bottom, the said body being likewise provided with cheek projections from its sides, in each of which cheek projections a chamber is formed connecting with the said lower extension from the body, a trolley-wheel carrier mounted to turn on the said bottom extension, and provided with a collar which extends down into the opening in the said lower extension, a plug screwed into the said collar and provided with a flange at its bottom portion which engages with the bottom of the said forward extension and the bottom of the said collar, the said collar having recesses formed in its under edge at each

side of its center, springs located in the chambers in the cheek extensions, having bearing against the forward walls of the recesses in the collar, and adjusting-screws at the rear
5 portions of the said chambers, against which the rear ends of the springs abut, whereby to regulate the tensional qualities of the springs, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

SANTOS JURADO.

Witnesses:

F. W. HANAFORD,
JNO. M. RITTER.