June 24, 1947. R. R. RUNDELL 2,423,050

WIRE SWIVEL

Filed June 19, 1944

Fig. 1.

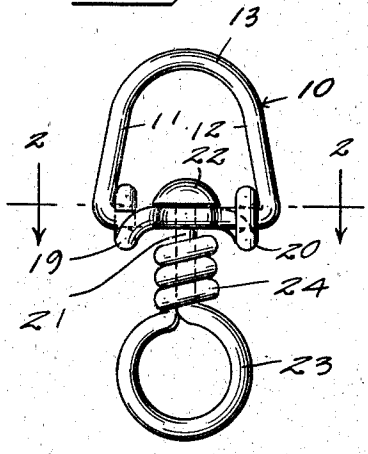
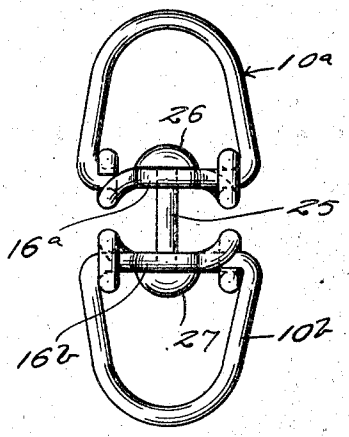


Fig. 3.



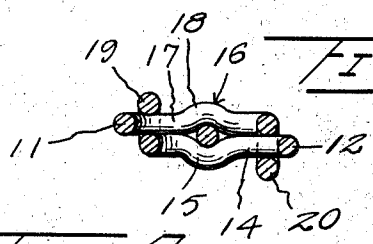


Fig. 2.

Fig. 5.

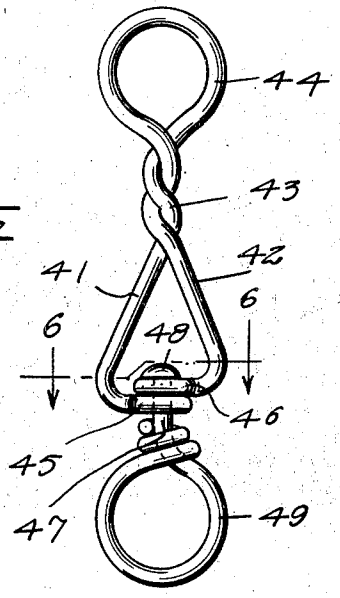


Fig. 4.

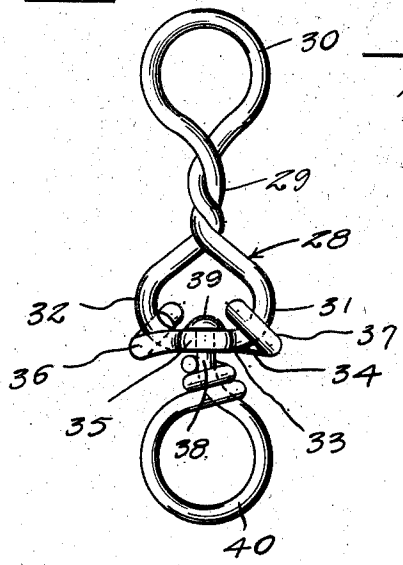
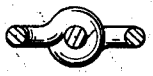


Fig. 6.



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WIRE SWIVEL

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3 Claims. (Cl. 59—95)

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This invention relates to wire swivels.

An object of this invention is to provide a swivel which may be formed out of wire which is bent in a manner to be hereinafter described for forming a clevis or loop and an eye.

Another object of this invention is to provide in a device of this kind an improved means for forming the swivel bearing, the latter being formed by bending the ends of the clevis inwardly and locking these ends together.

With the foregoing objects and others which may hereinafter appear, the invention consists of the novel construction, combination and arrangement of parts as will be more specifically referred to and illustrated in the accompanying drawing, wherein is shown an embodiment of the invention, but it is to be understood that changes, variations and modifications may be resorted to which fall within the scope of the invention as claimed.

In the drawing:

Figure 1 is a detail side elevation of a wire swivel constructed according to an embodiment of this invention,

Figure 2 is a sectional view taken on the line 2—2 of Figure 1,

Figure 3 is a detail side elevation of a modified form of this swivel,

Figure 4 is a detail side elevation of another form of this invention,

Figure 5 is a detail side elevation of a further form of this invention, and

Figure 6 is a sectional view taken on the line 6—6 of Figure 5.

Referring to the drawing, and first to Figures 1 and 2, the numeral 10 designates generally a clevis which is formed of wire and includes divergent arms 11 and 12 which are connected together at their upper ends by an arcuate connecting member 13. The clevis 10 also includes an arm 14 which is bent inwardly from the lower end of the side 12 and is provided with an arcuate offset portion 15 forming one-half of a swivel eye, generally designated as 16. The side 11 is provided with an inwardly projecting extension 17 which is parallel with the extension 14 and is provided with an arcuate offset 18 forming with the arcuate portion 15 the swivel eye 16.

Extension 14 at its terminal end is provided with an eye 19 engaging about the extension 17 adjacent the side 11. The terminal end of extension 17 is provided with an eye 20 engaging about the extension 14 adjacent the lower end of the side 12. The eyes 19 and 20 firmly lock

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and secure the extensions 14 and 17 together and prevent lateral spreading or opening of the eye portions 15 and 18.

A shaft 21 is rotatably mounted in the eye 16 and is provided with a head 22 engaging the upper or inner side of the eye 16. The shaft 21 is extended downwardly and is then formed with a loop or eye 23 and the eye 23 is continued upwardly from the open or split portion thereof and is twisted or wound around the shaft 21, as indicated at 24. In this manner, the eye 23 is closed and the convolutions 24 prevent opening of the eye. As will be noted from Figure 1, the locking loops or eyes 19 and 20 are disposed in parallel relation with each other and provide a means whereby the divergent ends of the sides 11 and 12 will be firmly held against inward movement. In this manner the swivel formed by the clevis 10 and the eye 23 including the shaft 21 will not become distorted under reasonable strain.

Referring now to Figure 3, there is disclosed a double swivel including a pair of clevis members 10*a* and 10*b*. The clevis members 10*a* and 10*b* are formed identical with the clevis 10 and the detailed description of the elements forming the clevis 10 will apply equally as well to the clevis members 10*a* and 10*b*. A shaft 25 loosely engages through the swivel eyes 16*a* and 16*b* formed with the clevises 10*a* and 10*b*, respectively, and is provided at the opposite ends thereof with heads 26 and 27.

Referring now to Figure 4, there is disclosed another form of eye swivel including a clevis 28 which is formed with a twisted upper extension 29 and an eye 30 about the twisted portion 29. The opposite sides 31 and 32 of the clevis 28 are provided with parallel confronting extensions 33 and 34, respectively, and these extensions are provided with offset intermediate portions forming a swivel eye 35.

Extension 33 is provided with a ring or eye 36 engaging the lower portion of the side 32 and extension 34 is provided with a ring or eye 37 engaging the lower portion of the side 31. A swivel shaft 38 loosely engages through the eye 35 and is provided with a head 39. The shaft 38 is also formed with a loop 40 positioned below the swivel eye 35.

Referring now to Figures 5 and 6, there is disclosed another form of wire swivel including a single length of wire which is bent to form upwardly convergent clevis sides 41 and 42. The sides 41 and 42 are extended upwardly from their convergent ends and twisted about each other as

indicated at 43 and then continue upwardly and bent in circular form to provide an upper eye 44. Clevis side 41 has formed integral with the lower end thereof an inwardly projecting eye or loop 45 and clevis side 42 has formed integral with the lower end thereof an eye or loop 46.

The loops or eyes 45 and 46 are in axial alignment and provide a bearing for a swivel shaft 47 which extends through the two eyes 45 and 46. Shaft 47 is formed at its upper end with a head 48 engaging the upper side of eye 46 and the lower end of shaft 47 is extended downwardly and formed into a loop or eye 49.

The wire swivels hereinabove described may have varied uses and it will be understood that the wire from which the swivels are made may be of desired thickness depending only upon the use for which the swivel is designed.

What I claim is:

1. A wire swivel comprising a U-shaped member, oppositely extending overlapping extensions carried by the free ends of said member, said extensions including complementary intermediate arcuate eye forming members, and a locking eye carried by one extension disposed at substantially right angles relative thereto and engaging about the other extension whereby said extensions are locked to each other, and a headed shaft swivelly engaging in the eye formed by said arcuate eye forming members.

2. A wire swivel as set forth in claim 1 wherein said locking eye is disposed at right angles to the adjacent extension and is positioned adjacent the junction between the adjacent extension and the free end of one side of said U-shaped member, said locking eyes holding said extensions against endwise movement.

3. A wire swivel comprising a looped wire twisted together between the ends thereof to form an eye at one end, said wire diverging outwardly from the twisted portion thereof and including oppositely extending overlapping extensions integral with the divergent ends thereof, said extensions including complementary arcuate eye-forming members, a looped locking member carried by one extension engaging about the other extension for locking said extensions together, and a headed shaft rotatably engaging between said eye forming members.

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