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HOPPLE FOR PACER HORSES

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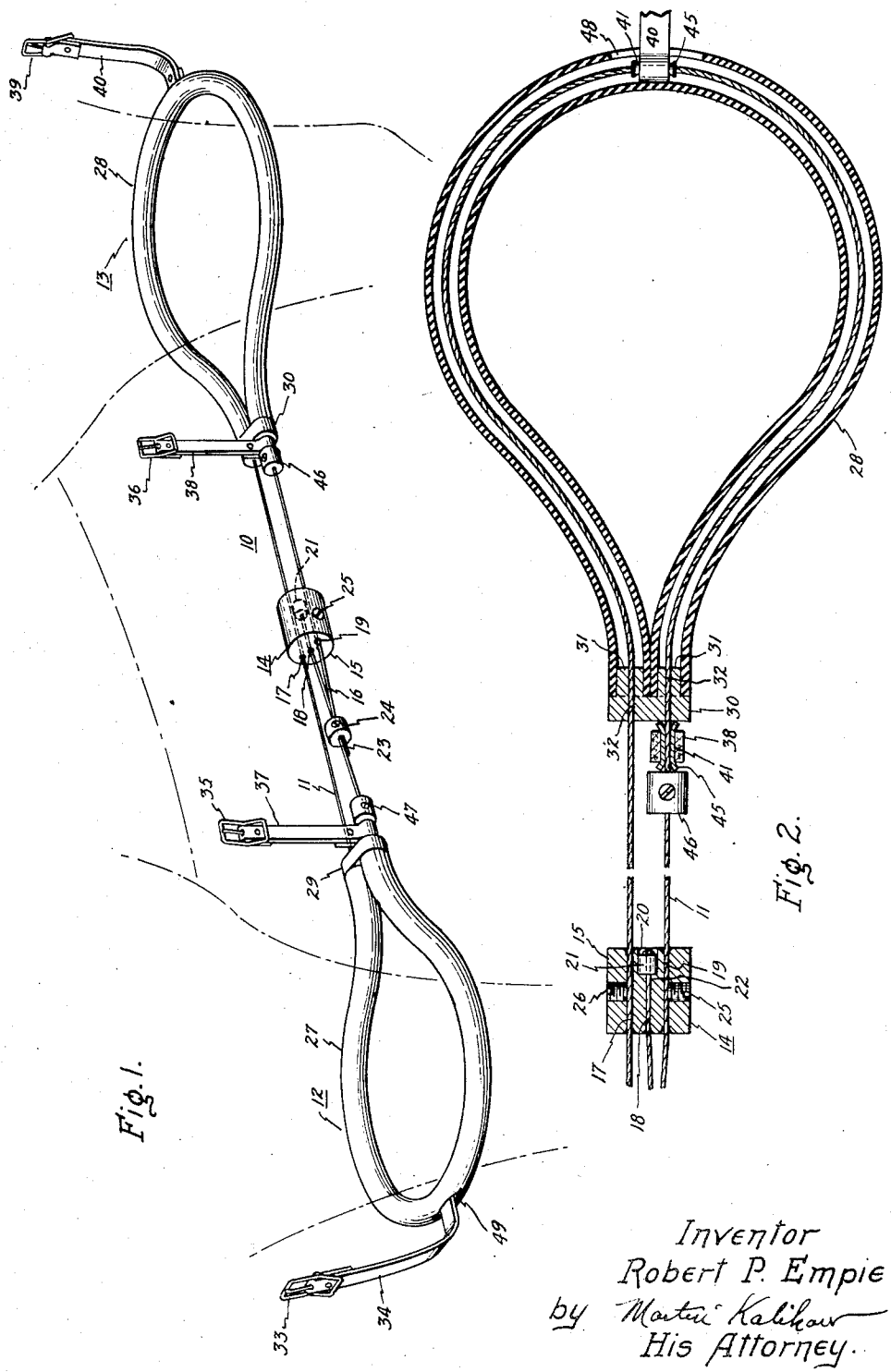

Fig. 1.

Fig. 2.

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HOPPLE FOR PACER HORSES

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My invention relates to hopples for horses, and more particularly to hopples for maintaining the gait of pacer horses.

Conventional pacer hopples are made from straps of leather or plastic material arranged to be looped around the front and hind legs of a horse and fastened together by buckles. These conventional pacer hopples are quite expensive, require constant care, inspection and readjustment, and must be replaced fairly often if used by racing horses since the strenuous and constant use which they normally endure during a racing season makes them rough and irritating to the horse and causes them to stretch, weaken and sometimes break during a race.

Accordingly, one important object of the invention is to provide a pacer hopple that is strong enough to endure many years of strenuous use without danger of breaking.

Another object is to provide a pacer hopple that is much less expensive than conventional hopples and is constructed from commercially available and replaceable components such that the whole hopple need not be discarded if one component should become defective or eventually wear out.

A further object is to provide a pacer hopple that is lightweight, flexible and comfortable for the horse.

In general, my invention comprises a pacer hopple including a strong flexible metal wire which is inserted through and is easily slideable within a pair of smooth flexible hoses which form the front and rear leg guards of the hopple. For greater strength the metal wire is preferably continuous and forms a complete loop. Means are also provided for adjusting the size of the loop thus formed, thereby controlling the overall length of the hopple.

The novel features which are believed characteristic of the invention are set forth in the appended claims. The invention itself, however, together with further objects and advantages thereof may best be understood by referring to the following description taken in connection with the accompanying drawing in which Figure 1 is a plan view of a hopple embodying the invention; and Fig. 2 is a sectional view of a leg guard assembly included in the hopple of Fig. 1.

Referring to the drawing, the invention is shown in one form embodied in a hopple **10** comprising a flexible metal wire **11** inserted through and supporting a front leg guard assembly **12** and a rear leg guard assembly **13**. Metal wire **11** may conveniently be ⅛ in. stranded steel cable, as indicated, and forms a complete loop passing through a take-up sleeve **14** located between the front and rear leg guard assemblies **12** and **13**. Take-up sleeve **14** is preferably a light-weight, rust-proof metal, such as aluminum, and functions both to guide portions of wire **11** in close side-by-side alignment and to clamp the two end portions of wire **11** in adjustable position relative to one another, thereby controlling the overall size of the complete wire loop and the length of hopple **10**. Take-up sleeve **14** is shown as a cylindrical block **15** having three axially extending parallel holes **17**, **18** and **19** whose diameter is large enough to accommodate wire **11** as a close slidable fit therein. Central hole **18** has a widened portion **20** extending to a partial depth from one end of sleeve **14**. This widened portion **20** of hole **18** snugly accommodates a conforming stop plug **21** welded or otherwise secured to one end **22** of wire **11**. In assembling hopple **10**, the other end **23** of wire **11** is threaded through central hole **18** of sleeve **14**, through one leg guard assembly **12**, back through hole **17** of sleeve **14**, through the other leg guard assembly **13**, and then back through hole **19** of sleeve **14** until stop plug **21** falls within widened portion **20** of hole **18**. The excess portion **16** of wire **11** extending beyond sleeve **14** is clamped to an adjacent portion of wire **11** by any suitable clamp **24** such as those commonly used to fasten bare power or telephone cables together. Set screws **25** and **26** provided in sleeve **14** are then tightened against the portions of wire **11** passing through holes **17** and **19**.

Leg guard assemblies **12** and **13** respectively include front and rear leg guards **27** and **28** within which wire **11** is threaded. Leg guards **27** and **28** may be leather coverings, but are shown as and preferably constitute plastic or hard rubber hoses such as are commonly used to pour beer or other beverages. Means, such as apertured metal blocks **29** and **30** are provided for holding the free ends of each hose **27** and **28** together, thereby to form leg-protecting oval-shaped rings at opposite ends of the loop formed by wire **11**. Metal blocks **29** and **30** are preferably aluminum and each have two adjacent cylindrical lugs **31** projecting from one side thereof, which lugs are inserted in tight frictional engagement within the opposite ends of a respective one of the hoses **27** and **28**. Wire **11** is inserted within hoses **27** and **28** through suitable apertures **32** extending through the projecting lugs **31** of blocks **29** and **30**.

Hopple **10** is carried in a conventional manner with leg guard assemblies **12** and **13** around the fore and hind legs on one side of the horse by a neck strap (not shown) inserted within a buckle **33** on front strap **34**; a pair of central carrying straps (not shown) inserted within buckles **35**, **36** on side straps **37**, **38**; and a rear carrying strap (not shown) inserted within buckle **39** on rear strap **40**. Straps **34**, **37**, **38** and **40** are each securely fastened, such as by sewing, around associated metal collars **41**, which, in turn, ride as free fits on wire **11**. Metal collars **41** each have outwardly flared ends **45** to prevent straps **34**, **37**, **38** and **40** from slipping off the collar. Stop members **46** and **47** clamped to wire **11** hold collars **41** associated with side straps **37** and **38** in suitable stationary positions against leg guard fastening blocks **29** and **30**, and thereby also prevent any tendency of blocks **29** and **30** to move out of engagement with hoses **27** and **28**. Front and rear straps **34** and **40** are inserted around their respective collars **41** through small splits **48** and **49** in the outer central portions of hoses **27** and **28**, respectively. It will be appreciated that wire **11** is threaded through collars **41** during the assembly of hopple **10**.

It will thus be seen that I have provided an unusually strong hopple that is also light-weight, flexible and comfortable. It is unusually strong because its principal structural component is a wire cable easily capable of withstanding a stress of several thousand pounds which is many times greater than that exerted by even the strongest horse. The size of hopple **10** is easily adjusted or readjusted by merely passing more or less wire cable **11** through take-up sleeve **14** and then fastening clamp **24** and tightening set screw **26**. Since there is no appreciable deterioration of wire cable **11**, take-up sleeve **14**, or metal blocks **29** and **30** even over long periods of time, the only components susceptible of eventually wearing out are the leg guard hoses **27** and **28**. These hoses are quite inexpensive and may be quickly and easily replaced.

Although I have described above a particular embodiment of my invention, it will be appreciated that many modifications may be made. It is to be understood, therefore, that I intend by the appended claims to cover all such modifications as fall within the true spirit and scope of the invention.

What I claim as new and desire to protect by Letters Patent of the United States is:

1. A hopple for a horse comprising front and rear leg guards each comprising a smooth hose, and means connecting said leg guards comprising a metal wire inserted through said hoses and extending therebetween to space said hoses to front and rear leg guarding positions.

2. A hopple for a horse comprising a loop of flexible metal wire, front and rear leg guards covering and supported on spaced portions of said wire loop, and means for adjusting the size of said wire loop.

3. A hopple for a horse comprising front and rear leg guard assemblies each including a smooth leg protecting

covering, and a flexible metal wire inserted through and slideable within both said coverings and extending therebetween to space said coverings to front and rear leg guarding positions, the opposite end portions of said wire being fastened together to form a complete loop.

4. A hopple for a pacer horse comprising front and rear leg guards each comprising a smooth flexible hose, a wire cable inserted through and slideable within both said hoses and extending therebetween to space said hoses to front and rear leg guarding positions, and means for fastening the opposite end portions of said wire cable together to form a loop of adjustable size.

5. A hopple for a pacer horse comprising front and rear leg guards each including a hose and means for holding the opposite ends of the hose together to form a protective leg ring, a stranded metal wire cable inserted through and slideable within both said hoses and extending therebetween to space said hoses to front and rear leg guarding positions, and a wire take-up sleeve located between said leg guards for fastening the opposite end portions of said wire cable together in adjustable relative position, thereby to form said wire into a loop of adjustable size.

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