Dec. 29, 1959 F. H. WEBER 2,919,017

TELESCOPIC CARRYING CASE

Filed Oct. 31, 1957 2 Sheets-Sheet 1

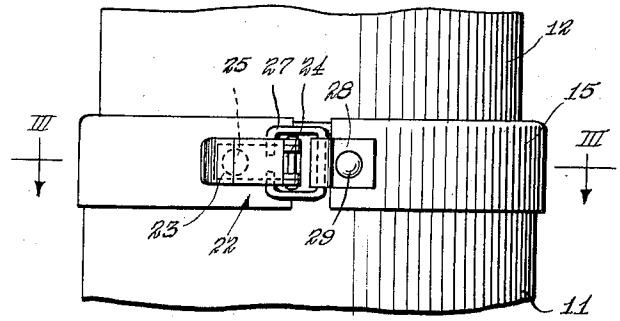


Fig. 2

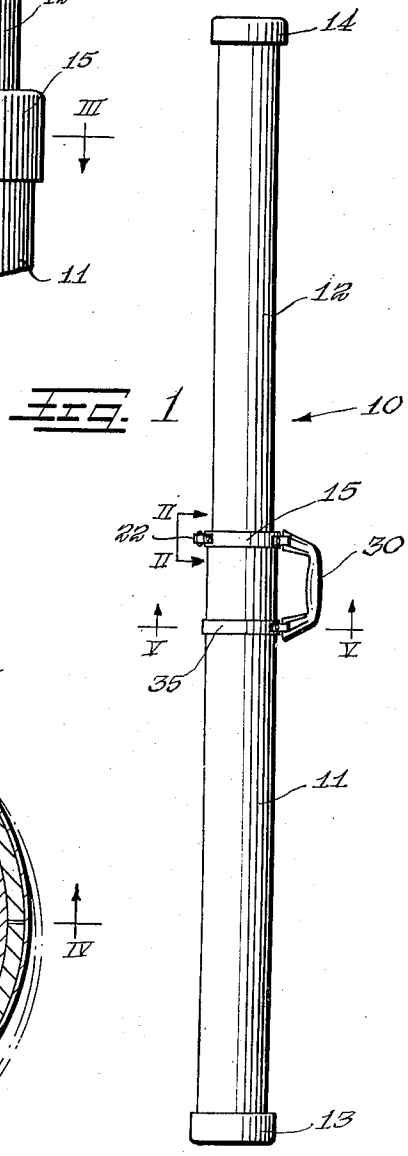


Fig. 1

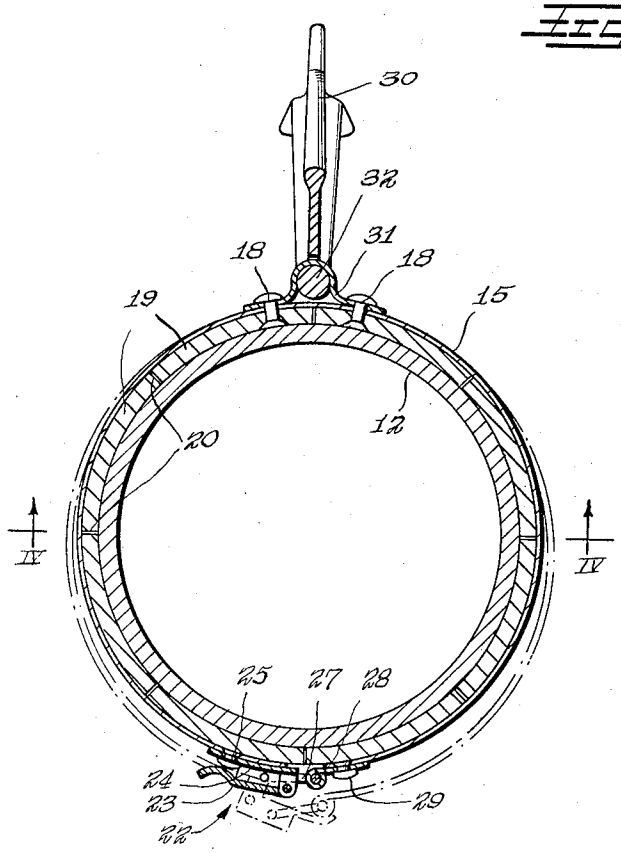


Fig. 3

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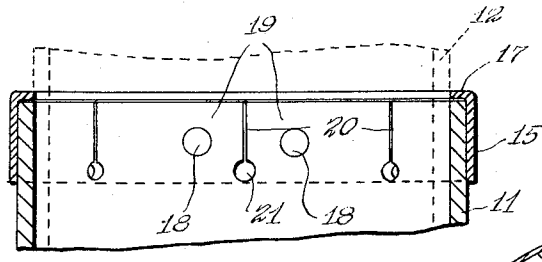


Fig. 4

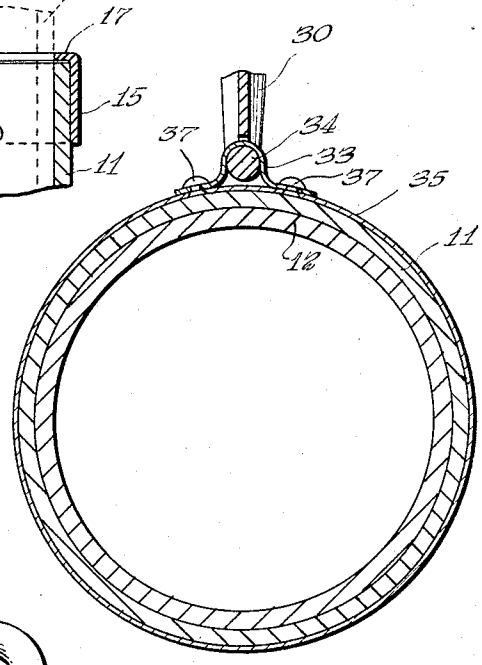


Fig. 5

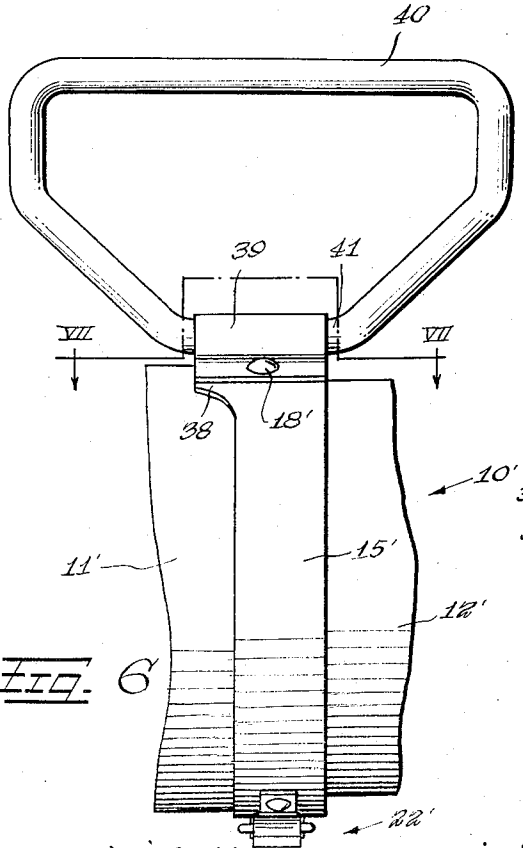


Fig. 6

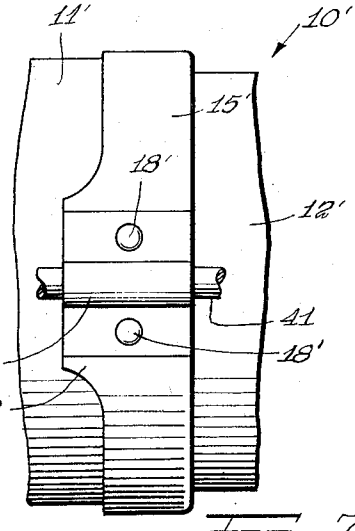


Fig. 7

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TELESCOPIC CARRYING CASE

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4 Claims. (Cl. 206—1)

The present invention relates to improvements in telescopic carrying cases and more particularly concerns novel means for adjustably securing the relatively telescopically related tubular members of the case.

Telescopic carrying cases comprising a pair of tubular members with one of the members slidably disposed within the other of the members are especially useful for carrying fishing tackle and more especially valuable rods or other elongated devices which should be protectively incased for transportation or storage purposes. Inasmuch as such elongated articles are of various lengths, telescopic carrying cases are desirably readily adjustable as to over-all length so that one standard of length in the telescopic tubes comprising the case will enable adjustment within a large range from a predetermined maximum extension or relative protraction of the tubular members of the case to a minimum over-all length wherein the members of the case are relatively collapsed or retracted. In any preferred or adjusted over-all length determined by the length of the articles to be incased the carrying case members should be capable of relatively fixed securement to maintain the desired adjusted length.

It is accordingly an important object of the present invention to provide a telescopic carrying case having impoved means for securing the relatively telescopic tubular members thereof in fixed adjustment.

Another object of the invention is to provide novel combination adjustment securing and carrying means for telescopic carrying cases.

A further object of the invention is to provide improved means for effecting relative adjustment of telescopic carrying case members by means of a novel releasable clutch device including an expansible and contractible wall portion of the outer of the carrying case tubes.

Still another object of the invention is to provide an improved clutch structure for telescopic carrying cases carried by and comprising entirely means on the outer of the carrying case tubes while the inner of the tubes is entirely free from and infinitely adjustable relative to the clutch means within the substantial range of telescopic adjustments possible with the members of the particular carrying case.

Other objects, features and advantages of the present invention will be readily apparent from the following detailed description of certain preferred embodiments thereof taken in conjunction with the accompanying drawings in which:

Figure 1 is a side elevational view of a carrying case embodying features of the invention;

Figure 2 is an enlarged fragmentary elevational view of that portion of the carrying case assembly indicated by the line II—II of Figure 1;

Figure 3 is a sectional detail view taken substantially on the line III—III of Figure 2;

Figure 4 is a fragmentary sectional detail view taken substantially on the line IV—IV of Figure 3;

Figure 5 is a fragmentary sectional detail view taken substantially on the line V—V of Figure 1;

Figure 6 is a fragmentary side elevational view of a modified combination clutch and carrying device on a tubular carrying case; and

Figure 7 is a fragmentary sectional elevational view taken substantially on the line VII—VII of Figure 6.

A telescopic carrying case **10** (Fig. 1) embodying the present invention comprises a pair of tubular elongated members **11** and **12** which are of predetermined differential diameter to enable the tube **12** to be slidably adjusted longitudinally within the tube **11**. The combined length of the tubes **11** and **12** enables the carrying case to be adjusted as to length throughout a wide range from the fully relatively extended or protracted condition of the tubes **11** and **12** while yet slidably interengaged, to a relatively short case wherein the tube **12** is substantially retracted or slidably telescoped into the outer tube **11**. At the distal or remote ends thereof, the tubes **11** and **12** are provided with respective end closure caps **13** and **14**. At least the closure cap **14** on the smaller diameter or inner of the carrying case tubes **12** may be detachable if preferred so that after the tubes have been relatively adjustably secured or locked in a predetermined case length relationship contents can be inserted and removed through the distal end of the tube **12** by removing the end cap **14**.

The carrying case tubes **11** and **12** may be made from the same or different materials. While lightweight metal tubing such as aluminum tubing may be used for either or both of the carrying case tubes **11** and **12**, cardboard or other fiber material or plastic material or combination fiber and plastic material tubing may be used.

According to the present invention, quick releasable friction clutch means are provided for retaining the carrying case tubes **11** and **12** in selected telescopically related relative positions of adjustment determinative of the overall length of the carrying case. To this end, a split draw ring **15** (Figs. 1, 2, 3 and 4) is assembled about the proximal or inner end mouth portion of the larger or outside tube **11**. In a preferred form, the draw ring **15** is constructed from suitable sheet or strip material, preferably metallic and possessed of at least limited resiliency. The width of the draw ring **15** is such as to overlap the outer side of the margin of the inner mouth end of the tube **11** throughout a substantial width, with a narrow radially inwardly turned flange **17** along one edge of the draw ring affording resilient stiffness therefore and an edge finish at and overlapping the edge of the tube **11**, but with the flange **17** preferably shorter than the thickness of the material of the tube **11** as best seen in Figure 4. Opposite the split ends thereof, the draw ring **15** is secured to the tube **11** as by means of one or more rivets **18** (Fig. 3), leaving the remainder of the ring free from attachment but encompassingly, grippingly engageable with the outer marginal perimeter of the outside tube **11**.

Normally the clamping ring **15** tends to spring resiliently open to a slightly larger diameter than the outside tube **11** as best seen in dash outline in Fig. 3. Thereby, flexible friction clutch segments or fingers **19** into which the ring-encompassed margin of the tube **11** is uniformly sub-divided by longitudinal slots **20** (Figs. 3 and 4) are free for longitudinal sliding adjustment of the inner case tube **12** relative to the outer of the case tubes **11**. At their inner ends, the slots **20** are preferably provided with enlarged blind ends **21** as best seen in Figure 4 so as to render the clutch fingers **19** more flexibly yieldable. On the other hand, the slots **20** are preferably as narrow as practicable so as to afford for the clutch fingers **19** as large frictional engaging area as practicable. It may also be noted that preferably the total length of the slots

20 inclusive of the enlarged blind ends 21 thereof is so related to the width of the draw ring 15 as to be covered thereby.

Upon effecting the desired relative telescoped adjustment of the case tubes 11 and 12, the draw ring 15 is drawn into tight clamping engagement about the clutch fingers 19 to effect firm frictional clutching engagement of the fingers uniformly about the engaged perimeter of the inner case tube 12 to thereby maintain the adjusted relationship of the tubes. To this end, the total band length of the ring 15 is somewhat less than the circumference of the outer case tube 11, and means are provided for drawing the separated ends of the ring toward one another until the desired firm clamping action has been attained. For this purpose, a toggle type draw latch or buckle assembly 22 is connected to and between the separable ends of the draw ring. This includes a lever member 23 pivotally mounted on a bracket 24 secured as by means of a rivet 25 to one of the ring end portions. Pivotally connected in overcenter toggle relation to the lever 23 is a toggle link 27 pivotally attached to a bracket 28 secured as by means of a rivet 29 to the remaining end portion of the ring. In the closed condition of the buckle 22 as seen in Figures 2 and 3, the ends of the ring member 15 are drawn toward one another to draw the ring into slightly smaller diameter than the normal circumference of the tube 11 for thereby cramping and snugly clamping the clutch fingers 19 against the encompassed perimeter of the inner case tube 12. Yet, by snapping the latch or buckle lever 23 open into the dash line position shown in Figure 3, release of the draw ring 15 is quickly effected and it springs open to release the clutch fingers 19 from their gripping engagement with the tube 12 so that the case tubes can be separated or readjusted.

Conveniently, the same rivets 18 that connect the draw ring 15 to the outer tube 11 of the case are used for securing, at least in part, a carrying handle 30 to the carrying case. To this end, a bearing loop bracket 31 has opposite end portions thereof secured to the outer face of the draw ring 15 as best seen in Figure 3, while the loop of the bearing bracket engages a journal end 32 of the handle. At its opposite end, the handle 30 is secured pivotally by means of a looped bearing bracket 33 engaging an end journal 34 thereof to a continuous handle attaching band 35 as by means of rivets 37. The band 35 is of an inside diameter to more or less snugly engage about the perimeter of the outer of the case tubes 11 as best seen in Figures 1 and 5. Through this arrangement, the handle 30 is located at approximately the center of weight in a substantially balanced manner for ease in carrying the case.

In the modification shown in Figures 6 and 7, the structure and operational details of the carrying case 10' are preferably substantially the same as described in connection with the carrying case 10 and therefore primed reference numerals indicate substantially identical parts for which the description need not be here repeated. However, in this form of the invention, the draw ring band 15' is provided with a somewhat wider or stabilizing extension portion 38 in line with the central or intermediate portion of the ring that is secured by the rivets 18' to the case tube 11' so as to accommodate a bearing bracket 39 which is of a width to support pivotally in effective stable manner a loop type carrying handle 40 having a journal portion 41 pivotally engaged within the bracket 39. Through this arrangement, the second handle attaching band such as the band 35 in Figure 1 is eliminated. Nevertheless, the same rivets by which the draw band or ring is attached to the outer tube of the case are used for attaching the handle in the assembly.

It will be understood that modifications and variations may be effected without departing from the scope of the novel concepts of the present invention.

I claim as my invention:

1. In a telescopic carrying case, a pair of telescopically related tubes, the larger of the tubes having an end portion encompassingly disposed about the smaller of the tubes, a draw ring about said end portion and having means for crampingly engaging it about said end portion, a handle, and common means securing said handle and said draw ring to said end portion.

2. In a telescopic carrying case, a pair of telescopically related tubes, the larger of the tubes having an end portion encompassingly disposed about the smaller of the tubes, a draw ring about said end portion and having means for crampingly engaging it about said end portion, a handle, and common means securing said handle and said draw ring to said end portion, said handle having additional connecting means on the larger of the tubes spaced from said draw ring and disposed in axially fixed relation to said larger tube by said common means.

3. In a telescopic carrying case, a pair of telescopically related tubes, the larger of the tubes having an end portion encompassingly disposed about the smaller of the tubes, a draw ring about said end portion and having means for crampingly engaging it about said end portion, a handle, and common means securing said handle and said draw ring to said end portion, said handle having additional connecting means on the larger of the tubes spaced from said draw ring and disposed in axially fixed relation to said larger tube by said common means, said additional means comprising a second ring encircling the larger of the tubes in permanently closed relationship therearound.

4. In a telescopic carrying case, a pair of tubes each having an end closure at one of its ends and its opposite end open, one of said tubes having an inside diameter for slidingly receiving the second of said tubes, said one tube having the margin of its open end uniformly subdivided by longitudinal slots of predetermined length into a plurality of flexible friction clutch fingers, a split resiliently flexible draw ring band of a width substantially equal to the length of said fingers encompassing the fingers and closing the slots and normally springing open to a larger diameter than the outside diameter of said one tube, a flange, shorter than the thickness of the fingers, along one edge of the ring, substantially contacting the end of the fingers and substantially closing the ends of the slots, means permanently securing said draw ring band intermediate its ends to at least one of said fingers, the open end portion of said one tube telescopically engaging about the open end portion of said second tube and being relatively longitudinally slidably adjustable to vary the length of the case provided by the combined tubes, and a quickly releasable draw latch assembly connected to and between the ends of said draw ring band and operable to draw said draw ring band ends toward one another and thereby tighten the draw ring band about said fingers and uniformly frictionally press said fingers throughout their length against said second tube and to clutch and hold the tubes in adjusted longitudinally adjusted case length relation.

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