Aug. 8, 1933. F. PURDON 1,921,323

EXTENSIBLE HANDLE

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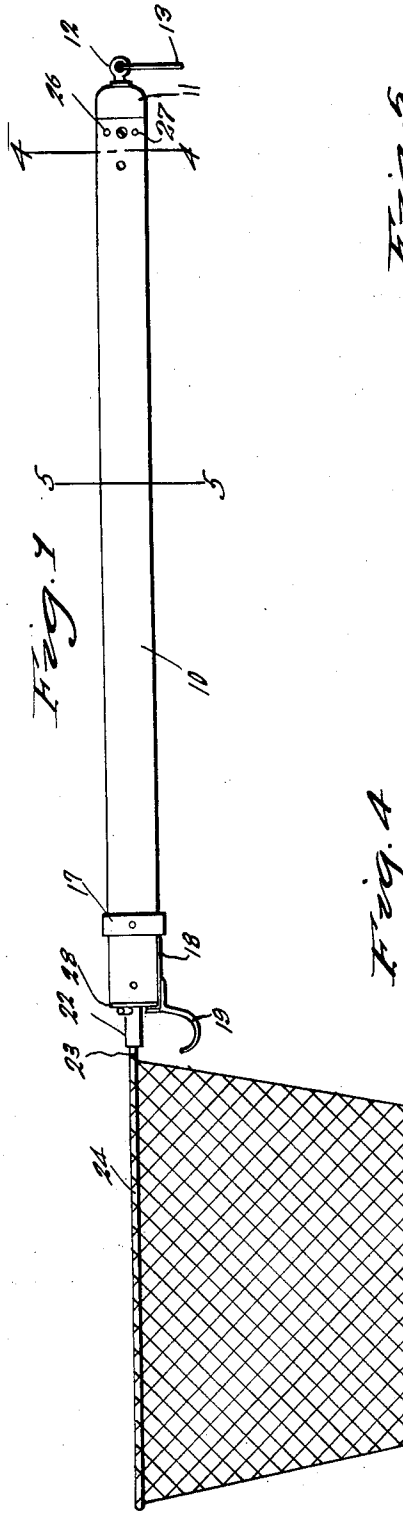


Fig. 1

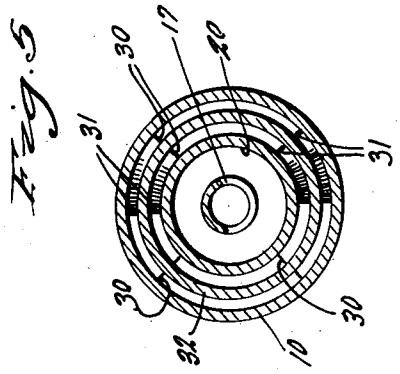


Fig. 5

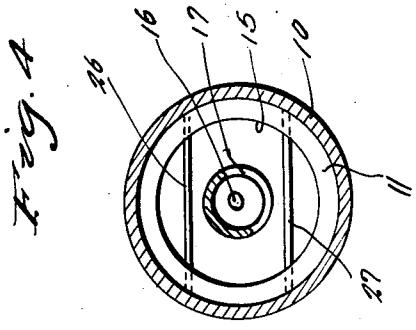


Fig. 4

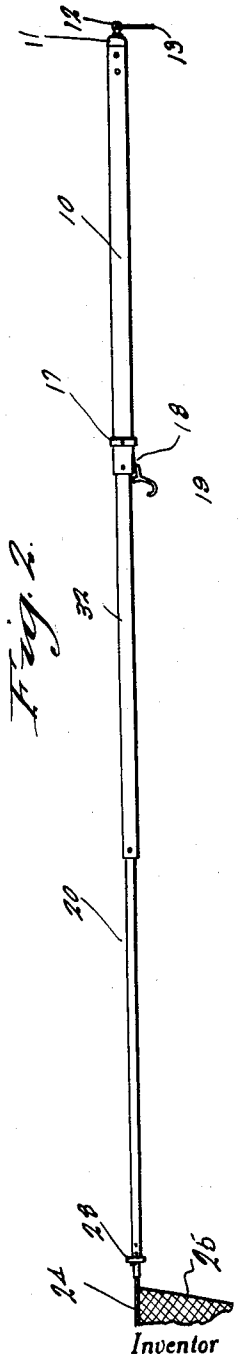


Fig. 2

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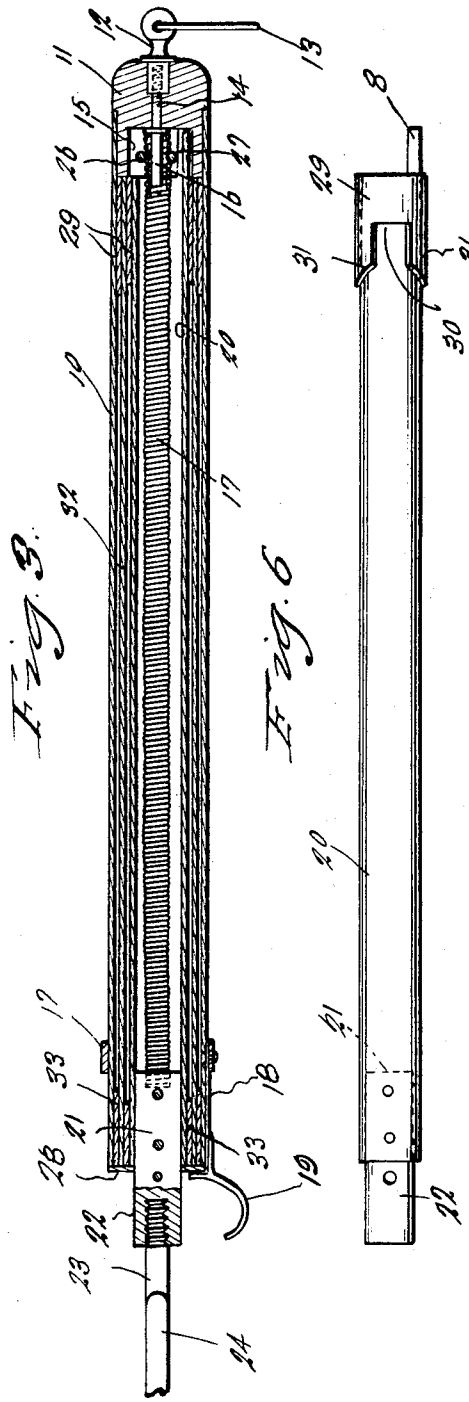


Fig. 5.

Fig. 6.

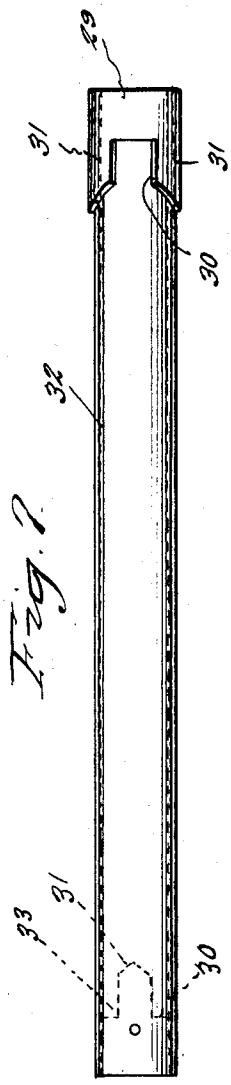


Fig. 7.

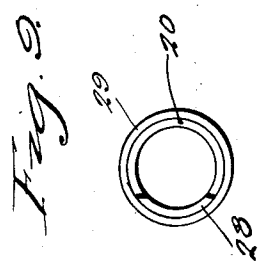


Fig. 9.

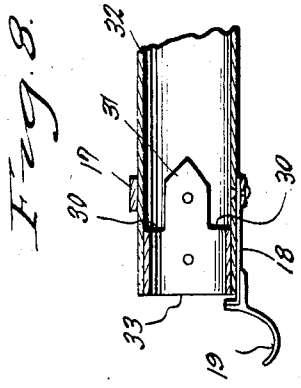


Fig. 8.

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1,921,323

EXTENSIBLE HANDLE

Frank Purdon, Herkimer, N. Y.

Application April 7, 1932. Serial No. 603,868

3 Claims. (Cl. 43—12)

This invention relates to a novel sectional extensible handle for use by fishermen and the like, and it has more specific reference to a structure which is especially, but not necessarily designed as a holder for a crabbing and fishing net.

Briefly stated, the invention relies for its novelty on the particular construction of the companion part of a telescopic spring projected handle structure designed to serve as a compact and convenient holder for crabbing nets and other accessories used by sportsmen, fishermen and the like.

In carrying the invention into actual practice, I have evolved and produced a simplified and economical arrangement which is characterized by efficiency and dependability and capable of fulfilling the requirements of this class of device in a desirable and gratifying manner.

In the drawings, in which like numerals are employed to designate like parts throughout the same:—

Figure 1 is an elevational view showing the handle collapsed for convenient storage and carrying purposes and showing an ordinary crab net attached thereto.

Fig. 2 is a view showing the handle extended for use.

Fig. 3 is a longitudinal sectional view through the handle structure seen in Fig. 1.

Figs. 4 and 5 are transverse cross sections on the line 4—4 and 5—5 respectively of Fig. 1.

Figs. 6 and 7 are detail views of the extensible inner telescoping sections of the handle.

Fig. 8 is a detail view of a coupling clip.

Fig. 9 is an end view of the handle section seen in Fig. 6, observing it in a direction from right to left.

In practice, it has been found satisfactory to use three extensible handle sections to provide the desired length, although any number of sections may be employed. The main and relatively stationary handle section is in the nature of a tube 10 of appropriate length and dimensions. Plugged into the right hand end thereof as seen in Fig. 3 is an appropriate closing cap 11 equipped with a suitably attached fixture 12 to accommodate and carry a finger ring 13. This fixture is held in place by a clamping bolt 14, whose inner end projects into the socketed portion 15 as indicated at the point 16 to serve as a pilot and anchoring stud for the adjacent end of the elongated coiled expansion spring 17.

At the opposite end of the tube is a ring or collar 17 which serves to attach a spring retaining clip 18 in position. Incidentally the numeral 19 designates a finger hook carried by the clip to facilitate operation thereof. The clip obviously serves to hold the three sections of the handle in retracted relationship as seen in Figs. 1 and 3, which is the position of parts when the handle is collapsed for carrying purposes.

The inner tube is distinguished by the numeral 20 as seen in Fig. 6 and secured in the left hand end thereof is a core element 21 having a protruding end portion 22 forming a socket. The socket is screw threaded to accommodate the attaching shank 23 of the ring 24 which obviously carries the net 25. Incidentally, the same socket arrangement is intended to be standardized to accommodate other appurtenances and appliances (not shown).

In addition, the member 21 serves as an abutment for the adjacent end of the coiled spring 17. The opposite right hand end of the spring fits over the stud 16 and passes between the pair of cross pins 26 and 27 which also serve to fasten the closing plug 11 in the adjacent end of the main tube 10. In this connection I call attention to an extension tongue or finger 8 formed on the adjacent end portion of the tube 20 which slides between the socket wall 15 and the adjacent pin 27 to prevent rotation of the tube 20 when said tube is folded or retracted. Then too, there is a shoulder forming washer or disk 28 carried by the left hand end of this tube 20 for incorporation with the spring latch 18 for maintaining all three of the tubular sections telescoped one within the other.

Moreover, to prevent rotation of the tubes when they are extended as seen in Fig. 2, I provide complemental clips, each clip being in the nature of a collar 29 having diametrically opposite keeper notches 30 defining diametric pointed retaining tongues 31. There are two of these clips as seen in Figs. 6 and 7, the same being attached to the right hand or inner end portion of the inner tube 30 as well as the intermediate surrounding tube 32.

These external collar clips 29 cooperate with the internal correspondingly constructed clips 33 secured to the inner left hand ends of the last-named or intermediate tube 32 as seen in Fig. 8, but as before the clips 29 and 33 are similar in construction so that the tongues and notches cooperate in interfitting or interlocked relationship when the tubes are extended as seen in Fig. 2 to hold the various sections of the tubes rigid and against relative rotation at this particular time.

The two clips 29 as seen in Figs. 6 and 7 are

on the outer surfaces of the tubes 20 and 32 while the two clips 33 are provided on the interior of the tube 32 and tube 10 as shown in Fig. 3.

It is evident that when one of the tubes is retracted into telescoping relationship as seen in Fig. 3, and the latch is released, the spring 17 comes into play to project the extensible or slidable tubes 20 and 32 to the operating relationship illustrated in Fig. 2.

The gist of the invention is in the provision of a plurality of cooperating telescopically arranged tubes, two, three or more wherein spring means is confined within the innermost tube and cooperable therewith in projecting the relatively movable tubes to extended position; together with a latch for retaining the tubes in retracted state when a small handle is desired, or whenever it is stored for convenient carrying purposes.

The innermost spring pressed tubular member is provided at its projectible end for the coupling or fixture so made as to accommodate the crabbing net or other device used by sportsmen, fishermen and the like.

Novelty is also predicated upon the arrangement whereby the innermost tube cooperates with the pin 27 as seen in Fig. 3 to prevent rotation of this particular tubular section when it is retracted into the main tube 10, so as to permit a short handle to be employed if occasion demands.

Further, the provision of the notched and tongue-equipped collars or clips is important, in that these cooperate in interlocking association in holding the tubular sections together and against relative rotation when said sections are extended the full position depicted in Fig. 2.

The present embodiment of the invention has been disclosed in considerable detail merely for the purpose of exemplification since in actual practice it attains the features of advantage enumerated as desirable in the statement of the invention and the above description.

It is to be understood that by describing in detail herein any particular form, structure or arrangement, it is not intended to limit the invention beyond the terms of the several claims, or the requirements of the prior art.

Having thus described my invention, what I claim as new is:—

1. An extensible handle construction of the class described comprising a relatively stationary outer tube provided on its interior at one end with a stop clip, a socketed plug fitted into the opposite end of said tube, a pair of connecting pins passing through the tube and a socketed portion of the plug, a bolt mounted centrally in the plug and having its inner end portion projecting into the adjacent end of the outer tube, a relatively slidable inner tube mounted for telescopic sliding in said outer tube and having a stop clip at one end for cooperation with the first-named stop clip, a socket coupling member secured rigidly in the projectible end of said inner tube and constructed to accommodate a detachable net, an elongated expansion projection spring confined in said inner tube, having one end cooperating with said bolt, having its opposite end bearing against said coupling member, and a retaining latch carried by the outer end of the outer tube and cooperating with the adjacent end of the inner tube to hold said inner tube retracted in the outer tube against the tension of said spring.

2. An extensible handle construction of the class described comprising a relatively stationary outer tube provided on its interior at one end with a stop clip, a socketed plug fitted into the opposite end of said tube, a pair of connecting pins passing thru the tube and a socketed portion of the plug, a bolt mounted centrally in the plug and having its inner end portion projecting into the adjacent end of the outer tube, a relatively slidable inner tube mounted for telescopic sliding in said outer tube and having a stop clip at one end for cooperation with the first-named stop clip, a socket coupling member secured rigidly in the projectible end of said inner tube and constructed to accommodate a detachable net, an elongated expansion projection spring confined in said inner tube, having one end cooperating with the bolt, having its opposite end bearing against said coupling member, a retaining latch carried by the outer end of the outer tube and cooperating with the adjacent end of the inner tube to hold said inner tube retracted in the outer tube against the tension of said spring, the inner tube being provided adjacent said plug with an extension projectible in to the socket of the plug and cooperating with the adjacent pin to prevent rotation of the inner tube within the outer tube when said tubes are collapsed.

3. A collapsible and extensible crab net handle of the class described comprising a main relatively stationary outer tube provided at its outer end with an internal stop clip, said clip being in the form of a collar having diametrically opposite notches and intervening tongues, a relatively slidable inner tube arranged in said outer tube, a projection spring therefor, a retaining clip therefor, said inner tube being provided on its inner end with a corresponding stop clip for cooperation with said first-named clip.

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