Dec. 24, 1968 L. H. PLATT, JR 3,417,732

FLAG DISPLAY AND HOUSING POLE

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FIG. 1.

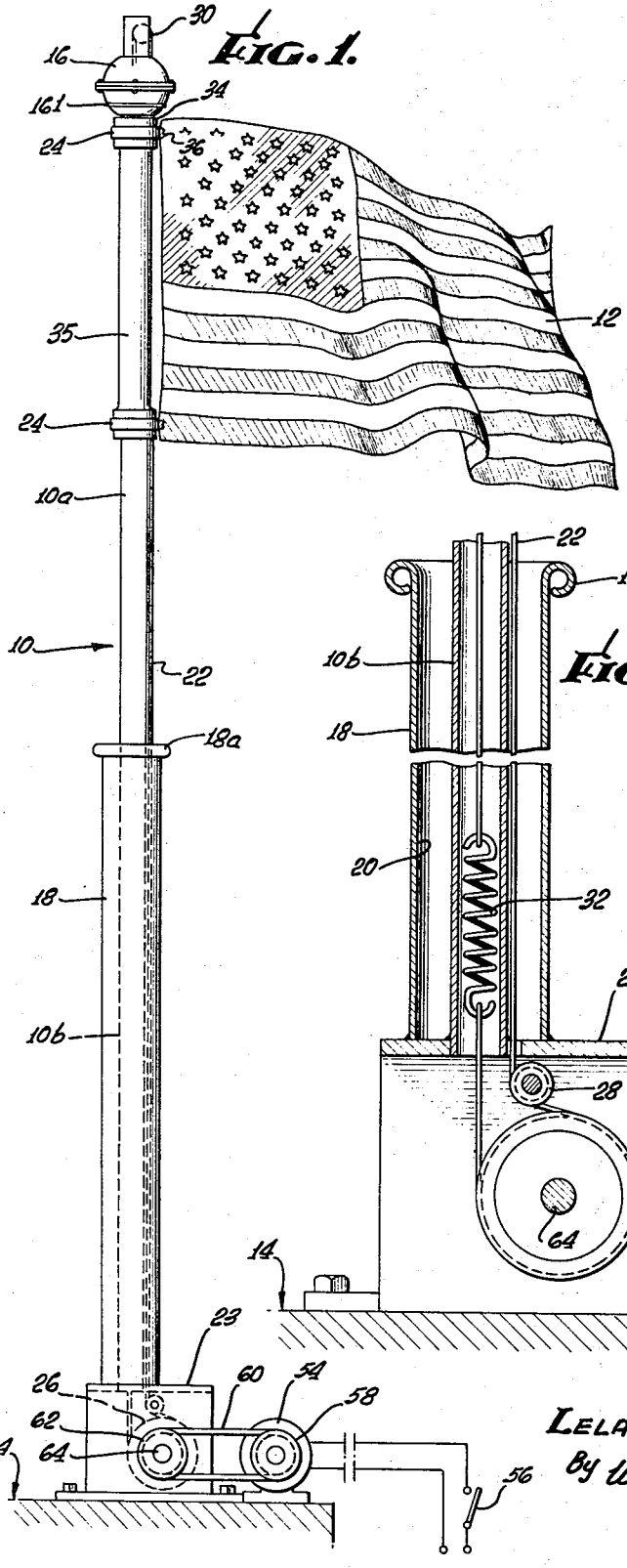
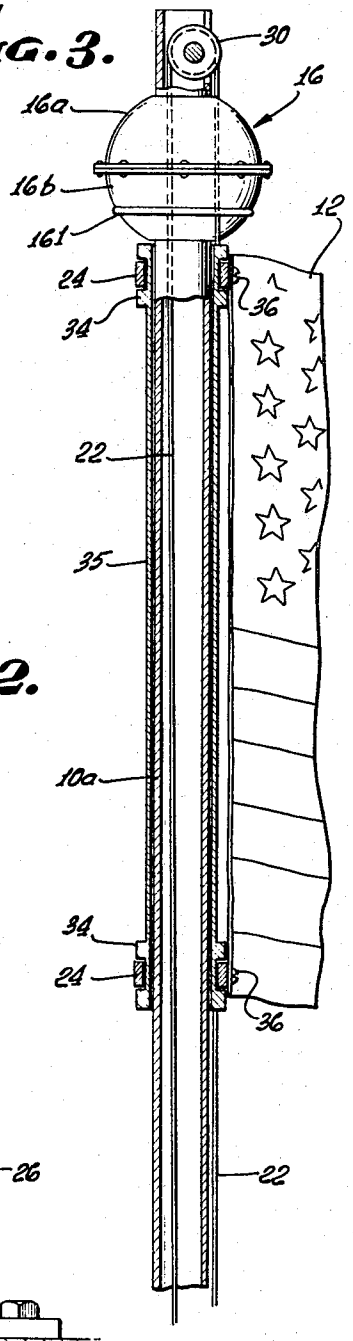


FIG. 2.

FIG. 3.



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FIG. 4.

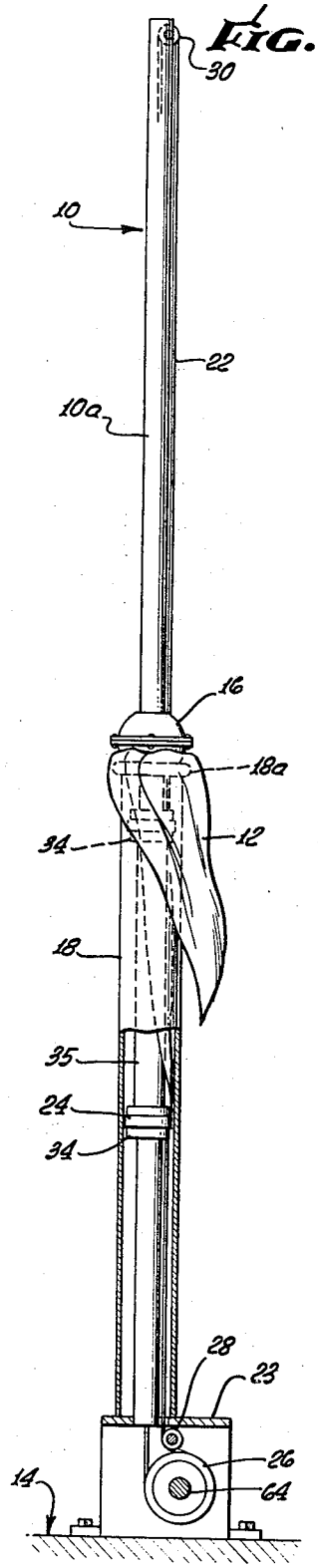


FIG. 5.

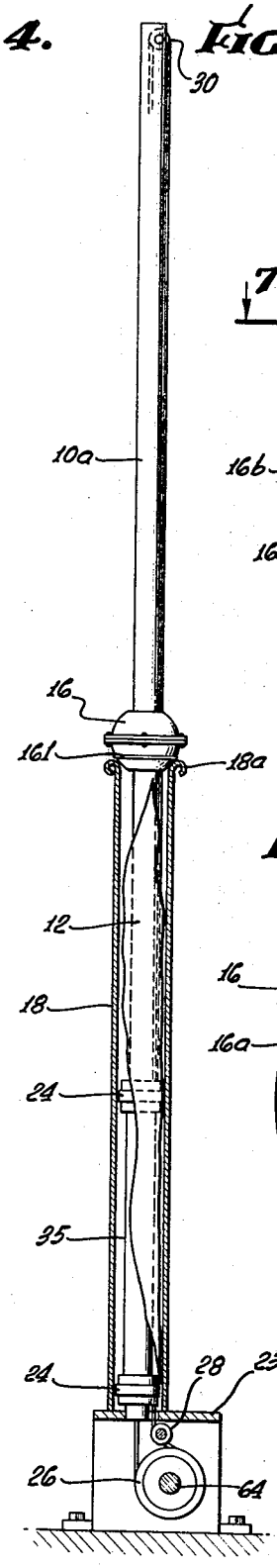


FIG. 6.

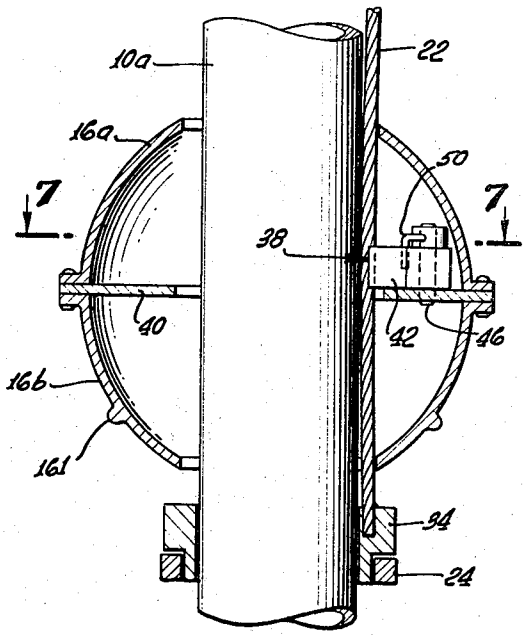
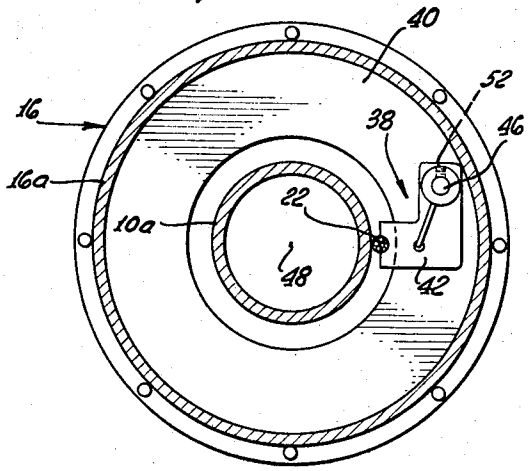


FIG. 7.



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FLAG DISPLAY AND HOUSING POLE

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6 Claims. (Cl. 116—173)

ABSTRACT OF THE DISCLOSURE

The invention is directed to novel arrangements for the mounting and manipulation of a flag in association with a pole for normal display in elevated position, and providing about a lower or bottom extent of the pole an annular flag storage chamber into and out of which the flag is displaceable by manipulation of a flag carrying line.

This invention relates to flag pole apparatus and, more particularly, to apparatus for alternately displaying and storing a flag.

The invention contemplates apparatus operable from a remote location for displaying a flag and for storing such flag at times when display is inappropriate or undesirable, including means associated with a flag pole into which the flag may be drawn and covered for protection against the elements.

The desire to display a flag is often tempered by the realization that places for prominent display are usually elevated and generally precarious, for example, the top of a building adjacent the edge of the roof. The inconvenience and expense associated with the twice daily effort to attach, raise, lower, detach and store the flag have discouraged more frequent flag display.

Numerous inventions in the past have been made to ease the effort involved in flag display. In general, the proposed solutions involve a storage space within, above or below the flag pole and range from an extra large ball fixed on the top of the pole to bulky storage lockers at the base of the pole. These expedients have not found widespread acceptance because of the unsightliness of the apparatus required, which spoils the simple symmetry of the pole, or in the case of internal storage devices, the expense involved in fabricating suitable pole structures. The provision of a slot in a conventional flag pole, e.g. one of tubular aluminum is a considerable expense and a slotted chamber in a wooden flag pole is a practical impossibility.

In the present invention aesthetic and practical disadvantages of the prior art are overcome. Easily fabricated apparatus, affording the traditional symmetry of flag poles and providing a weather tight enclosure for the flag is herein disclosed. Moreover, the present flag pole apparatus is suitable for use in an inconveniently accessible place because the invention permits flag manipulation from an office within a building on which the flag pole is mounted.

Accordingly, this invention provides a flag pole apparatus including a pole carrying a flag on an upper portion and, on a lower portion of the pole, a receptacle spaced away from and circumscribing the lower portion to define therewith a flag receiving chamber and means for raising and lowering the flag into and out of the chamber.

The invention further provides for remotely controlled raising and lowering of the flag and the automatic closing of the chamber opening following lowering of the flag to prevent ingress of dirt and precipitation.

The invention will be further described in conjunction with the attached drawings wherein:

FIG. 1 is a view in side elevation of the flag pole apparatus of the present invention;

FIG. 2 is an enlarged view in vertical section of the lower portion of the flag pole apparatus shown in FIG. 1;

FIG. 3 is an enlarged view in section of the upper portion of the flag pole apparatus shown in FIG. 1;

FIG. 4 is a side elevation, partly in section, showing the flag partly enclosed in the flag receiving chamber;

FIG. 5 is a view similar to FIG. 4 showing the flag completely enclosed with the flag receiving chamber;

FIG. 6 is an enlarged sectional view in side elevation of the closure ball shown in FIG. 1; and

FIG. 7 is a section taken on line 7—7 in FIG. 6.

Referring now to the drawings in detail, there is shown in FIG. 1 a flag pole apparatus including a tubular flag pole generally indicated at **10** carrying a flag **12** standing on a base **14** which may be a roof, including the difficultly accessible peak, a sill, rail, ledge, or the ground or other support on which a pole can be mounted for flag display. The flag is shown elevated to upper portion **10***a* of the pole and is surmounted by closure ball **16**. Lower portion **10***b* of the pole is circumscribed by receptacle **18** in the form of a tubular section of greater diameter spaced from the pole to define a flag receiving chamber **20**, as best seen in FIG. 2. The receptacle **18** is generally concentric with pole **10** and is provided with a rolled shoulder **18***a* at its uppermost extension. Line **22** extends along the pole and carries the flag. At the base of pole **10** housing **23** encloses a line drive mechanism including sheave **26** and idler wheel **28**. Line **22** passes around sheave **26** and along the exterior of pole **10** to sheave **30** at the top of pole **10** and then into the interior of the pole and downwardly to sheave **26**. Also in FIG. 2, line **22** is shown with a spring insert **32** to tension the line and to maintain its frictional contact with sheaves **26** and **30**.

Referring now to FIG. 3, secured to line **22** to carry the flag is a flag support means which includes rings **24** rotatable 360° in raceways **34** at opposite ends of sleeve **35** journaled on pole upper portion **10***a*. Suitable fasteners **36** secure the flag to rings **24**. The flag is thus freely rotatable about the pole and is separated by the sleeve from possible entanglement with or such interference by the line **22** as might prevent smooth folding and unfolding of the flag into and out of chamber **20**.

An important feature of the present invention is the automatic closure of the flag receiving chamber on the lowering of the flag. Means for closing the chamber, with reference to FIGS. 6 and 7 include the closure ball **16** which surmounts the upper ring and comprises a pair of hemispherical sections **16***a* and **16***b* joined at their respective flanges. Within the closure ball, a drag mechanism **38**, carried by support **40**, is secured between the sections. The drag mechanism comprises a shoe **42** having a snubbing surface bearing frictionally and slidably against line **22**. The shoe, pivotally secured at pin **46**, is biased toward axis **48** by spring **50**, adjustable with set screw **52**.

A further important feature of the present invention is the capacity of the apparatus to be operated from a location remote to the pole. The flag pole can be at the roof of a building and the flag carrying line can be extended to any remote location or means for reversely actuating the flag carrying line can be provided in an office one or many stories below the flag display point. Typically a reversible motor **54** having reversing switch **56** at the office location drives sheave **58** to move line **60** appropriately. Line **60** in turn drives sheave **62**, coaxially mounted with sheave **26** on axle **64**, to adjust flag carrying line **22** to raise or lower the flag.

With reference to FIGS. 1, 4 and 5, the flag is raised or lowered by rotating sheave **26** by adjustment of line **60** leading from the remote control such as switch operated motor **54** to turn coaxial sheave **62** and axle **64**.

Clockwise revolution of sheave **26** lowers the flag toward receptacle **18**. By frictional engagement between the snubbing surface of shoe **42** and line **22**, ball **16** simultaneously moves downward with the flag. With continued downward movement, ring **24** is received in the receptacle and the flag is drawn and folded into the annular chamber **20**. Ball **16** reaches receptacle shoulder **18***a* and stops there as the frictional engagement of the snubber surface and line **22** permits slippage of the line through the ball. The congruence of ball **16** and shoulder **18***a* serves to assist the shaping of the flag into a form easily receivable in the receptacle. Continued downward movement of the flag completely encloses the flag within chamber **20**. The ball may be provided with an annular lip **161** seatable on shoulder **18***a* to exclude dirt and water from the chamber. Elevation of the flag is accomplished by reverse actuation of the line **22** by counterclockwise rotation of sheave **26**. Ball **16** is lifted by line **22** upward to the sheave **30** where again, frictional resistance notwithstanding, line **22** slips through the ball. The ornamental ball is in place atop the pole during flag display but at other times serves to protect the flag from exposure.

In summary, the invention affords a flag pole apparatus of traditionally symmetrical appearance having a ball which is both decorative and functional; having the storage chamber as inconspicuous as it is efficient; and wherein remote control operation makes pole location immaterial.

I claim:

1. Flag pole apparatus comprising a vertical pole and a flag to be raised and lowered alongside the pole, a tubular member surrounding and annularly spaced from a lower extent of said pole to form therewith an annular chamber for reception of said flag, support-guide means mounted on the upper end of said pole, a line operatively associated with said support-guide means and extending longitudinally of said pole and into said chamber and operable to raise and lower said flag, and means connecting said flag to said line whereby the flag automatically and fully enters said chamber upon being pulled down thereinto from normal exposed distension, and automatically restores to normal distension when hauled up out of the chamber.

2. Apparatus according to claim **1**, in which the top of said tube has an annular outwardly curved surface for smooth guidance of the flag into the chamber from any direction.

3. Apparatus according to claim **1**, in which said connecting means mounts the flag for bodily wind conformed rotation about the pole.

4. Apparatus according to claim **3**, in which said connecting means comprise rings carrying the flag and rotatable about the pole.

5. Apparatus according to claim **1**, in which said line extends through said chamber and carries about the flag a pole-surrounding closure which seats upon the top of said tube following entry of the flag into said chamber.

6. Apparatus according to claim **4**, in which said connecting means includes a sleeve carrying said rings below said closure, the sleeve, rings and flag being receivable within said chamber.

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U.S. Cl. X.R.

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