July 25, 1961 F. A. LAYMON 2,993,222

FEATHER DUSTER

Filed March 17, 1959

Fig. 1.

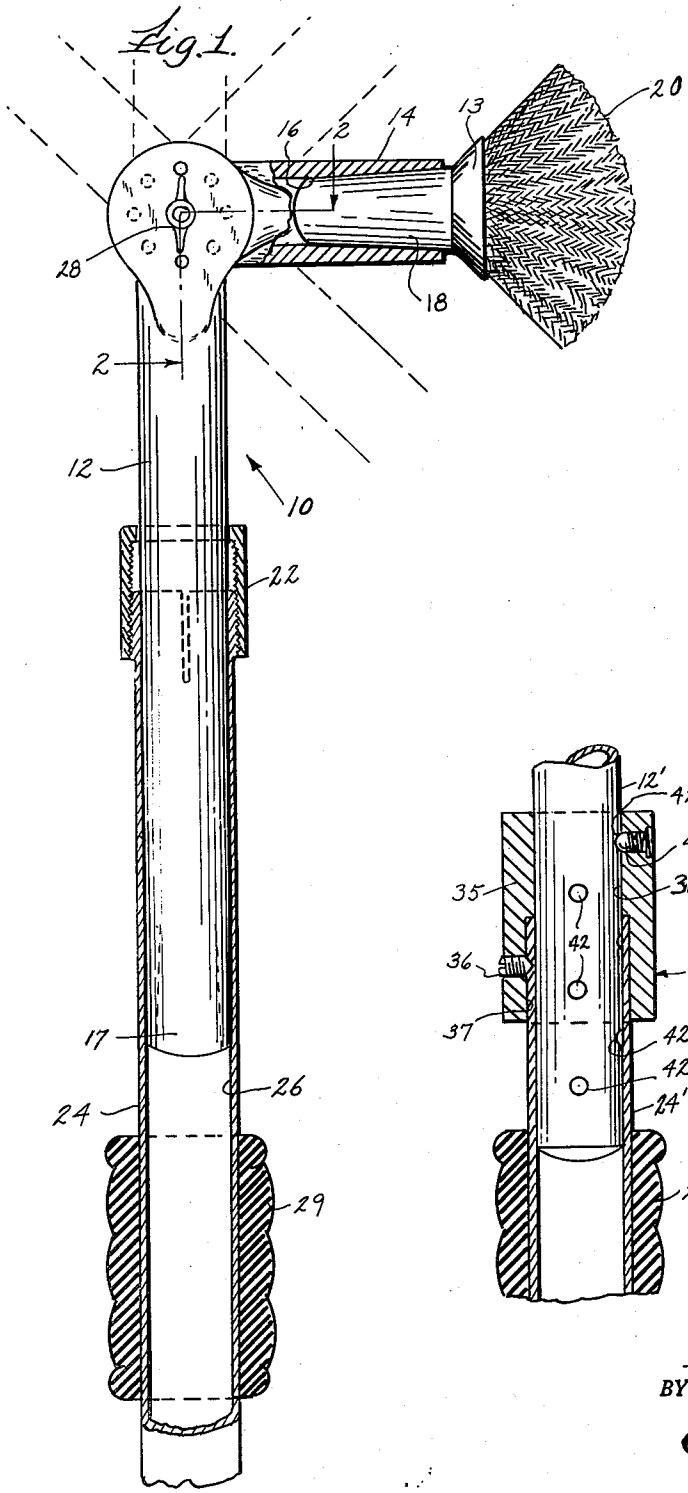


Fig. 2.

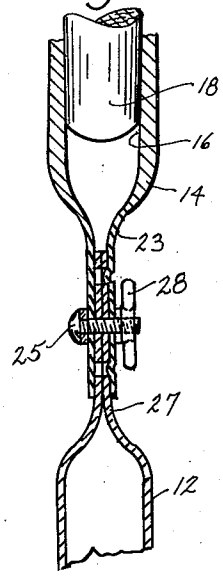


Fig. 3.

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FEATHER DUSTER

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1 Claim. (Cl. 15—234)

This invention relates to maintenance equipment and more particularly to a multi-section duster for various types of institutions.

It is an object of the present invention to provide a manually operated duster for use in various industrial, commercial, and educational institutions for reaching high fixtures, moldings, and the like without the necessity for having to climb a ladder or step upon other elements to gain access thereto.

Another object of the present invention is to provide a portable duster assembly that can be conveniently carried from place to place, is completely collapsible when not in use, and which may be readily used to reach the tops of ceiling mounted fixtures with a minimum of effort.

Other objects of the invention are to provide a three section duster with suitable connecting means bearing the above objects in mind which is of simple construcion, has a minimum number of parts, is inexpensive to manufacture and efficient in operation.

For other objects and for a better understanding of the invention, reference may be had to the following detailed description taken in conjunction with the accompanying drawing, in which:

FIGURE 1 is a side elevational view, with parts broken away, of a duster made in accordance with the present invention;

FIGURE 2 is an enlarged fragmentary cross sectional view taken along line 2—2 of FIGURE 1; and

FIGURE 3 is a fragmentary view of the extension member shown in FIG. 1, with a modified type of connector.

Referring now more in detail to the drawing, a duster assembly **10** made in accordance with the present invention is shown to include a generally tubular handle having an elongated tubular portion **12**, with an adjustable related terminal portion **14** connected at one end thereof and having an elongated tapered bore **16** extending therethrough. A feather cluster **20** mounted upon a base **13** with an elongated tapered wooden shaft portion **18** may thus be conveniently mounted within the longitudinal tapered bore **16** at the terminal end, as shown. In FIGURE 1, the feather cluster is shown mounted in the terminal end **14** arranged perpendicularly so as to gain access to the tops of various fixtures, while such feather cluster may also be mounted in the opposite tapered end **17** of the elongated straight portion **12** and the perpendicularly related portion **14** can be used as the carrying handle.

An extension member **24** having a longitudinal bore **26** may be conveniently attached to the straight section **12** by means of an internally threaded tapered ferrule or retaining nut **22**, in the manner shown in FIGURE 1, extension **24** having external threads, engageable within said internally threaded ferrule. When so connected, the extension **24** effectively increases the length of the duster, and the feather cluster **20** may be conveniently mounted upon the adjustable related terminal portion **14**, as shown in FIGURE 1, or within the tapered bore in the free end of the extension member **24**, not shown. In all cases, the frictional engagement between the tapered wooden shaft **18** of the feather cluster and the interior surface of the tubular handle or extensions is sufficient to retain the parts in the desired assembled relationship. It thus becomes a simple matter to reach high places,

moldings, and fixtures in buildings with high ceilings without the necessity of having to use a ladder or other elevating means. The adjustable terminal end portion **14** has its inner end flattened at **23** with its walls spaced apart from each other to receive the flattened walls of the flattened upper end **27** of said shaft **12**, and pivotally mounted upon bolt **25** extending transversely through the flattened upper end portion **27** of said shaft **12** which has its walls in adjacent contact for swinging or turning movement in a vertical plane. The end portions **23** and **27** are clamped upon said bolt **25** by a wing nut **28**. It is obvious that the terminal end **14** may be turned in any angular desired position. A rubber hand grip **29** is shown secured to said shaft **24**.

In FIG. 3 a modified type of connecting means **30** is shown connecting shafts **12'** and **24'** adjustably together. A collar **35** is mounted upon the upper end of extension **24'** and secured thereto by set screw **36**. The collar **35** has a lower bore **37** to fit up shaft **24'**, and a smaller upper bore **38** to fit the tubular shaft **12'**. A spring-pressed detent **40** is arranged in said collar **35** engaging in one of a plurality of recesses **42** arranged in the tubular shaft **12'** and serves to hold the shaft **12'** at definite positions or adjustments as desired by the user.

While various changes may be made in the detail construction, it shall be understood that such changes shall be within the spirit and scope of the present invention as defined by the appended claim.

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

A portable duster comprising, in combination, a feather cluster mounted upon a base integrally secured with a relatively short, rigid, tapered wooden shaft with a straight central axis, said wooden shaft effecting a wooden handle with a straight central axis when said cluster and base are used as a unit without other extension means secured thereto, a straight upper tubular section, a tubular elongated two-piece sectional duster extension, said duster extension comprising a straight lower tubular section with external threads at the upper end portion thereof, a straight intermediate section having cylindrical lower and intermediate portions and a longitudinally flattened upper end portion with its terminal end wall flattened with opposite sides thereof in contact with each other, said cylindrical lower and intermediate portions of said intermediate section being of substantially the same external diameter as the internal diameter of said lower tubular section and telescopically received therein, a coupling means having threads in the lower portion thereof for selectively securing said lower tubular section to said intermediate tubular section, the upper end of said intermediate section being closed and having a longitudinal flattened terminal end of disc shape, the lower end of said intermediate section having a tapered bore therein suitable to selectively receive therein in axial alignment said tapered wooden shaft when so desired, said straight upper tubular section having an outer end portion with a solid cylindrical exterior wall, a tapered bore therein and an inner end portion with a longitudinally flattened portion with its terminal end walls spaced apart from each other to receive said flattened upper end portion of said intermediate section therebetween, said wooden shaft selectively slidable and frictionally receivable within said tapered bore of said upper section and in said tapered bore in said intermediate section according to the desired use thereof, each of said disc shaped flattened portions of said intermediate section and said upper tubular section having a bore extending transversely therethrough and rotatably mounted upon a threaded bolt having a head at one end and its threaded portion extending

through said bores and selectively clamped by a wing nut with internal threads applied to said threaded portion for clamping and arresting rotation of the disc shaped portions between the upper and intermediate sections, a plurality of openings in said disc shaped flattened portion of said intermediate section, a plurality of protrusions on the inner surface of one of said spaced apart disc shaped walls of said upper tubular section in registration with at least two of said openings in said flattened portion of said intermediate section to assist said bolt and wing nut in holding said upper tubular section in any angular position arranged and clamped thereby.

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