June 20, 1961 R. A. NOAH 2,989,329

EXTENSIBLE LEGGED FILM FILE CASE AND PROJECTOR TABLE

Filed Aug. 28, 1958

FIG. 1

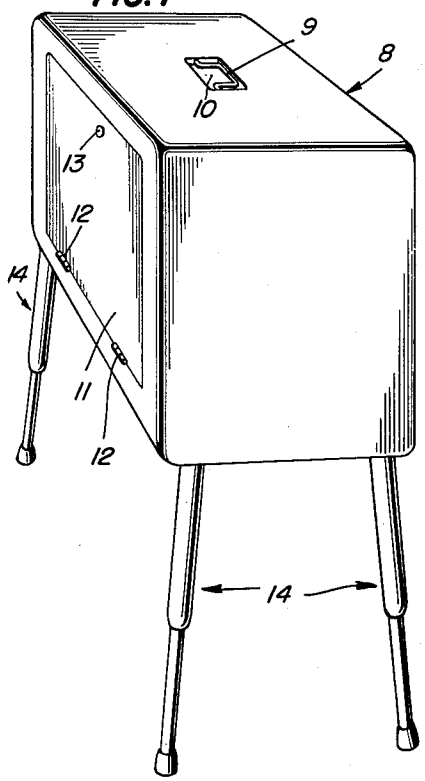


FIG. 2

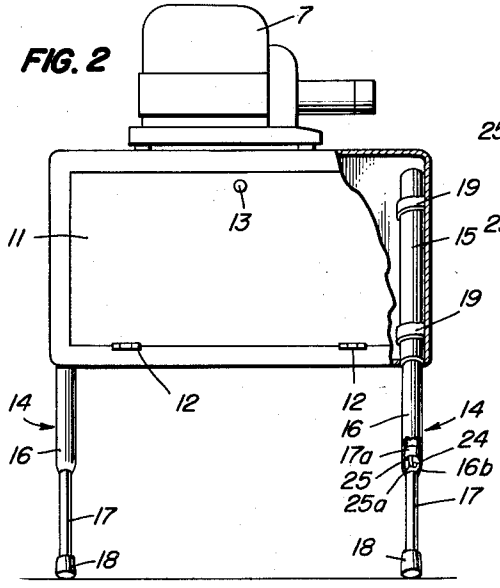


FIG. 3

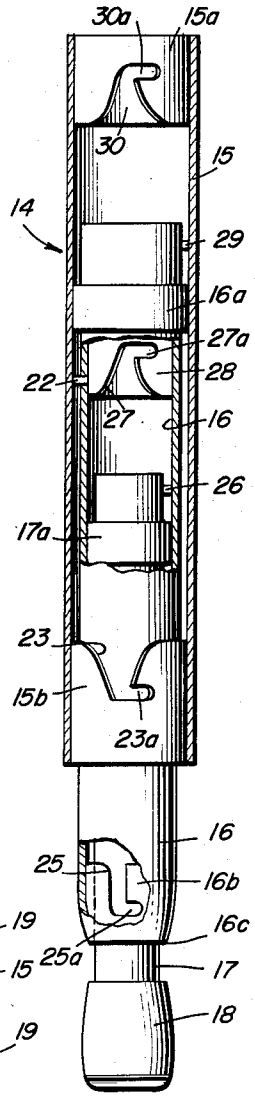
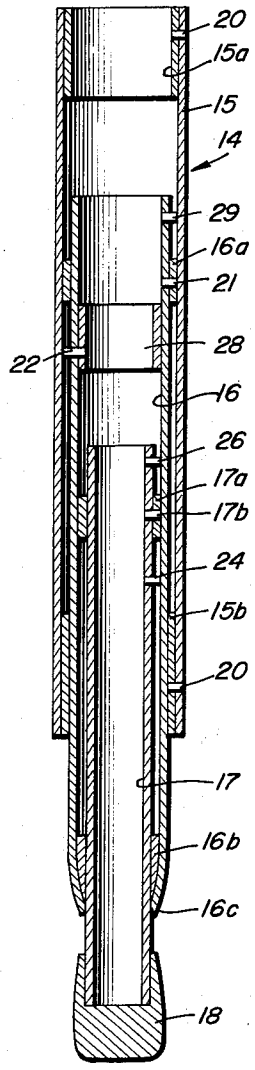


FIG. 4



INVENTOR

Ross A. Noah

BY Eugene E. Stevens

Eugene E. Stevens III

ATTORNEYS

United States Patent Office 2,989,329
Patented June 20, 1961

2,989,329

EXTENSIBLE LEGGED FILM FILE CASE AND PROJECTOR TABLE

Ross A. Noah, 927 Saracen Road, Santa Rosa, Calif.

Filed Aug. 28, 1958, Ser. No. 757,801
2 Claims. (Cl. 287—58)

My invention relates to a novel carrying case for transporting movie film and other articles and which is also adapted to serve as a projector supporting stand or table, the latter having novel extensible legs which can be housed within the case to facilitate transportation and storage of same.

Briefly and generally stated, the invention contemplates a device for the purpose specified and for other purposes, which is simple in construction, strong and durable, and which provides means whereby extensible sections of the legs can be securely locked in either extended or retracted relationship with respect to the case.

Also contemplated, is a device of this character which is neat and attractive in appearance and will contribute materially to the appearance of a home.

Other objects and advantages of the invention will be readily understood and appreciated by those versed in the art upon reference to the accompanying drawing which illustrates a now preferred example of my invention. It is to be understood, however, that the drawing disclosure is to be taken as illustrative, rather than limitative, and that my inventive concept is susceptible of other mechanical expressions within the spirit and scope of the subject matter claimed hereinafter.

In the drawing, wherein the same reference characters have been used to designate the same parts throughout the several views—

FIG. 1 is a perspective view of a device embodying my invention;

FIG 2 is a side elevational view partly broken and partly in section, and illustrating the device in use as a projector stand for a motion picture projector;

FIG 3 is a view partly broken and partly in longitudinal section illustrating the novel leg construction; and

FIG. 4 is a longitudinal sectional view of one of the legs taken approximately at right angles to FIG. 3.

Referring to the drawing by reference characters, numeral **8** indicates a case or cabinet for the filing of reels of movie film, etc., the same having a hinged carrying handle secured to its top and located in a recess **10** thereof so that the handle can be folded down out of the way when, for instance, the unit is used to support a moving picture projector **7**, as indicated in FIG. 2.

FIGS. 1 and 2 of the drawing also show the cabinet or case **8** as having one side providing a door **11** which is hinged adjacent the casing base as indicated at **12**, there being provided a finger piece or lock element **13** to maintain the door closed and to facilitate manipulation of the same.

The extensible legs **14** which project from the bottom of the cabinet are generally indicated by reference character **14** and as will be more clearly understood later on, these legs are adapted to be completely received in the cabinet or case **8** as suggested in FIG. 2.

Since the structure and mounting of each of the legs **14** is the same, a description of one will suffice for all. Thus, referring to FIGS. 3 and 4, it will be noted that each leg **14** comprises an upper tubular section **15** which is secured by interior case wall-carried bands **19**, each leg section **15** being open through the bottom of the case as indicated in FIG. 2. The shiftable telescoping sections of the legs **14** comprise the intermediate tubular section **16**, which telescopes into section **15**, and the outer or lower section **17** which telescopes into section

16 and carries the rubber or other anti-friction tip **18** at its outer end, as indicated in the drawings.

In carrying out the invention, I provide each upper case or cabinet-carried leg section **15** with an upper interior collar **15***a* and a lower interior collar **15***b* which are suitably secured in place by set screws **20**, or otherwise. The intermediate leg section **16** which slides in section **15** in spaced relationship to the interior surface of the latter, is in part guided by the lower collar **15***b* of the leg section **15**, and in part by an exterior stop collar **16***a* which is secured to section **16** inwardly of its upper end by set screw **21** as shown.

The lowermost leg section **17** is spacedly centered for sliding movement in the intermediate leg section **16** by means of an upper exterior stop collar **17***a*, secured to section **17** by a pin **17***b*, and in conjunction the lower collar **16***b* which is interiorly secured, as at **16***a*, to the intermediate leg section **16**.

It is to be noted from an inspection of FIG. 3 that the upper collar of leg section **15** has its lower edge cut with a bayonet slot **30** providing a lateral pin seating extension **30***a*; and that its lower collar has a similar slot **23**, but located in its upper edge and providing a pin-seating extension **23***a*. The function of these bayonet slots **30**, **23** will be explained later on along with the function of the similar bayonet slots **27**, **25** (see FIG. 3) which are provided in the lower and upper edges, respectively, of the internal collars **28**, **16***b* of the intermediate leg section **16**.

When the leg sections **16**, **17** are fully extended, the upper exterior collar **17***a* of the lower section **17** will rest on the upper end of the interior collar **16***b*. With the parts in this position, the fixed and outwardly extending pin **24** of section **17** will have come to rest on the lower edge of the bayonet slot **25** of collar **16***b* and by a twist action can be finally located in the lateral extension **25***a* of said slot, so as to maintain **16**, **17** against relative longitudinal movement.

Similarly, when the intermediate section **16** has been pulled out until its upper exterior collar **16***a* rests on the upper end of the lower interior collar **15***b* of upper section **15**, the fixed and exteriorly projecting pin **22** of section **16** will rest on the lower edge of the bayonet slot **23** of collar **15***b*. Thus, a twist of section **16** in the direction of the lateral extension **23***a* of slot **23** will lock section **16** against longitudinal movement. Thus, it will be understood, the legs **14** are firmly retained in extended position by reason of the pin and collar slot provided connections noted.

When the extensible leg sections **16**, **17** are to be housed in the casing-carried upper section **15**, the leg section **17** is given a twist to free its pin **24** from the slot **25**, **25***a* of the collar **16***b* whereupon the outer leg section **17** is slid upwardly until its collar **17***a* engages the lower end of the interior collar **28** of the intermediate leg section **16**. When this happens, the fixed outwardly projecting pin **26** of section **17** above its collar **17***a* will be at the inner edge of the bayonet slot **27** of the upper collar **28** of section **16**, and can be readily located in the lateral slot extension **27***a* by a twist of section **17** in that direction. Upon accomplishment of this, the rubber tip **18** will be outwardly of but adjacent the lower end of intermediate section **16**.

Next the intermediate section **16**, with the lower section **17** completely housed therein except for tip **18**, is actuated inwardly until its exterior collar **16***a* engages the lower edge of the upper interior collar **15***a* of leg section **15**. Now the fixed outwardly extending pin **29** of intermediate section **16**, which is located above its collar **16***a*, will engage the upper edge of the bayonet slot **30** of the outer section collar **15***a*. A twist of section **16** in the direction of the lateral extension **30***a*

of slot **30** serves to lock section **16** against outward movement.

It is to be understood that when the leg sections are fully telescoped into one another, the tips **18** will project from the bottom of the case **8** slightly so as to provide supports for same, such as are frequently employed with luggage and other items to protect the bottom thereof from wear.

Having thus described my invention, what I claim is:

1. In a supporting leg for a combined film file case and projector supporting unit or the like, said leg providing extensible, telescoping outer, intermediate, and inner sections of which the outer and intermediate sections have a circular internal cross section, with the intermediate and inner sections being also circular in external cross section, so as to admit of relative rotation of the sections, the outer one of said sections adapted to be secured to a case, the intermediate and inner sections being sufficiently smaller diametrically than the surrounding section so as to be spaced from the inner wall surfaces of the latter when the sections are concentrically assembled, and an inner section-provided foot extension which projects outwardly beyond the outer end of the intermediate section when the inner section is fully inserted thereinto; the improvement which comprises cooperating internal and external bearing collars secured in longitudinal end to end alignment to different adjacent ones of said sections with the internal collars fixedly located adjacent each end of the outer and intermediate sections and having bearing-providing inner ends, the external collars fixedly secured to the intermediate and inner sections and spaced inwardly of the respective inner ends of the latter, each end of the exterior collars providing a continuous and uninterrupted bearing for contiguous load-sustaining engagement with the opposed bearing ends of the internal collars of the adjacent surrounding section, the bearing-providing ends of each of said interior and exterior collars being wholly in a plane normal to the longitudinal leg axis, the bearing-providing end of each interior collar being interrupted only by the axially extending entry end of a bayonet slot which provides a laterally extending inner end, two pins carried by and projecting outwardly from each of the intermediate and inner sections, said pins respectively spaced outwardly from opposite bearing ends of the related external collars a distance corresponding to the spacement of the related lateral bayonet slot end inwardly from the bearing end of the opposed internal collar, whereby any one of the pins, having been engaged with the bearing end of the opposed internal collar, can be readily engaged in the latter's bayonet slot entry by relative rotation of the related sections in either direction and thereafter located in the lateral bayonet slot end to retain the opposed internal and external collar-provided bearing ends in load-sustaining engagement.

2. In a supporting leg for a combined film file case and projector supporting unit or the like, said leg providing extensible telescoping outer and inner sections, the outer section having a circular internal cross section and the inner section a circular external cross section, the outer section adapted to be secured to a case, the external diameter of the inner section being sufficiently small so that the inner section will be spaced from the inner wall surfaces of the outer section when the sections are concentrically assembled, and an inner section-provided foot extension which projects outwardly beyond the outer end of the outer section when the inner section is fully inserted thereinto; the improvement which comprises cooperating internal and external bearing collars secured in longitudinal end to end alignment to outer and inner sections respectively, with the internal collars fixedly located adjacent each end of the inner section and having bearing-providing inner ends, the external collar fixedly secured to the inner section and spaced inwardly of the inner end of the latter, each end of the exterior collar providing a continuous and uninterrupted bearing for contiguous load-sustaining engagement with the opposed bearing ends of the internal collars of the outer section, the bearing-providing ends of each of said interior and exterior collars being wholly in a plane normal to the longitudinal leg axis, the bearing-providing end of each interior collar being interrupted only by the axially extending entry end of a bayonet slot which provides a laterally extending inner end portion, two pins carried by and projecting outwardly from the inner section and respectively spaced outwardly from opposite bearing ends of the external collar of the inner section a distance corresponding to the longitudinal spacement of the related lateral bayonet slot end from the bearing end of the opposed internal collar, whereby any one of the pins, having been engaged with the bearing end of the opposed internal collar, can be readily engaged in the latter's bayonet slot entry by relative rotation of the related sections in either direction and thereafter located in the lateral bayonet slot end to retain the opposed internal and external collar-provided bearing ends in load-sustaining engagement.

References Cited in the file of this patent

UNITED STATES PATENTS

701,042	Holmes	May 27, 1902
2,009,791	Shroyer	July 30, 1935
2,301,414	Koehl	Nov. 10, 1942
2,330,173	Gordon	Sept. 21, 1943
2,719,771	Hoven et al.	Oct. 4, 1955
2,806,723	Fairclough	Sept. 17, 1957

FOREIGN PATENTS

156,241	Germany	Nov. 29, 1903
550,853	France	Mar. 22, 1923
581,685	Germany	Aug. 1, 1933