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ADJUSTABLE CUPOLA

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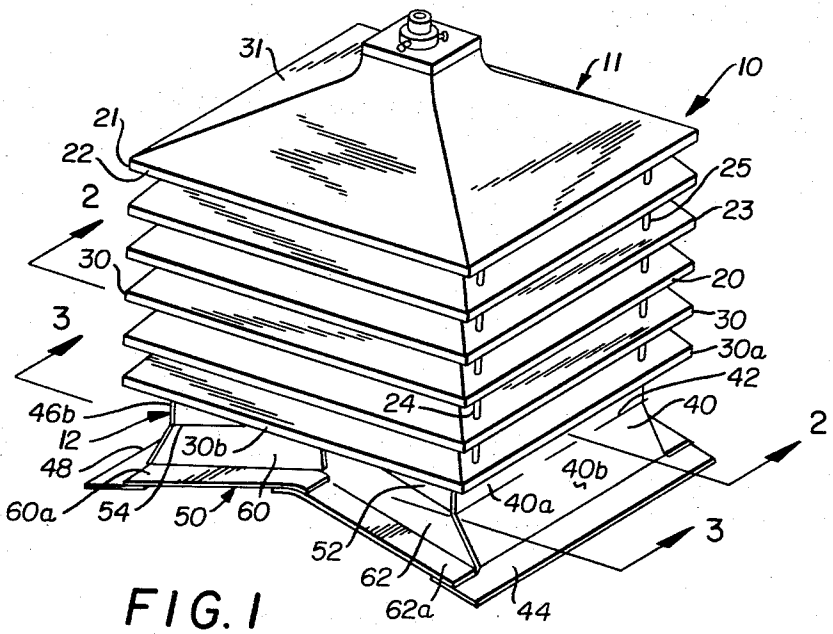

FIG. 1

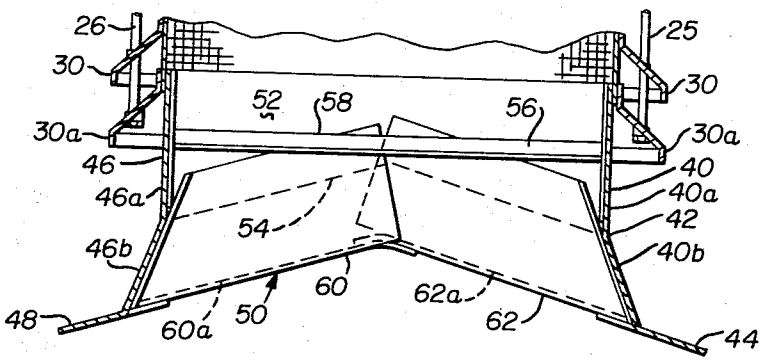

FIG. 2

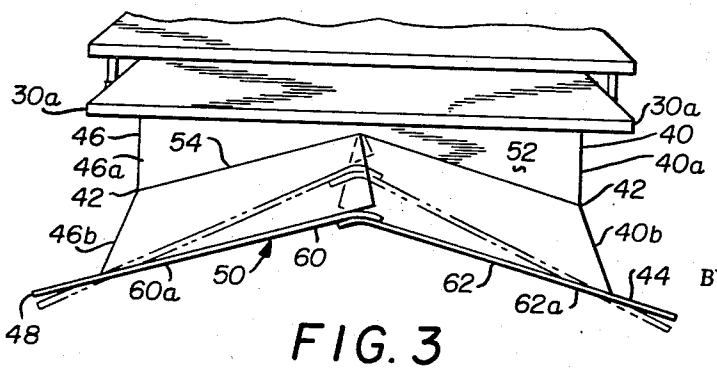

FIG. 3

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ADJUSTABLE CUPOLA

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This invention relates generally to roof cupolas. More particularly, it has reference to the improved type of cupola that has an adjustable base that permits the cupola to be mounted over the ridge of a gable roof, regardless of the pitch of the roof.

Cupolas have been in general use for a considerable time since they not only have various useful purposes, but decorative functions as well. In the past, however, it was necessary to prefit the cupola to the slant of a particular roof. Consequently, cupolas are normally tailored to fit a particular roof.

While cupolas of this type serve the purpose for which they were designed, they are possessed of certain disadvantages. Since the design must be made to accommodate the pitch of a particular roof, considerable time is lost through the necessity of tailoring a cupola to the particular pitch required.

It has been discovered that the above described disadvantages can be obviated by producing a pre-constructed cupola. The cupola can be built with an adjustable base capable of adjusting to fit over the ridge of all normal gable roofs. Further, the cupola is so adjustable to readily admit to attachment to any existing roof of the gable type construction without the necessity of cutting, measuring, or trimming in any form.

It has been further discovered that the adjustability advantage above discussed can also be utilized in connection with flashing components that are provided on the cupola itself so that the cupola in question can be readily nailed to the roof surface in question.

An improved cupola having an adjustable base construction is described in the assignee's co-pending application Serial No. 207,942, filed July 6, 1962, now U.S. Patent 3,216,161. The cupola having an adjustable base therein described has been successful in fulfilling intended purposes. It has been found, however, that the adjustable base structure can be simplified without any reduction in efficiency of use and operation. The simplification will result in additional savings in cost and time which are always quite desirable.

It is therefore, the primary object of this invention to provide a cupola having an adjustable base, adaptable for use on all normal roofs of the gable construction.

Another object is in the provision for greatly simplifying the structure of the adjustable base to effect a savings in time and money.

These and other objects will become apparent upon a reading of the following brief specification considered and interpreted in the light of the accompanying drawings, in which

FIGURE 1 is a perspective view of the improved adjustable cupola.

FIGURE 2 is a vertical sectional view taken on the lines 2—2 of FIGURE 1.

FIGURE 3 is a vertical sectional view taken on the lines 3—3 of FIGURE 1.

Referring now to the drawings, and in particular to FIGURE 1, the improved adjustable cupola, generally designated by the numeral **10**, includes a cupola housing **11** and an adjustable base **12**. The base **12** is designed for the purpose of properly seating the cupola with respect to the gable roof, with the housing **11** and base **12** being joined together to form the unitary cupola **10**, as clearly shown in FIGURE 1.

The housing **11**, in the embodiment shown, may be considered as having a front side **20**, a rear side **21**, and opposed side portions **22** and **23**. The primary vertical support is formed through the use of elongate pins **24**, **25**, **26** and **27**. The pins support the elongate decorative louvers **30**, **30**, which are overlapped at the corners so as to appear to be continuous when they are spaced and arranged to provide the outer covering on all four sides of the housing **11**, as is illustrated in FIGURE 1. In addition, a top surface or roof **31** is provided in covering relationship to the components just described. In this manner, the cupola is given a four-sided ventilated appearance, as is shown in the perspective view of FIGURE 1.

For the purpose of union and continuity to the housing above described, the adjustable base **12** is shown as having a front support member in the form of a flat plate **40**. Plate **40** spans the space between pins **24** and **25** and has its upper edge attached, as by riveting or welding, to the inward edge of lowermost louver **30***a*. Additionally, plate **40** is creased, as at **42**, to in effect, divide plate **40** into two sections with the section **40***a* thereof being straight in vertical direction, and the section **40***b* flaring slightly outward and being movable with respect to section **40***a*. Plate **40**, further, has a formed flange **44** which is bent at an acute angle with respect to section **40***b*. The flange **44** is designed to provide nailing surfaces for securing the cupola with respect to a roof.

As shown in FIGURE 2, a similar plate **46**, having sections **46***a* and **46***b*, as well as a flange **48**, is similarly positioned with respect to the back side **21**. The plate **46** is thus disposed in opposed relationship to the just described plate **40**, with the flange **48** thereof serving to again provide a nailing surface for attachment of the rear portion of the cupola with respect to a roof.

In order to provide adjustment for varying roof pitches, as has been previously indicated, the space beneath the lowermost louver **30***b* is shown enclosed by a side closure panel than is generally designated by the numeral **50**. The side closure panel **50** is comprised of a plurality of component parts co-acting together to effect an adjustable closure.

To this end, panel **50** is shown as having an upper plate **52** formed with the bottom edge in the shape of a permanent pitch **54**. Plate **52** is not movable and is secured by welding or bolting to front plate section **40***a*. Disposed interiorly of plate **52** is an angle bar member **56**. At each end, bar member **56** is attached to plate **52**, but in such a manner that a spacing **58** occurs between the plate **52** and the bar **56**. Spacing **58** receives the overlapped ends of panel segments **60** and **62** which are formed with flanges **60***a* and **62***a* respectively. At their opposed ends, panels **60** and **62** are attached, by welding or otherwise, to the flared sections **46***b* and **40***b* of the rear and front sides, respectively. In this manner, it is possible to unify and coordinate the movement of all movable elements in the adjustable base **12** as is shown in the chain-dotted line of FIGURE 3. Panels **60** and **62** are slideable in the space **58** and relative to the pitch plate **52**. Further, the panels **60** and **62** and the respective flanges **60***a* and **62***a* overlap each other as is clearly shown in FIGURES 2 and 3. The overlap is such that separation of the overlapped relationship is impossible under normal conditions and such as will provide free movement of the panels **60** and **62** relative to each other. The flanges **60***a* and **62***a*, as in the case of other flanges herein employed, provide the necessary nailing surfaces.

It is to be understood that in the particular embodiment of the invention shown, the remaining opposed side unit is of identical configuration and accordingly would be in opposite hand relationship to the closure panel element **50** just described, so that further description of the re-

maining side elements is not believed necessary for the purpose of fully describing this invention.

It is also to be understood that while the particular form of the invention shown has two opposed adjustable side units, the invention is not intended to be limited to this structure. One or even all four sides could be constructed in the manner of panel **50**, if desired, and according to variation in roof construction.

In use or operation of the improved cupola, it will first be assumed that the component parts have been assembled as indicated. Then, it is merely necessary that the cupola be positioned on a roof and hand force applied. Flanges **44** and **48**, due to their attachment to movable sections **40***b* and **46***b* of plates **40** and **46**, may be pressed into full surface to surface contact with the pitch of the roof. Simultaneously, movable segments **60** and **62** will slide in the space **58** relative to plate **52** and relative to each other to thereby bring the respective flanges **60***a* and **62***a* into full surface to surface contact to the roof pitch. All flanges may now be secured to the roof, by nailing or other means, thereby securing the cupola in position on a roof.

With regard to the preferred material employed, the invention has been illustrated with an aluminum or other light-weight type of metallic structure, although it is to be understood that the principle of adjustable closure could be equally utilized with other material that could be adjusted in the same fashion.

There has been shown, then, a cupola which has an adjustable base enabling the cupola to be adapted to all normal gable roof constructions. Tailor fitting to a particular roof with all the attendant delays involved in cutting, smoothing, and trimming, becomes unnecessary. The movable elements of the adjustable base are of simple construction and durable through all intended purposes.

It should also be noted that the adjustable base disclosed herein would have equal utility with other structures designed to be placed on the ridge of a gable roof such as for example, sky lights, flashing for chimneys, trap doors and the like. It is believed that the inventive concepts herein embodied are equally applicable to various uses of the type noted above.

While a full and complete description of the invention has been made in accordance with the dictates of the patent statutes, it is to be understood that the invention is not intended to be limited to the original embodiment herein shown.

Accordingly, modifications of the invention may be resorted to without departing from the spirit hereof or the scope of the appended claims.

What is claimed is:

1. An adjustable cupola for use on the ridge of a gable roof, comprising:

(A) a cupola housing including

(1) a top member

(2) a front side

(3) a rear side, and

(4) opposed sides interconnecting said front and rear sides and attached to and depending from said top member;

(B) an adjustable base support depending from the sides of said housing;

(C) said base support having front and rear support members with each said support member having a stationary section and a movable section; and

(D) at least one remaining support member of said base support including a pair of overlapped and relatively movable panel sections with one end of one of said panel sections being secured to the movable section of said front support member and with one end of the remaining panel section being secured to the movable section of said rear support member for movement in unison therewith

(1) whereby all said front and rear support members and said remaining sides of said base support may be adjusted simultaneously to fit the pitch of said roof.

2. The device of claim **1** further characterized by the fact that each said movable section of said front and rear support members of said base support and each said panel section include flanges projecting substantially perpendicularly therefrom and providing a surface for securing said cupola to said roof.

3. The device of claim **1** further characterized by the presence of

(A) a stationary plate member depending from said cupola housing on at least one remaining side of said base support; and

(B) an elongate bar member supported interiorly of said cupola housing and spanning the space between said opposed front and rear sides thereof in parallel spaced relationship with said plate member.

4. An adjustable base support for use on the ridge of a gable roof, comprising:

(A) front and rear support members with each said support member having a stationary section and a movable section; and

(B) a pair of relatively movable panel sections disposed on at least one remaining side of said base support with one end of one of said panel sections being secured to said movable section of said front support member and with one end of the remaining panel section being secured to the movable section of said rear support member for movement in unison therewith

(1) whereby movement of said panels and said movable sections of said front and rear support members is coordinated to achieve a substantially full surface to surface contact between said roof and said base support.

References Cited

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