United States Patent [19]

Brown

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[54] **MODULAR BUILDING FACADE**

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[51] **Int. Cl.** **E04c 3/36**

[58] **Field of Search** 52/89, 311, 211, 300, 301, 52/632, 731, 727, 728, 726

[56] **References Cited**

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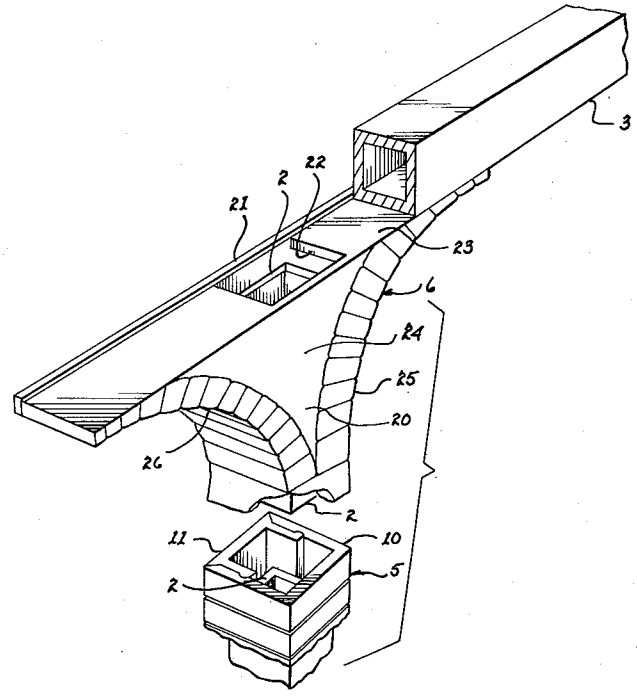
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[57] **ABSTRACT**

A modular structure for attachment to roof supports of awnings and ramadas is disclosed. The structure includes a plurality of interlocking sectionalized sleeves circumscribing the roof supports. Single or dual arches, which arches are also interlocking and sectionalized, are secured intermediate the upper extremity of the sleeves and the roof of the awning or ramada. The exterior surface of the structure may be brick, stucco, etc., to blend with the adjacent structure or to dramatize the awning or ramada.

10 Claims, 8 Drawing Figures



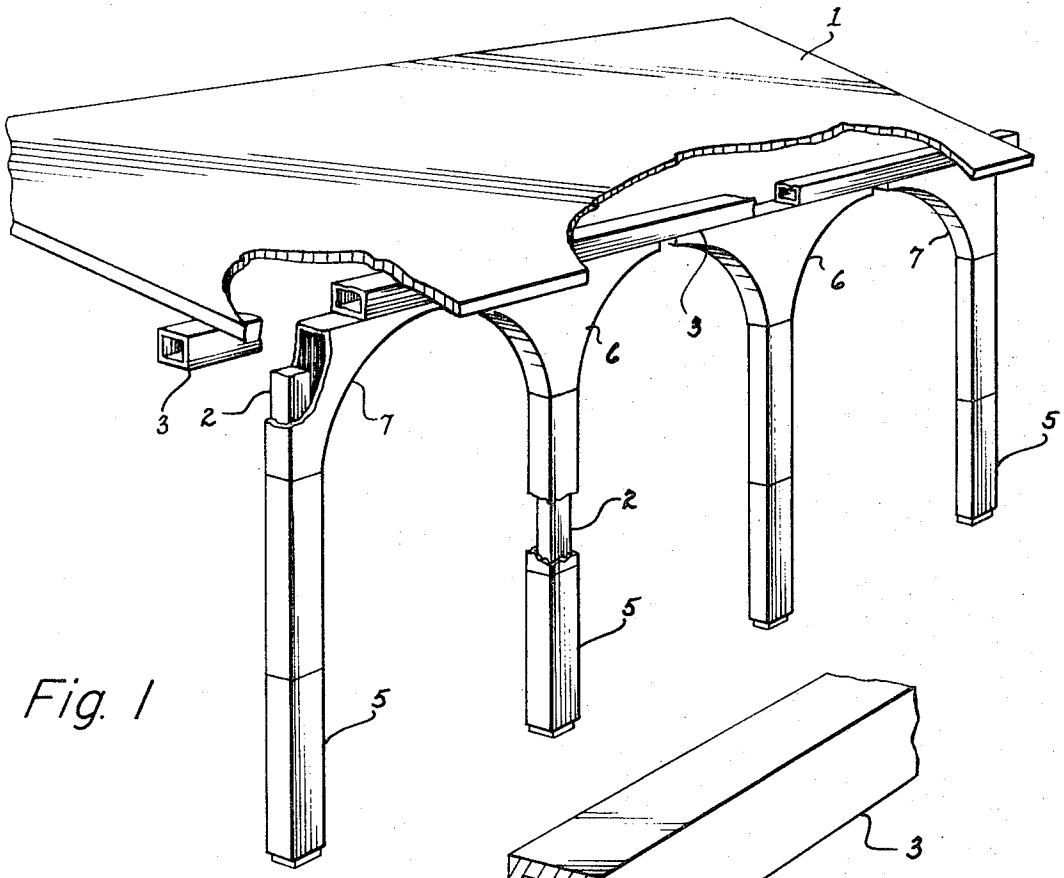


Fig. 1

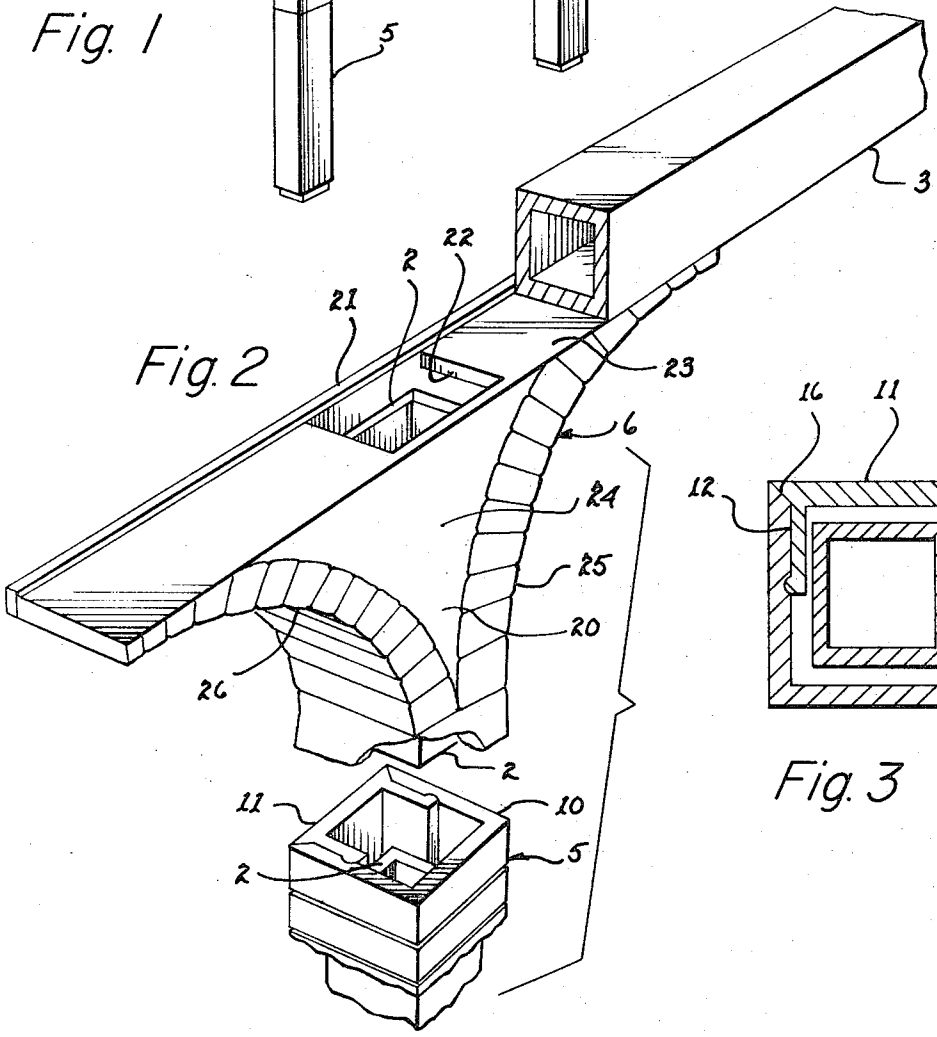


Fig. 2

Fig. 3

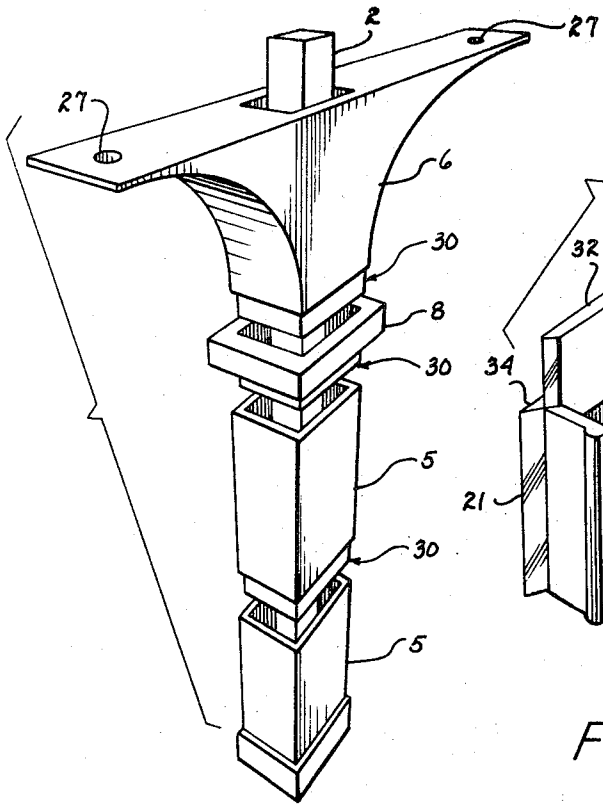


Fig. 4

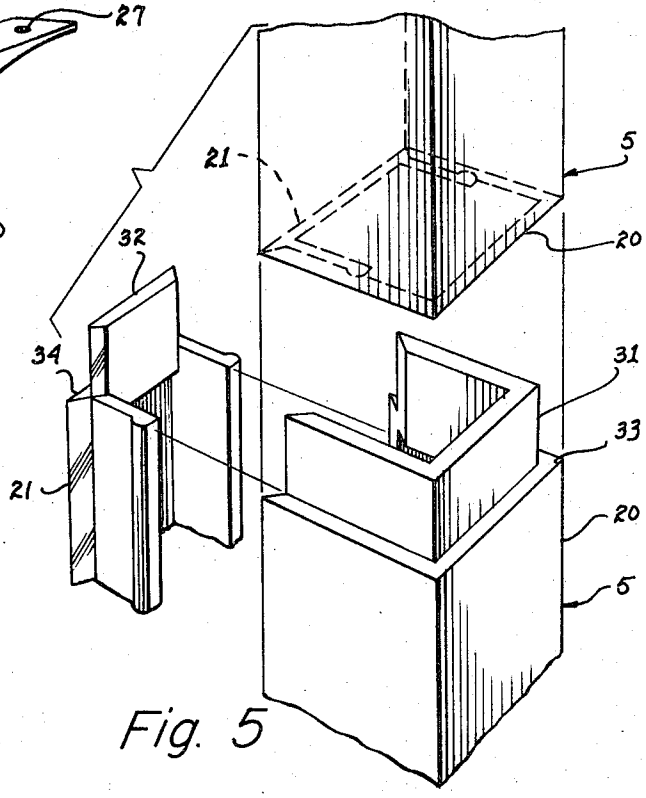


Fig. 5

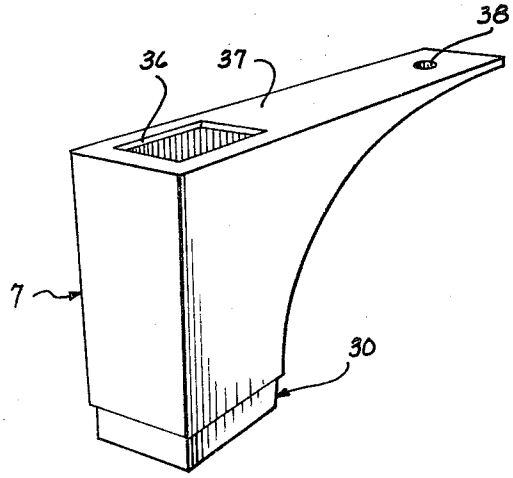


Fig. 6

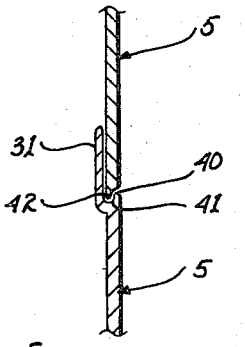


Fig. 7

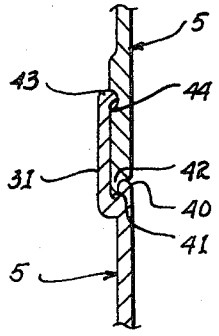


Fig. 8

MODULAR BUILDING FACADE

The present invention relates to structural facades, and more particularly, to sectionalized facades attachable subsequent to the completion of a dwelling structure.

Awnings, particularly those attached to trailers, mobile homes, and the like, usually are supported by aesthetically unattractive steel or aluminum posts. These posts add nothing to the overall decorative impression of the dwelling unit. Similarly, ramadas usually include little more than a roof supported by any one of various types of posts. In both of these types of structures, the costs must necessarily be kept low and therefore prohibits the construction of aesthetically attractive support members.

As the cost factors prevent the awnings from being in aesthetic conformance with the main structure, they invariably look like add-ons and are generally considered to be eyesores. Ramadas, serving the primary purpose of temporarily shielding the occupants thereof against the sun and rain, must be limited in cost in order to be economically feasible. The cost limitation necessarily prevents the ramadas from being built to conform with the surrounding typography or adjacent structures.

It is therefore a primary object of the present invention to provide a structure circumscribing the posts supporting a roof to give the posts decorative value.

Another object of the present invention is to provide a facade for roof supports, which facade may be mounted subsequent to the construction of the roof support.

Yet another object of the present invention is to provide a plurality of sectionalized interlocking sleeves fitting about a roof support.

Still another object of the present invention is to provide a plurality of sectionalized interlocking members disposed at the junction of the roof and sleeves circumscribing the roof supports.

A further object of the present invention is to provide a facade circumscribing the supports for a roof, which facade is not a load bearing element.

A yet further object of the present invention is to provide an interlocking assembly for attachment about existing roof supports.

These and other objects of the present invention will become apparent to those skilled in the art as the description thereof proceeds.

The present invention may be described with more specificity and clarity with reference to the following drawings, in which:

FIG. 1 is a perspective view showing the present invention attached to each of a plurality of existing roof supports.

FIG. 2 is a detailed perspective view of the structure of the present invention.

FIG. 3 is a cross-sectional view of the present invention mounted about a roof support.

FIG. 4 is an exploded view of the elements of the present invention.

FIG. 5 is an exploded view illustrating the interlocking features of the present invention.

FIG. 6 illustrates a single half arch constructed in accordance with the present invention.

FIG. 7 illustrates an interlock between adjacent sleeves of the present invention.

FIG. 8 illustrates a further interlock of adjacent sleeves of the present invention.

Referring to FIG. 1, there is shown an existing roof 1, which roof may be an awning or part of a ramada or other similar structure. The roof 1 is supported by a plurality of roof supports 2 acting upon a beam 3, which beam lies intermediate the roof supports and the roof. In general, roof supports 2 are simply metal or wooden supports performing the mundane function of supporting roof 1. For the type of structures, such as awnings and ramadas, the cost factor, which are paramount, prevent the roof support 2 from being aesthetically attractive, except by chance, as they are configured simply as load bearing members.

With the present invention, it becomes possible to convert the mundane structurally engineered roof supports 2 into aesthetically attractive members forming an integral part of the overall dwelling. A plurality of sleeves 5 are fitted about each of roof supports 2. The sleeves may be externally textured to simulate stucco, brick, or painted wood, and thereby conform with the overall exterior surface of the dwelling. If the sleeves 5 are intended to depict brick, the junction between adjacent sleeves should be configured to simulate the mortar joint intermediate the rows of brick. If the sleeves 5 are intended to simulate stucco, the junction between adjacent sleeves should be minimized.

The structure intermediate sleeves 5 and the roof line, represented by beam 3, may be formed as dual half arches 6 for each of the interior posts 2 and as single half arches 7 for the end posts. Both the dual half arches and single half arches interlock with the respective adjacent sleeves 5 and are fixedly secured to the undersurface of beam 3. The exterior of dual arches 6 and single arches 7 matches that of sleeves 5.

The architectural configuration shown (arches) may, of course, be varied to suit the adjacent or surrounding structures and dwellings without departing from the teachings of the present invention.

Further details of the structure described with respect to FIG. 1 are shown in FIGS. 2 and 3. Each of sleeves 5 are formed of a U-shaped female member 10 and a U-shaped male member 11. The male member 11 includes a pair of flanges 12, which flanges fit interior to the arms of female member 10. At the extremity of flanges 12 there is a protrusion 14 cooperating with a recess 13, which recess is disposed within the arms of male member 10, to interlock the male and female members. Further, the female and male members 10 and 11, respectively, are joined to one another at miter joints 15 and 16, such that the only external visual evidence of the two part construction of the sleeve 5 is a slight indetectable crack along two of the corners of the sleeve.

The internal dimensions of the members forming sleeve 5 may be configured to exactly fit the circumscribed roof support 2. Alternatively, packing material (not shown) may be disposed intermediate roof support 2 and internal surfaces of the sleeve to prevent movement therebetween.

The dual arch 6 is formed of a female and male member, 20 and 21, respectively, which are secured to one another. Female member 20 includes side 24, lateral sides 26 forming the arches, and upper surface 23. An aperture 22 is disposed within upper surface 23 to permit roof support 2 to extend therethrough. The lower

part of female member **20** is apertured to also permit roof support **2** to extend therethrough.

The female and male members **20** and **21** may interlock in a manner similar to that described for sleeves **5** or they may be secured to one another by means of screws, nuts and bolts, etc. Dual arch **6,** may be secured to the lower surface of roof support **3** by means of screws, nuts and bolts, etc.

As shown in FIG. **2,** surface **24** may be ornamented with simulated brick **25** along the curved extremity of surface **24.** Intermediate the simulated bricks, there may be stucco finish. It is to be understood, of course, that the ornamentation used is variable depending upon the intended overall aesthetic effect of the present invention.

In FIG. **4,** there is shown a further configuration of the assembly generally described in FIGS. **1** through **3.** Herein, there is shown a plurality of sleeves **5,** a collar **8,** and a dual arch **6** configured to the architectural style generally referred to as Colonial. The total assembly envelops and hides roof support **2** and performs an aesthetic function in rendering the roof support an attractive element of the dwelling. A plurality of apertures **27** are disposed at the outward extremities of dual arch **6.** These apertures receive the screws or bolts to fasten the dual arch to the adjacent roof beams. The lateral interlock as shown and described with respect to FIGS. **2** and **3** are incorporated in the configuration shown in FIG. **4.** In addition, the sleeves, collar and dual arch shown in FIG. **4** include a vertical interlock, which interlock is generally referenced by number **30.**

The vertical interlock **30** is shown in further detail in FIG. **5.** Each of the male and female members **20** and **21** include vertically extending shrouds **31** and **32.** Each of these shrouds are inset from the exterior surface of the respective members to provide a horizontal seat **33** and **34** on each member. The external dimensions of shrouds **31** and **32** are configured to mate with the internal sides of the immediately upwardly adjacent sleeve **5.** Thereby, relative lateral movement between adjacent sleeves **5** is prevented. Seats **33** and **34** provide support for the immediately upward adjacent sleeve **5.** The single half arch **7,** as shown in FIG. **1,** is shown in further detail in FIG. **6.** The half arch **7** includes an aperture **36** disposed within the upper surface **37** and a similar aperture disposed within the lower part of the single half arch. These apertures are configured to receive the end roof support, as shown in FIG. **1.** An aperture **38** may be disposed at the lateral extremity of the upper surface to receive a screw or bolt for attaching the half arch to the roof beam. The construction of the half arch **7** is similar to that described with respect to the dual half arch, including the vertical interlock **30.**

In FIGS. **7** and **8,** there are shown various forms of the interlock **30.** In example, a ridge **40** may be disposed along the external edge of the seat **33** (see FIG. **5**) whereby a channel **41** is formed intermediate ridge **40** and shroud **31.** The lower edge of the vertically adjacent sleeve **5** includes a further ridge **42,** which ridge fits within channel **41.** With this configuration, the upper and lower edges of sleeves **5** are securely interlocked with one another.

To obtain a snap-action interlock, shroud **31** may include a protrusion **43** extending along its upper edge. Protrusion **43** mates with and is received within a recess **44,** which recess is disposed within the internal side of the immediately adjacent sleeve **5.** With this configuration, the adjacent sleeves **5** are less likely to slide with respect to one another along the vertical axis.

While the principles of the invention have now been made clear in an illustrative embodiment, there will be immediately obvious to those skilled in the art many modifications of structure, arrangement, proportions, the elements, materials, and components, used in the practice of the invention which are particularly adapted for specific environments and operating requirements without departing from those principles.

I claim:

1. A modular facade for circumscribing roof supports and extending upwardly to a supported roof beam to provide an aesthetically attractive appearance to the roof support and the junction between the roof support and roof beam, said facade comprising in combination:

a. a multi element sleeve circumscribing each roof support to hide the roof support from view, said multi element sleeve being dismantleable to receive the roof support;

b. locking means forming a part of each element of said sleeve for retaining the elements of said sleeve secured to one another about the post support, said locking means being disposed within said sleeve and concealed from view;

c. a multi element junction member for providing an aesthetically pleasing transition from said sleeve to the roof beam, said junction member including a lower part circumscribing the roof support about its longitudinal axis and an upper part extending lateral to the roof support for attachment to the roof beam;

d. said junction member including further locking means for retaining said junction member juxtaposed with the upper part of the adjacent one of said sleeves; and

e. attachment means for securing said junction member adjacent the roof beam; whereby, said sleeve and said junction member can be attached to existing roof supports supporting a roof beam to alter the aesthetic value of the roof supports and the roof beam.

2. The combination as set forth in claim **1** wherein a plurality of said sleeves are retained about each roof support.

3. The combination as set forth in claim **2** including interlock means attached to one end of each of said sleeves for securing adjacent ones of said sleeves to one another.

4. The combination as set forth in claim **3** wherein said interlock means of the uppermost one of said sleeves engages the adjacent one of said junction members to secure said adjacent junction member to said uppermost sleeve.

5. The combination as set forth in claim **1** wherein each said multi element sleeve comprises:

a. a female member, said female member including a first U-shaped channel having a pair of legs extending from a base;

b. a male member, said male member including a second U-shaped channel having a pair of legs extending from a base; and

c. said legs of said male member being configured to have a lateral dimension approximately equivalent to the internal lateral dimension of the legs of said female member; whereby, the legs of said male member are fitted within the legs of said female member to form said sleeve.

6. The combination as set forth in claim **5** wherein said locking means comprises:

a. a protrusion disposed on the longitudinal edge of each of the legs of said male member;

b. a recess disposed within the internal side of each of the legs of said female member for receiving the corresponding one of said protrusions; whereby, said protrusions are positioned within corresponding recesses to lock said male member to said female member.

7. The combination as set forth in claim **6** wherein said attachment means is disposed internal to the peripheral surface of said sleeve and said junction member and comprises a shroud extending from each of the legs and base at one end of said female member, and a further shroud extending from the base at one end of said male member.

8. The combination as set forth in claim **7** including a seat disposed along the longitudinal ends of the legs and base at the other end of said female member and juxtaposed with said shroud of an adjacent sleeve and a further seat disposed along the longitudinal end of the base at the other end of said male member and juxtaposed with said further shroud of an adjacent sleeve, said seat and said further seat providing support for the adjacent sleeve.

9. The combination as set forth in claim **8** wherein said seat and said further seat each include a ridge disposed along their lower extremities and said seat and said further seat include channels for receiving said ridges.

10. The combination as set forth in claim **7** wherein said attachment means further comprises a portion extending laterally from each of said shroud and said further shroud, and a lateral depression disposed internal to a juxtaposed part of said sleeve, each said raised portion mating with one of said depressions to lock adjacent part of said sleeves to one another.

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