United States Patent [19]

Lynch

[54] COLLAPSIBLE CANOPY WITH TELESCOPING ROOF SUPPORT STRUCTURE

- [76] Inventor: James P. Lynch, 13 South Field, Lakewood, Colo. 80226
- [21] Appl. No.: 89,441
- [22] Filed: Aug. 26, 1987
- [51] Int. Cl.⁴ E04H 15/18; E04H 15/50
- [58] Field of Search 135/103, 97, 106, 98, 135/107, 108, 109, 110, 111, 112, 113; 52/109

[56] References Cited

U.S. PATENT DOCUMENTS

684,130	10/1901	Taubert 135/110 Sterhardt 135/109
1,326,006	12/1919	
1,493,915	5/1924	Baker 135/109
1,712,836	5/1929	Mills 135/110
1,728,356	9/1929	Morgan 135/109
1,853,367	4/1932	Mace 135/110
2,135,961	11/1938	Chemoweth 135/109
2,440,557	4/1948	Power 135/90
2,770,243	11/1956	Miller 135/109
2,928,404	3/1960	Klages 135/109
3,174,397	3/1965	Sandborn 52/109
3,199,518	8/1965	Glidewell 135/109
3,335,815	8/1967	Oakes 52/109
3,375,625	4/1968	Mikulin 52/109
3,496,687	2/1970	Greenberg et al 52/109
3,526,066	9/1970	Hagar et al 52/27
4,156,433	5/1979	Beaulieu 52/109
4,607,656	8/1986	Carter 135/110
4,641,676	2/1987	Lynch 135/110

FOREIGN PATENT DOCUMENTS

15851 of 1886 United Kingdom 135/111

[11]	Patent Number:	4,779,635	
[45]	Date of Patent:	Oct. 25, 1988	

656361 8/1951 United Kingdom 135/97

Primary Examiner-J. Karl Bell

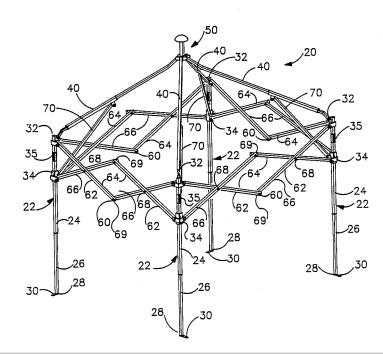
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Attorney, Agent, or Firm—Timothy J. Martin; J. Preston Oxenham

ABSTRACT

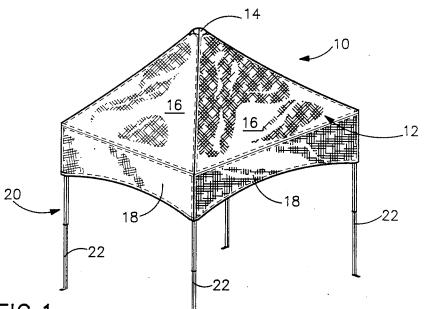
A canopy structure is provided and includes a framework unit and a flexible covering. The framework unit is formed by a plurality of upright corner members and a plurality of roof support members that are pivotally connected at the top ends of the corner members and, in an erected position, extend upwardly and inwardly to a central apex where they are pivotally connected to one another. The roof support members are formed of extendable sections which preferably telescope with respect to one another so that the framework unit may move into a collapsed state with the corner support and roof support members oriented in closely spaced, parallel relation. Latches are provided to prevent the framework unit from collapsing from the erected position. Constraining and support structure, preferably in the form of scissor assemblies, interconnect adjacent corner support members to prevent them from moving apart past the erect state. The scissor assemblies have one portion pivotally connected to the tops of its associated corner supports and another portion pivotally connected to slide brackets on its associated corner support member. A cantilever member interconnects each roof support member and the slide bracket on its associated corner support member. The central apex may include a spring biased central post to support the peak of the covering placed on the framework unit. Several framework units may be formed together into a larger canopy structure.

34 Claims, 4 Drawing Sheets

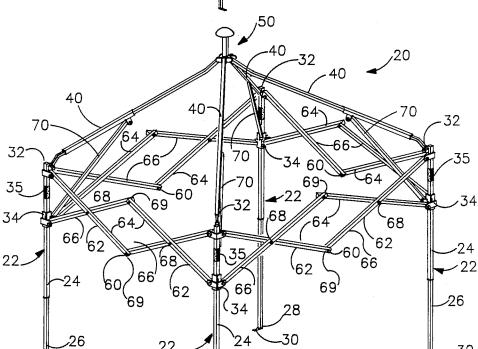


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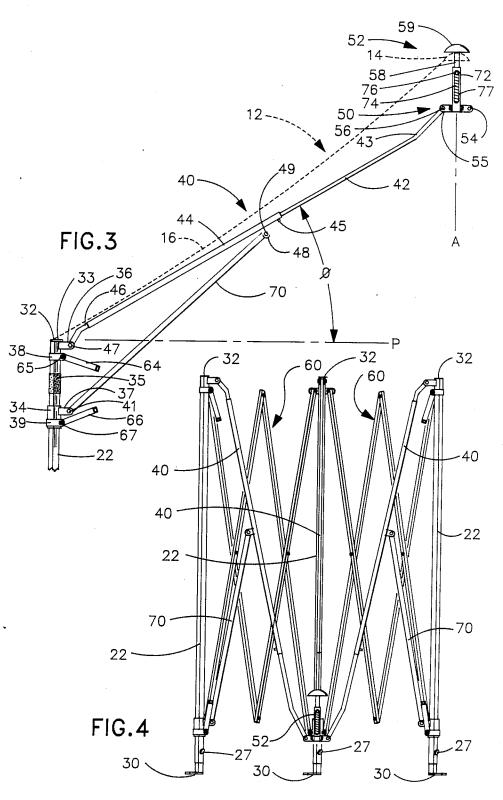
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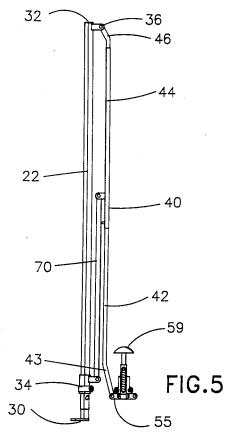
4,779,635

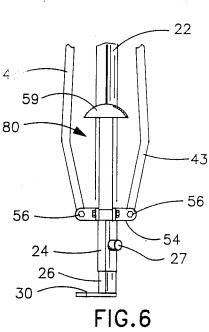


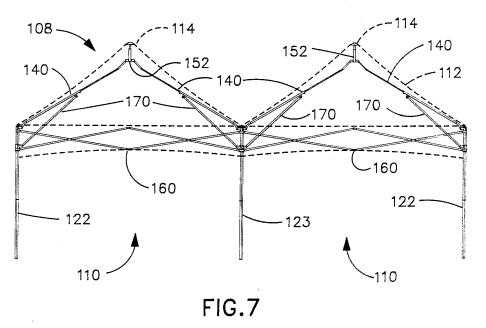
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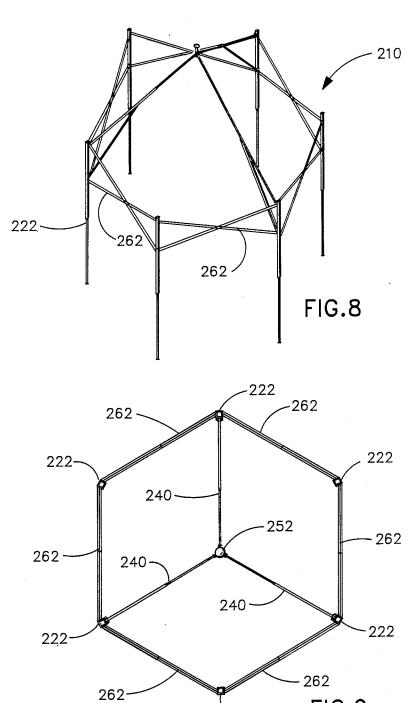
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FIG.9

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