United States Patent [19]

Ablett

[11] **3,787,015**

[45] **Jan. 22, 1974**

[54] **BRACKET FOR POLES AND THE LIKE**

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[21] Appl. No.: **306,430**

[52] **U.S. Cl.** ..... **248/43**, 248/221, 248/226 A, 248/226 D, 248/230

[51] **Int. Cl.** **F16m 13/02**

[58] **Field of Search** ..... 248/41, 42, 43, 221, 226 A, 248/226 B, 226 D, 226 R, 230; 24/243 B

[56] **References Cited**

UNITED STATES PATENTS

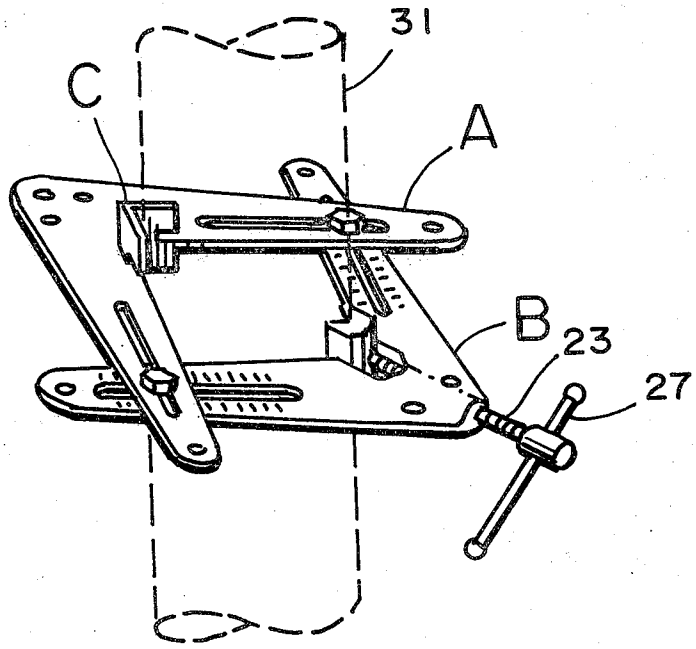
1,693,298	11/1928	Ingham	248/43 X
1,863,539	6/1932	Hawley	248/43 X
1,877,312	9/1932	Heinrich	24/243 B
2,348,954	5/1944	Brown	248/221

Primary Examiner—William H. Schultz
Attorney, Agent, or Firm—Salvatore G. Militana

[57] **ABSTRACT**

A bracket for poles and the like having a pair of bracket elements capable of being swung open to encircle a pole at the position it is desired to mount the bracket with fastening means for securing the bracket thereon and an attachment thereto that permits the fastening of the bracket to a pole for supporting a second pole or antenna; the bracket having a movable centering member that can be rotated to engage a horizontally positioned member such as a girder or planking and be mountable thereon.

3 Claims, 9 Drawing Figures



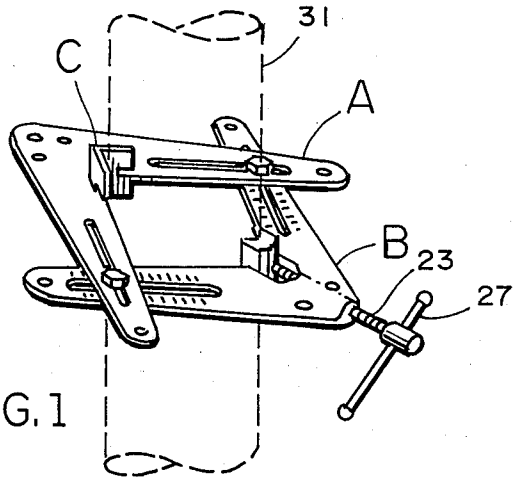


FIG. 1

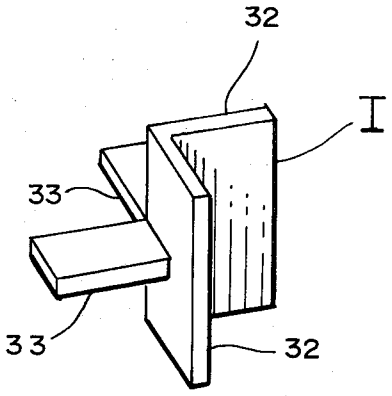


FIG. 9

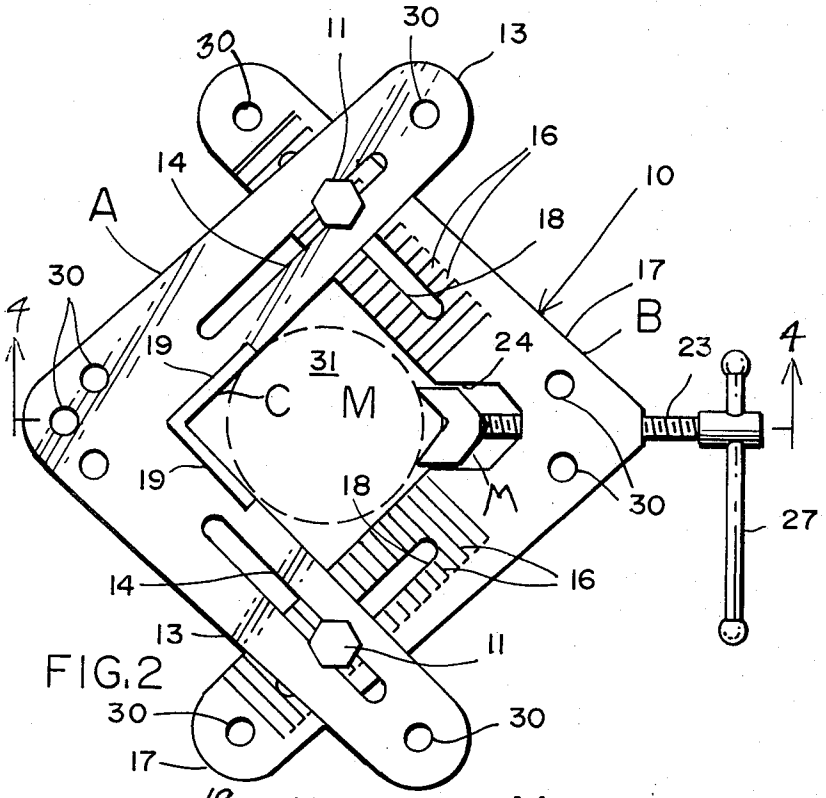


FIG. 2

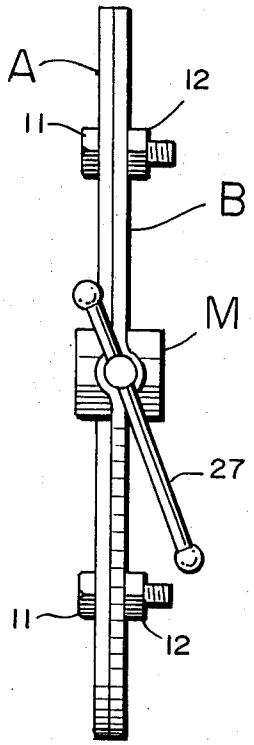


FIG. 3

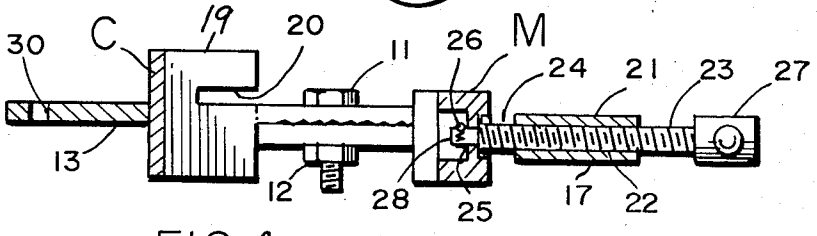


FIG. 4

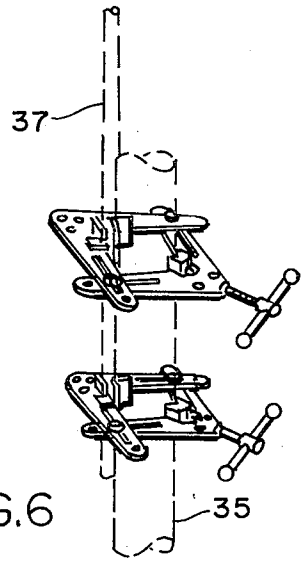


FIG.6

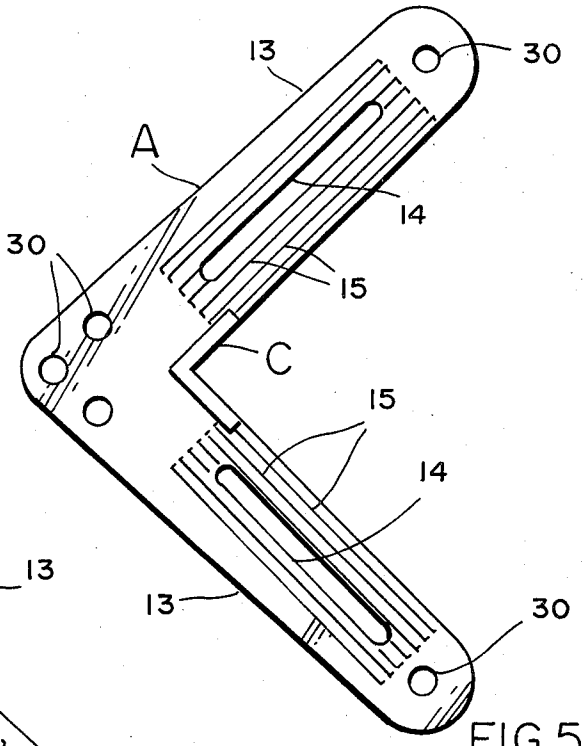


FIG.5

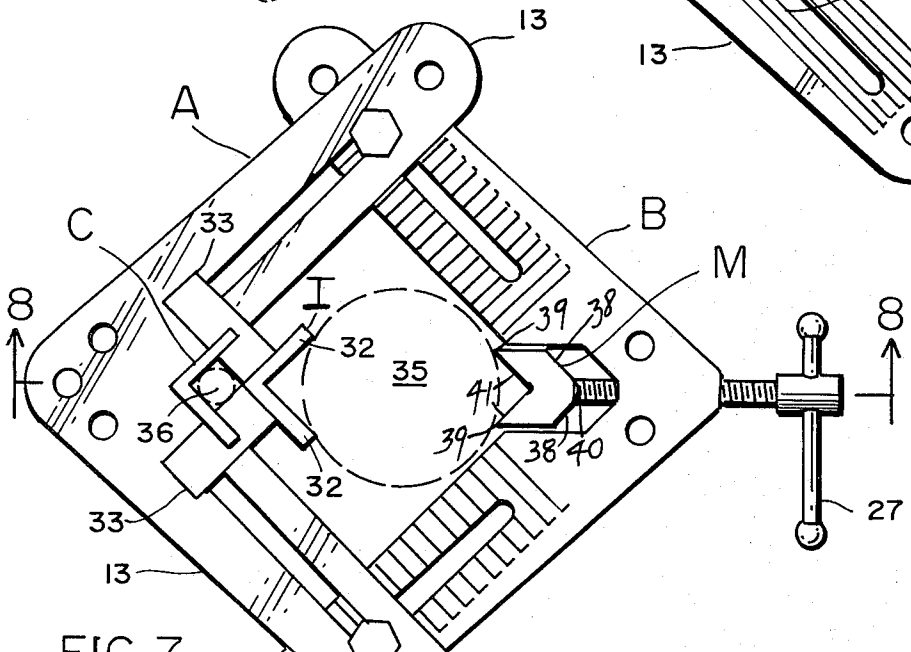


FIG. 7

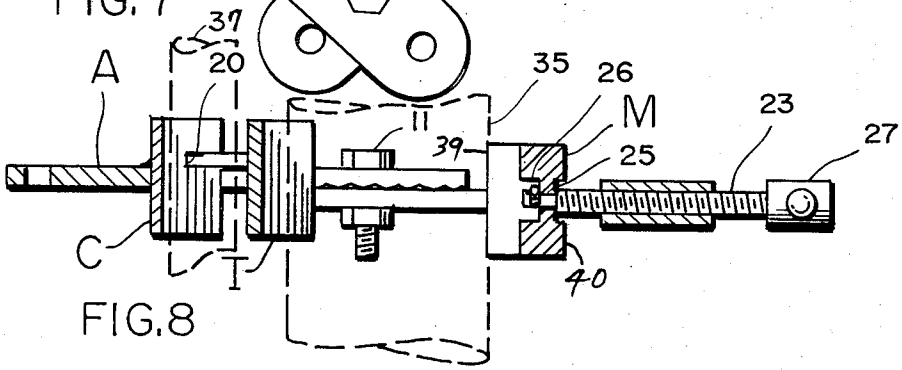


FIG.8

BRACKET FOR POLES AND THE LIKE

BACKGROUND OF THE INVENTION

1. Field Of The Invention

This invention relates generally to brackets and is more particularly directed to brackets for poles, girders, etc. forming a support which also operates to secure two poles, etc. together.

2. Description Of The Prior Art

The conventional brackets for poles and the like consist of strap arrangements which must be slid on the pole from the top in order to mount the bracket or taken apart so that it may be mounted about the pole at the place the bracket is to be secured. Most poles stand high off the ground and also have obstructions to prevent threading a bracket from the top end of the pole or that there are obstructions on the pole that prevent the sliding of the bracket downwardly to the position it is desired to mount the bracket. Consequently, those type of brackets are not feasible so that brackets that come apart must be used. However, most of these brackets are of the strap type that are complicated and require a great deal of dexterity to assemble while the person is perched precariously high off the ground. Tools are required and usually both hands must be free to assemble the bracket.

SUMMARY OF THE INVENTION

The present invention contemplates avoiding the above indicated objects of the conventional brackets by providing a simple bracket that may be readily swung to an open position and fastened to a pole without difficulty and the need for special tools.

Another object of the present invention is to provide a bracket for poles and the like that may be readily adapted for mounting a pole such as an antenna on a second pole already in standing position.

A further object of the present invention is to provide a bracket for poles and the like consisting of a pair of bracket elements removably secured to each other wherein the bracket elements may be swung away from each other to permit encircling the pole and mounting the bracket on the pole at the position it is to be secured thereon.

A still further object of the present invention is to provide a bracket for poles and the like wherein upon reversing a centering member thereof, the bracket may then be mountable on a horizontally disposed girder and the like.

With these and other objects in view, the invention will be best understood from a consideration of the following detailed description taken in connection with the accompanying drawings forming a part of this specification, with the understanding, however, that the invention is not confined to any strict conformity with the showing of the drawings but may be changed or modified so long as such changes or modifications mark no material departure from the salient features of the invention as expressed in the appended claims.

BRIEF DESCRIPTION OF THE DRAWINGS

In the drawings:

FIG. 1 is a perspective view of a bracket constructed in accordance with my invention shown positioned on a pole indicated by dotted lines.

FIG. 2 is a top plan view.

FIG. 3 is an end view.

FIG. 4 is a cross sectional view taken along the line 4—4 of FIG. 2.

FIG. 5 is a bottom plan view of an angle bracket element shown removed from the bracket.

FIG. 6 is a perspective view similar to FIG. 1 showing an alternate use for my bracket.

FIG. 7 is a top plan view of a modified version of my bracket.

FIG. 8 is a cross sectional view taken along the lines 8—8 of FIG. 7.

FIG. 9 is a perspective view of an intermediate centering member.

Referring to the drawings wherein like numerals are used to designate similar parts throughout the several views, the numeral 10 refers to my bracket consisting of a pair of angle bracket elements or members -A- and -B- secured together by bolts 11 upon which nuts 12 are threaded. The bracket member -A- is provided with a pair of arm portions 13 extending at right angle with each other and having elongated slots 14 along their centerlines with a plurality of parallel and longitudinally disposed grooves or serrations 15 on either side thereof. The serrations 15 are adapted to be received by transversely disposed serrations 16 formed on arms 17 of the bracket member -B-. The latter is likewise provided with an elongated slot 18 formed along the centerline of the arms 17 that extend at right angle with each other.

Mounted along the inner edge at the juncture of the arm portions 13 is a fixed centering member -C- consisting of a pair of plate members 19 extending at right angle with each other with a slot 20 extending from the free edges thereof. The slots 20 are parallel to the arm portions 13 and extend in a plane immediately above that of the arm portions 13.

The juncture of the arm portions 17 of the bracket element -B- is thickened as at 21 in order to permit providing a threaded bore 22 therethrough for receiving a threaded rod 23. At the inner edge portion of the juncture of the arm portion 17 there is an open slot 24 for receiving a movable centering member -M- provided with a center bore 25 for receiving the free end of the threaded rod 23. A spring loaded detent 26 retains the movable centering member -M- on the rod 23. The centering member -M- is provided with inner faces 41 set at approximately right angle to each other and outer faces 38 parallel thereto at the rear portion thereof. The inner faces 41 form a pair of edges 39 for engaging arcuate articles such as poles, etc. while the outer faces 38 form a ridge 40 for engaging a girder, planking, etc. On the free end of the rod 23 is a handle 27 for threading the rod 23 along the bore 22. A plurality of bores 30 are formed at the inner and outer ends of the arm portions 13 and 17 for the purpose of conveniently securing lines, objects, etc. that are to be supported by the bracket 10.

In the normal use of my bracket 10 for securing about a pole or post 31, one of the bolts 11 is removed while the other is merely loosened and the bracket elements -A- and -B- are pivoted away from each other on the bolt 11 to permit the bracket elements -A- and -B- to encircle the post 31. The removed bolt 11 is then replaced in the slots 14, 18 and the nuts 12 tightened to rigidly secure the bracket elements -A- and -B- together. Then the handle 27 is actuated to thread the centering member -M- in the direction of the centering member -C- whereby the post 31 becomes tightly en-

gaged therebetween. The object to be supported by the bracket **10** is then fastened to the bracket at any of the bores **30.** To remove the bracket **10** from the post **31** all that need be done is to rotate the handle **27** to unthread the rod **23** to cause the centering member -M- to slide in a direction away from the post **31** and become disengaged from the post **31.** One of the bolts **11** is removed and the other bolt **11** is loosened to permit the bracket elements -A- and -B- to swing away from each other and be removed from the post **31.**

In order to quickly and effectively fasten one post to another especially as in the setting up of an antennae, wherein one post is fixed and upright while the other is to extend above the first post as shown by FIG. **6,** I provide an intermediate centering member -I-. My bracket **10** shown by FIGS. **6-9** inclusive is identical to that shown in FIGS. **1–5** inclusive but there is added thereto, the intermediate centering member -I- which consists of a pair of plate members **32** set at approximately right angle with each other. At the mid-portion thereof and on their outer surfaces of each of the plate members **32** there extends a second transverse or horizontal plate member **33** that is received by the slots **20** of the centering member -C-. A pair of my brackets **10** are used for securing the antenna **37** to the pole **35.** In this instance after one bolt **11** is removed and the other bolt **11** loosened, the bracket elements -A- and -B- are swung to an open position and made to encircle the post **35.** The intermediate centering member -I- is then placed on the bracket **10** with the horizontal plate members **33** resting on the upper surfaces of the arms **13** and received by the slots **20** of the fixed centering member -C-. The vertical centering plates **32** engage the pole **35** on one side while the adjustable centering member -M- engages the pole **35** at the other side as the handle **27** is actuated. The anetnna **37** is then engaged by the fixed centering member -C- on one side as the horizontal plates **33** engage the antenna **37** on its other side to secure the antenna **37** to the pole **35** when the handle **27** is actuated to its tightened position. The use of more than one bracket **10** is to prevent sidewise or swinging movement of the antenna **37** on the pole **35.**

My bracket **10** may be used to fasten a horizontally disposed article such as a plank or girder to a pole, for example, by merely reversing the movable centering member -M- which is accomplished by depressing the detent **26** and removing the centering member -M- from the threaded rod **23** and replacing it thereon. Now, the ridge **40** will engage the girder as the handle **27** is rotated to tighten the bracket -B- in place thereon.

In the event the bracket -B- is to be affixed to a relatively small diametered article, then the bracket elements -A- and -B- are disengaged by removal of the bolts **11** and the bracket elements -A- turned over and placed the arms **17** made to rest on top of the arms **13** of the bracket element -B-. The bolts **11** are then returned to their position in the slots **14** and **18.** The bracket element -B- is then slid in the direction of the centering member **19** until the arms **17** are received by the slots **20** in the centering member **19.** Now the nuts **12** are tightened and the handle **27** rotated to cause the centering member -M- to engage the article.

Having disclosed my invention, what I desire to secure by Letters Patent of the United States is:

1. A bracket for poles and the like comprising a plurality of bracket elements each having a pair of arm portions extending at substantially right angle with each other, fastening means releasably securing said arm portions of one of said elements to said arm portions of the other of such elements, a fixed centering member secured to one of said bracket elements at the juncture of said arm portions, a movable centering member positioned at the juncture of said arms portions of said other of said bracket elements, a threaded bore extending through said last named juncture of said arm portions, a threaded rod received by said threaded bore, releasable means securing said movable centering member at one end of said threaded rod and a handle mounted at the other end for slidable movement of said centering member toward and away from said fixed centering member.

2. The structure as recited by claim **1** wherein said fixed centering member comprises a pair of plate members extending at substantially right angles with each other, said plate members lying in coplanar relation with inner edge portions of said arm portions and said plate members having a slot extending from free edges of said plate members and in substantial parallel relation with said arm portions.

3. The structure as recited by claim **2** taken in combination with a further centering member having a pair of plate members extending at substantially right angle with each other and a transverse plate member extending horizontally from substantially the mid-portion of each of said last named plate member, said transverse plate members being slidably positioned on said arm portions of said one of said bracket elements and received by said slots of said fixed centering member.

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