Nov. 23, 1954 E. J. CHABOT 2,695,149

ANTENNA MOUNTING BRACKET

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Fig. 1

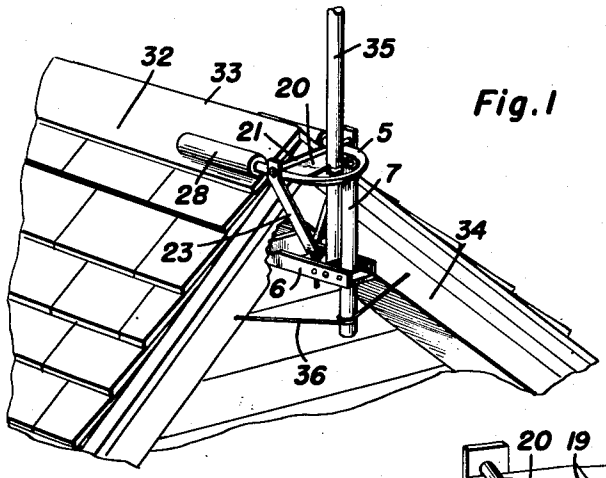
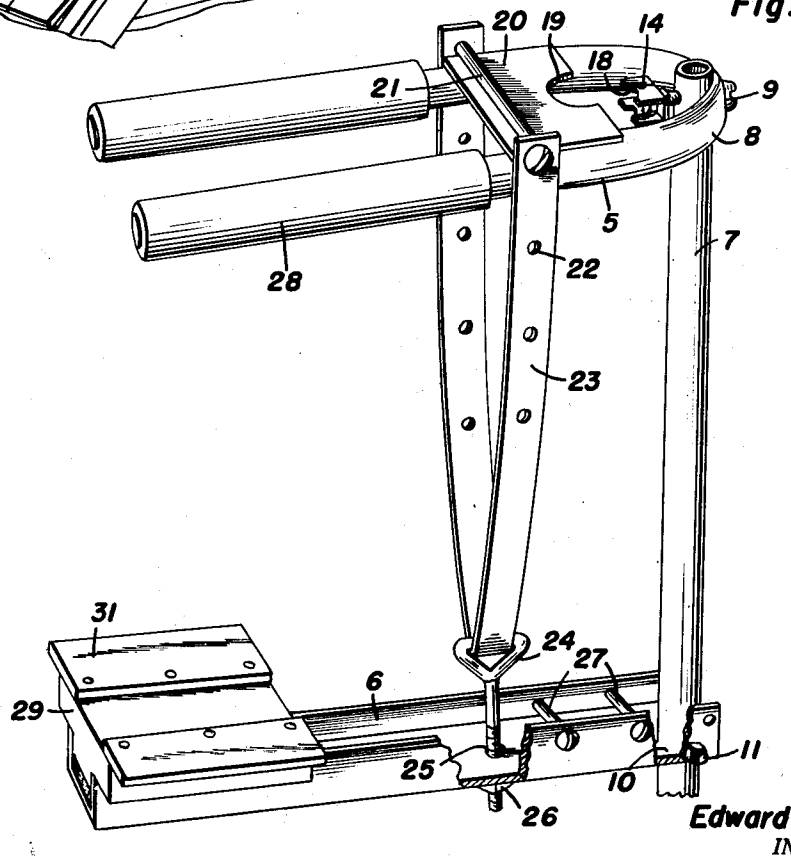


Fig. 2



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Fig. 3

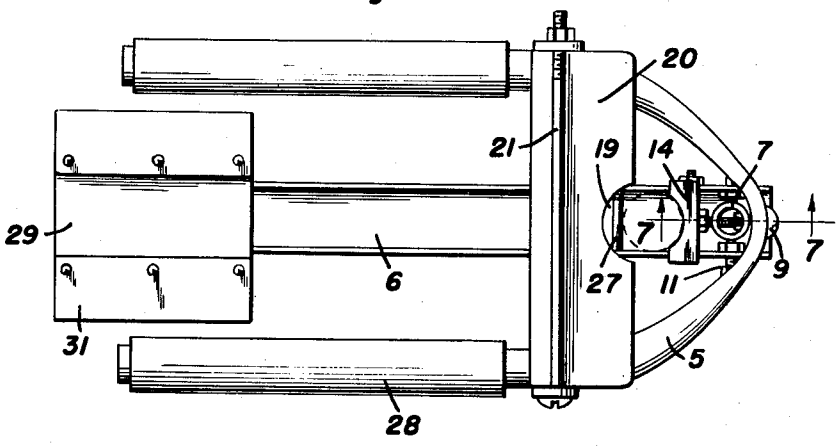


Fig. 4

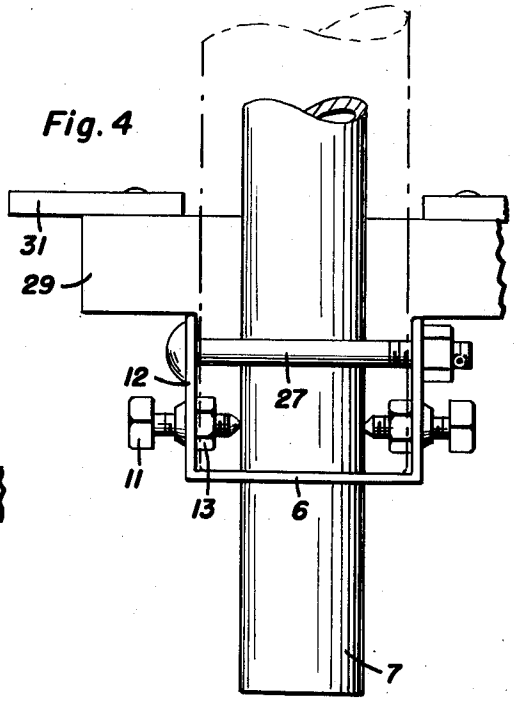


Fig. 5

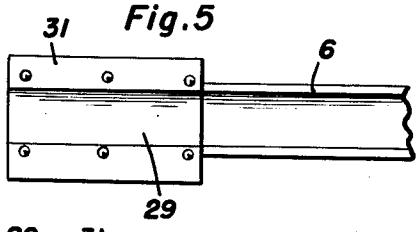


Fig. 6

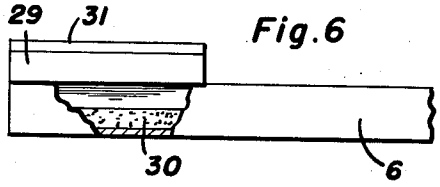
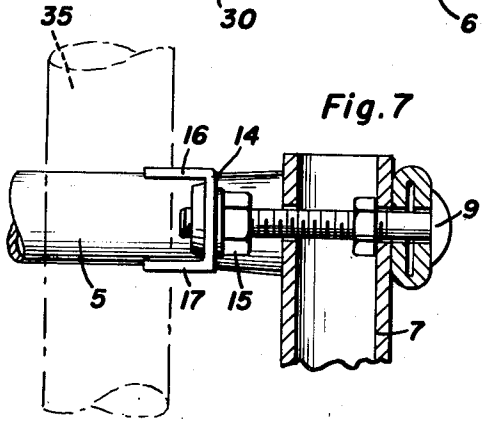


Fig. 7



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ANTENNA MOUNTING BRACKET

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Application February 7, 1952, Serial No. 270,345

8 Claims. (Cl. 248—43)

The present invention relates to new and useful improvements in brackets for mounting an antenna mast to the roof of a building without necessitating the use of nails, screws or other fasteners which penetrate the roof or other parts of the building to thus avoid damage thereto.

An important object of the invention is to provide a mounting bracket for an antenna mast embodying an upper clamp adapted to overlie the edge of a roof and a lower clamp positioned under the edge of the roof with means for adjusting and tightening the clamp and providing means for supporting the lower end of an antenna mast on the upper and lower clamp.

Another object is to provide a device of this character simple and practical in construction, which is strong and durable, relatively inexpensive to manufacture and otherwise well adapted for the purposes for which the same is intended.

Other objects and advantages reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a perspective view showing the bracket secured in position to the end of a gabled roof;

Figure 2 is an enlarged perspective view of the clamp;

Figure 3 is a top plan view;

Figure 4 is an enlarged front elevational view of the lower clamp and the vertical connecting bar connected thereto;

Figure 5 is a top plan view of the inner end of the channel arm of the lower clamp;

Figure 6 is a side elevational view thereof with parts broken away as shown in section; and

Figure 7 is an enlarged fragmentary sectional view taken on a line 7—7 of Figure 3.

Referring now to the drawings in detail, wherein for the purpose of illustration I have disclosed a preferred embodiment of the invention the numeral **5** designates an upper U-shaped clamping arm and **6** designates the lower channel-shaped clamping arm.

A vertical post **7** is connected at its upper end to the central or bight portion **8** of the upper U-shaped arm **5** by means of a screw **9** while the lower end of post **7** is slidable in an opening **10** in the outer end of lower clamping arm **6**. Lower arm **6** is secured in vertically adjusted position on post **7** relative to upper clamping arm **5** by means of a pair of clamping screws **11** threaded in the side or flanges **12** of arm **6** in clamping engagement at diametrically opposite sides of the post **7**. Jam nuts **13** lock the clamping screws or set screws **11** in adjusted position.

A U-shaped clamping head **14** is adjustably mounted on the inner end of screw **9** and is locked in adjusted position by jam nut **15**. The clamping head **14** is positioned on the screw to provide upper and lower flanges **16** and **17** having aligned notches **18** at their inner edges and opposed to a notch **19** in a clamping plate **20** secured on top of the upper arm **5** by a transverse nut and bolt **21** selectively secured in a vertical row of openings **22** in the sides of a V-shaped metal strap **23**.

An eye-bolt **24** is positioned at the lower end of strap **23** and is adjustable in an opening **25** in lower arm **6** by means of a nut **26** threaded on the lower end of the eye-bolt.

A pair of screws or bolts and nuts **27** are secured transversely in the sides or flanges **12** of lower arm **6**

in spaced parallel relation with respect to each other and in the vertical alignment respectively with the notches **18** and **19** of clamping head **14** and clamping plate **20**.

The rear or inner ends of the upper arm **5** are enclosed in rubber sleeves **28** and a clamping block **29** is slidable in the rear or inner end of lower channel clamping arm **6** with a rubber pad **30** under the block to frictionally hold the latter in slidably adjustable position in the channel. Rubber pads **31** are also secured to the upper surface of block **29** and with the outer edges of the pads **31** projecting outwardly beyond the side edges of the block.

In the operation of the device the bracket may be placed at the end of a gabled roof **32** with the rubber sleeves **28** at the inner end of upper clamping arm **5** overlying the roof at opposite sides of the ridge or peak **33** thereof, while the inner end of the lower arm **6** projects inwardly under the overhang **34** at the end of the roof.

Rubber pads **31** conform to the slope of the overhang **34**.

Upper and lower arms **5** and **6** are clamped tightly on the roof by tightening strap **23** by means of eye-bolt **24** and nut **26** and lower arm **6** is adjusted on connecting bar **7** by the set screws **11**.

An antenna mast **35** is then clamped in the notches **18** and **19** of clamping head **14** and plate **20** and with the lower end of the mast resting in channel arm **6** between the bolts or screws **27**.

Guy wires **36** may also be attached to the lower end of post **7** below the lower arm **6**.

In view of the foregoing description taken in conjunction with the accompanying drawings it is believed that a clear understanding of the device will be quite apparent to those skilled in this art. A more detailed description is accordingly deemed unnecessary.

It is to be understood, however, that even though there is herein shown and described a preferred embodiment of the invention the same is susceptible to certain changes fully comprehended by the spirit of the invention as herein described and the scope of the appended claims.

Having described the invention, what is claimed as new is:

1. An antenna supporting bracket adapted for attachment to a roof, said bracket including a post, upper and lower clamping jaws mounted on said post at longitudinally spaced points therealong, at least one of said jaws being movable along said post, means on said jaws for clamping a portion of an antenna therebetween in substantially parallel relation to said post, said lower jaw consisting of an upwardly opening channel, and a clamping block slidable in said channel for engaging the underside of a roof in coacting clamping relation with said upper jaw when the latter is placed on top of the roof.

2. An antenna supporting bracket adapted for attachment to a roof, said bracket including a post, upper and lower clamping jaws mounted on said post at longitudinally spaced points therealong, at least one of said jaws being movable along said post, means on said jaws for clamping a portion of an antenna therebetween in substantially parallel relation to said post, said lower jaw consisting of an upwardly opening channel, a clamping block slidable in said channel for engaging the underside of a roof, and means in said channel forming a socket for the reception of the end of an antenna.

3. An antenna supporting bracket adapted for attachment to a roof, said bracket including a post, upper and lower clamping jaws mounted on said post at longitudinally spaced points therealong, at least one of said jaws being movable along said post, said upper jaw consisting of a pair of spaced substantially parallel arms adapted for clamping engagement on top of a roof and cooperating means on said arms and on said post for clamping a portion of an antenna therebetween, said lower jaw consisting of an upwardly opening channel, a clamping block slidable in said channel for engaging the underside of a roof, and means in said channel forming a socket for the reception of the end of an antenna.

4. An antenna supporting bracket adapted for attachment to a roof, said bracket including a post, upper and lower clamping jaws mounted on said post at longitudinally spaced points therealong, at least one of said jaws being movable along said post, means on said jaws for clamping a portion of an antenna therebetween in substantially parallel relation to said post, and adjustable means connecting said jaws to one another and preventing relative movement of the jaws with respect to one another.

5. An antenna supporting bracket adapted for attachment to a roof, said bracket including a post, upper and lower clamping jaws mounted on said post at longitudinally spaced points therealong, at least one of said jaws being movable along said post, adjustable means connecting said jaws to one another and preventing relative movement of the jaws with respect to one another, said upper jaw consisting of a pair of spaced substantially parallel arms adapted for clamping engagement on top of a roof and cooperating means on said arms and said post for clamping a portion of an antenna therebetween.

6. An antenna supporting bracket adapted for attachment to a roof, said bracket including a post, upper and lower clamping jaws mounted on said post at longitudinally spaced points therealong, at least one of said jaws being movable along said post, adjustable means connecting said jaws to one another and preventing relative movement of the jaws with respect to one another, said lower jaw consisting of an upwardly opening channel means in said channel forming a socket for the reception of the end of an antenna, said upper jaw consisting of a pair of spaced, substantially parallel arms adapted for clamping engagement on top of a roof and cooperating means on said arms and said post for clamping a portion of an antenna therebetween.

7. An antenna supporting bracket adapted for attachment to a roof, said bracket including a post, upper and lower clamping jaws mounted on said post at longitudinally spaced points therealong, at least one of said jaws being movable along said post, and adjustable means connecting said jaws to one another and preventing relative movement of the jaws with respect to one another, said upper jaw consisting of a pair of spaced, substantially parallel arms adapted for clamping engagement on top of a roof, cooperating means on said arms and said post for clamping a portion of an antenna therebetween, said cooperating means including a plate secured to and extending between said arms, said plate constituting a seat for a portion of said adjustable means.

8. An antenna supporting bracket adapted for attachment to a roof, said bracket including a post, upper and lower clamping jaws mounted on said post at longitudinally spaced points therealong, at least one of said jaws being movable along said post, adjustable means connecting said jaws to one another and preventing relative movement of the jaws with respect to one another, said upper jaw consisting of a pair of spaced, substantially parallel arms adapted for clamping engagement on top of a roof, cooperating means on said arms and said post for clamping a portion of an antenna therebetween, said cooperating means including a plate secured to and extending between said arms, said plate constituting a seat for a portion of said adjustable means, and means in said channel forming a socket for the reception of the end of an antenna.

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