April 7, 1959 D. T. WATKINS 2,880,829

ANTI-CLIMBING SHIELD FOR TOWERS

Filed June 22, 1956

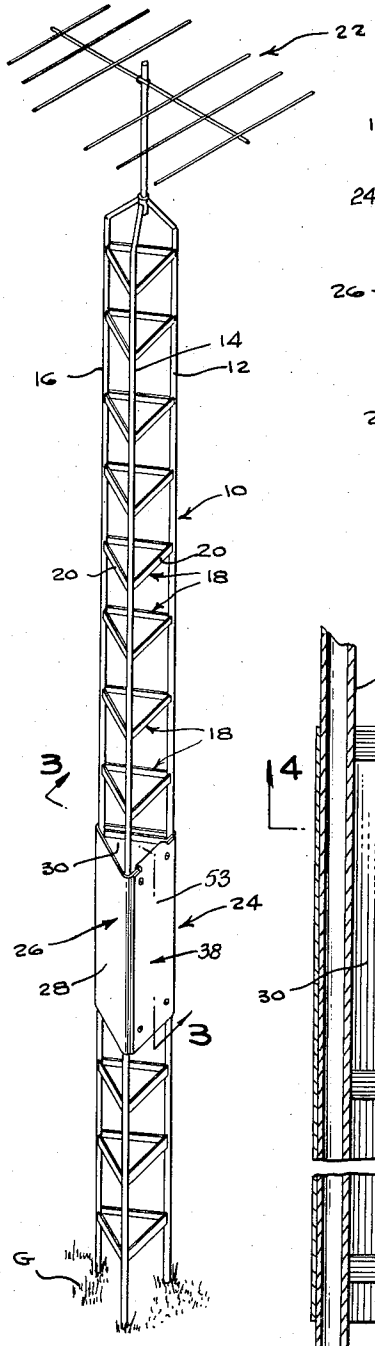


Fig-1

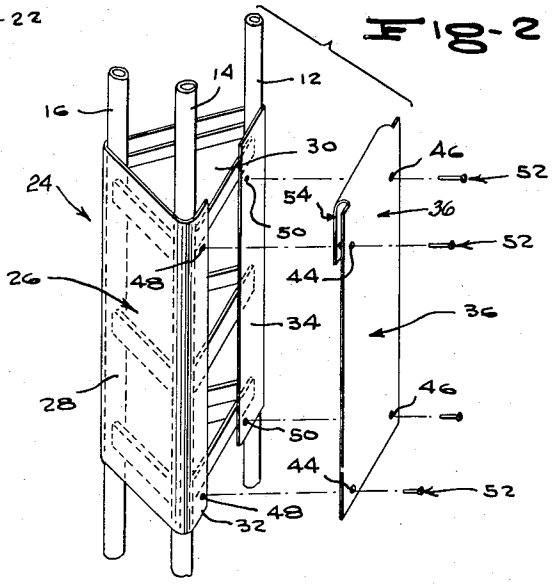


Fig-2

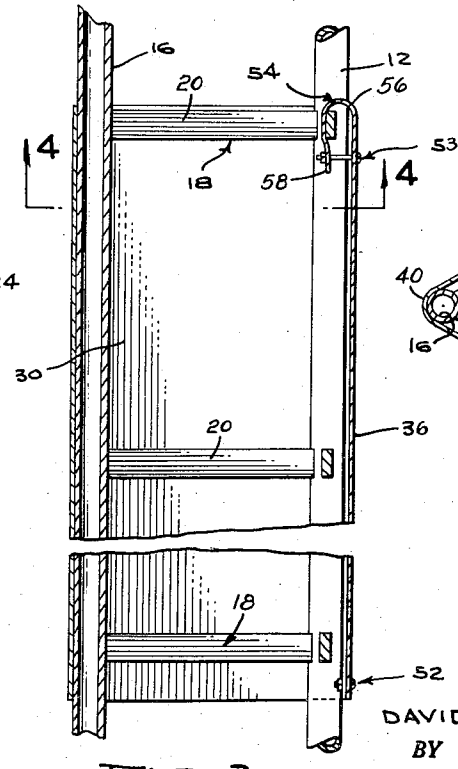


Fig-3

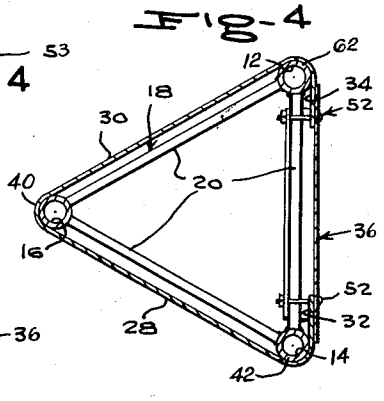


Fig-4

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ANTI-CLIMBING SHIELD FOR TOWERS

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1 Claim. (Cl. 189—32)

This invention relates to improvements in open-work towers, such as television antenna towers, and more particularly to an improved anti-climbing shield therefor.

The primary object of the invention is to provide an efficient and effective device of this kind which is especially, but not exclusively designed for installation on towers having vertically spaced bars which serve as steps and hand grips for workmen in climbing and descending the towers, the device being of a length to bridge and cover several vertically adjacent tower bars so as to prevent use of such bars for climbing or descending a tower past the device.

Another object of the invention is to provide an anti-climbing shield of the character indicated, which can be readily and economically manufactured, is easily installed, and is highly satisfactory for the purpose intended.

These together with other objects and advantages which will become apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout the several views, and in which:

Figure 1 is a perspective view of a television antenna tower having thereon an anti-climbing shield of the invention;

Figure 2 is an enlarged fragmentary exploded perspective view showing the shield partially installed on the tower;

Figure 3 is an enlarged fragmentary vertical transverse sectional view taken substantially on line 3—3 of Figure 1; and

Figure 4 is a horizontal sectional view taken substantially on line 4—4 of Figure 3.

Referring to the drawings in detail, a conventional television antenna tower, indicated generally at **10**, comprises parallel vertical standards **12**, **14**, and **16** which are suitably anchored at their lower ends in the ground G, and form a tower of polygonal cross section, such as triangular. Vertically spaced horizontal cross bars **20** extend between and are fixed to adjacent ones of the standards, in groups **18** whose bars **20** are on the same level. The bars **20** serve as steps and hand grips for workmen ascending and descending the tower for installing and servicing such as a television antenna, indicated generally at **22**, on the upper end of the tower **10**.

The illustrated anti-climbing shield, indicated generally at **24**, is of sufficient height to bridge three or four adjacent bar groups **18**, so as to prevent climbing of the tower **10** past the shield **24**.

The anti-climbing shield **24** comprises a vertically elongated V-shaped sheet metal body, indicated generally at

26, having angularly related side walls **28** and **30** which have co-planar laterally inwardly projecting flanges **32** and **34**, and a flat removable wall, indicated generally at **36**, which is of the same height as the body **26**, but is preferably slightly narrower than the distance between the free edges of the side walls **28** and **30** of the body **26**. The junctures of the side walls **28** and **30** of the body **26** with each other, and the junctures of the flanges **32** and **34** with the free edges of the side walls **28** and **30** are curved, as indicated at **40** and **42**, respectively, so as to make firm and conforming engagement with related standards of the tower **10**.

The removable wall **36** has vertically spaced bolt holes **44** and **46** near its side edges which are registrable with bolt holes **48** and **50** in related flanges **32** and **34** of the body **26**, and bolts **52** are extended through related bolt holes so as to secure the removable wall **36** in place, on the outer sides of the flanges, with the corners **40** and **42** of the body **36** embracing the outer sides of related ones of the standards **12**, **14** and **16**.

On the upper end of the removable wall **36** is a hook flange **54** which extends for the major portion of the width of the removable wall **36**, and has an inward and downward bend **56** which terminates in a full width depending flange **58** which is spaced from and parallel to the inward side of the wall **36**.

When installing the shield **24**, the hook flange **54** is engaged over a bar **20** extending between the upper ends of the flanges **32** and **34** of the body **26** at the upper end of the body, the body **26** having been engaged on the tower **10** at the desired level, and the removable wall **36** then secured to the flanges **32** and **34**, as above described, so that the removable wall **36** serves the further purpose of suspending the shield **24** in a selected place in the tower **10**, preferably at a point spaced above the ground G, as shown in Figure 1.

In order to prevent accidental disengagement of the hook flange **54** from an engaged bar **20**, a bolt **53** is extended through the removable wall **36** and the hook flange **58** below the engaged bar **20**.

Although the described embodiment of the invention relates to a triangular cross section tower, the body **26** of the anti-climbing shield can be altered in shape to accommodate it to towers of other polygonal cross sections, such as square.

The foregoing is considered as illustrative only of the principles of the invention. Since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, as fall within the scope of the appended claim.

What is claimed is:

In combination, a polygonal cross section tower comprising laterally spaced standards forming corners of the tower and having lower ends, and vertically spaced cross bars extending between and secured to adjacent standards above the lower ends of the standards, a sheet metal body having angularly related side walls, a first means extending between and joining adjacent side walls and defining corners with said side walls, said sheet metal body having outer flanges projecting inwardly, second means joining said flanges to the adjacent side walls and defining corners, said body embracing the tower with corners thereof embracing the outer sides of related tower standards and extending between vertical spaced cross bars, and a re-

movable wall extending between and overlapping said flanges and secured thereto, said removable wall having a hook flange on its upper end supportably engaged over a tower cross bar, said hook flange having an inward and downwardly bend engaged over the cross bar, said bend terminating in a depending flange engaging the inward side of the cross bar, and retaining means extending between and secured to said depending flange and the removable wall at a level below the related tower cross bar.

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