July 24, 1956 C. R. DOUTY 2,755,730

WIND DEFLECTOR FOR CHIMNEY TOPS

Filed Aug. 3, 1954 2 Sheets-Sheet 1

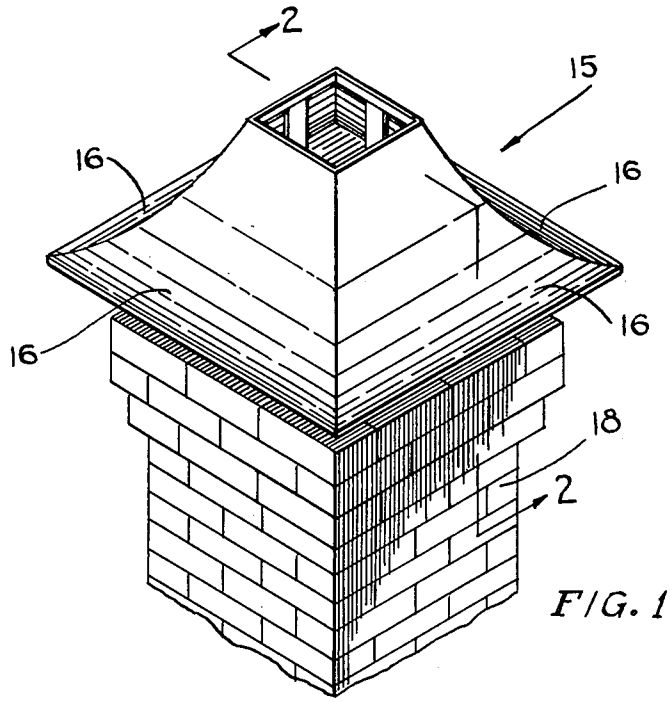


FIG. 1

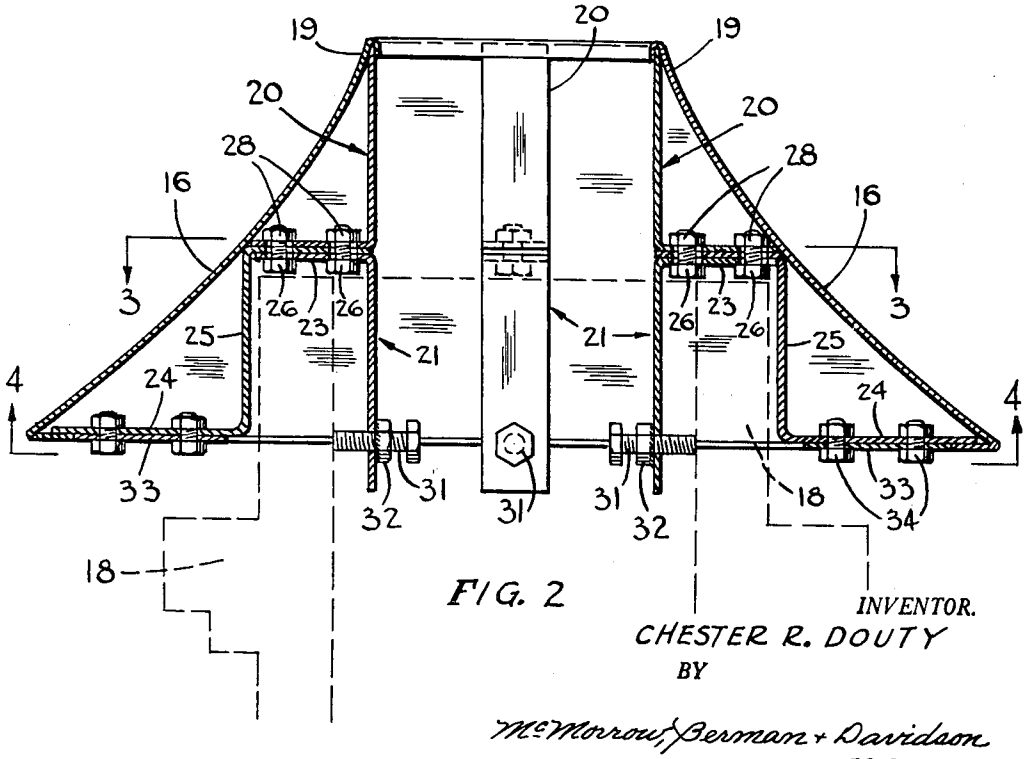


FIG. 2

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WIND DEFLECTOR FOR CHIMNEY TOPS

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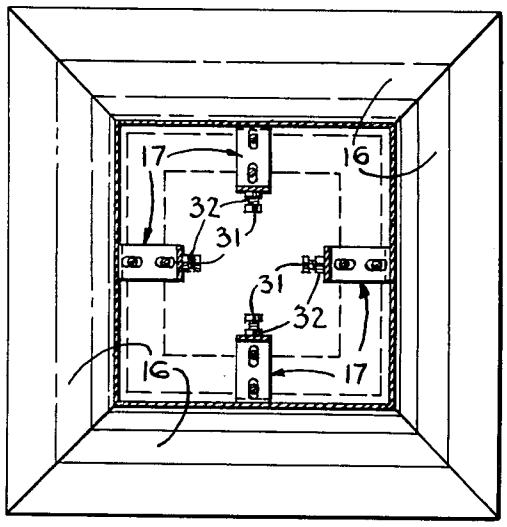


FIG. 3

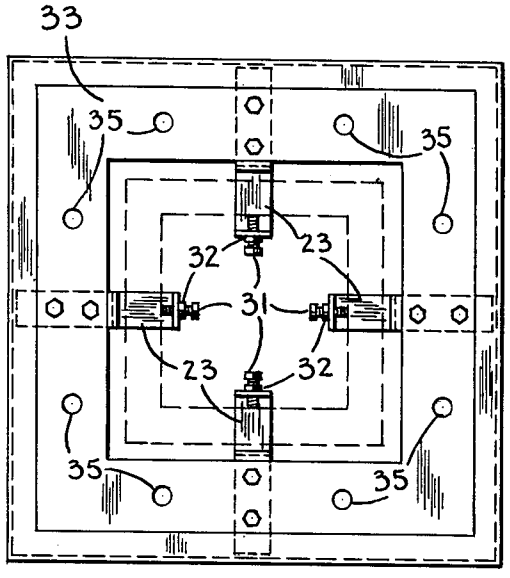


FIG. 4

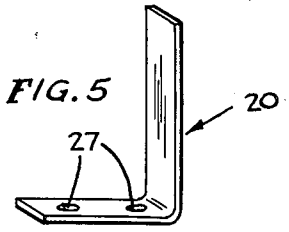


FIG. 5

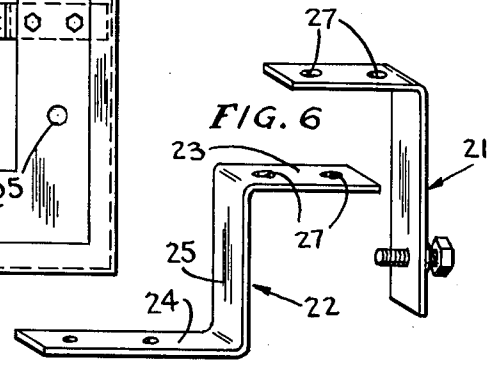


FIG. 6

FIG. 7

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2,755,730

WIND DEFLECTOR FOR CHIMNEY TOPS

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Application August 3, 1954, Serial No. 447,482

2 Claims. (Cl. 98—67)

This invention relates to improvements in wind deflectors for chimney tops.

An object of the invention is to provide a more efficient and practical wind deflector for chimney tops which is of simple construction, which is readily attached to a chimney and which presents an attractive, symmetrical appearance when so attached.

Other objects and advantages of the invention will appear from the following description considered in conjunction with the attached drawings, in which:

Figure 1 is a perspective view of a wind deflector of the present invention mounted upon a chimney top.

Figure 2 is an enlarged vertical transverse section taken along the line 2—2 of Figure 1, on an enlarged scale.

Figure 3 is a horizontal section taken along the line 3—3 of Figure 2, on a reduced scale.

Figure 4 is a horizontal section taken along the line 4—4 of Figure 2, on a reduced scale.

Figure 5 is a perspective view of the upper element of an anchoring means of the present invention.

Figure 6 is a perspective view of the intermediate element of an anchoring means of the present invention.

Figure 7 is a perspective view of the lower element of an anchoring means of the present invention.

Referring to the drawings, the illustrated device comprises an open-ended casing **15** in the form of a truncated pyramid, with its sides **16** concavely curved. The upper edges of the sides **16** are bent inwardly and downwardly to form a downwardly opening groove **19** around the upper end of the casing **15**. The sides **16** are made of copper, galvanized iron, or other non-corrosive material.

Within the casing **15** are anchoring means **17** for embracingly engaging the walls of a chimney **18**. An anchoring means **17** is connected to each side **16** of the casing **15**. Each of the anchoring means **17** is made of non-corrosive metal. Each anchoring means **17** includes an upper element **20**, consisting of an upright L-shaped strip, an intermediate element **21**, consisting of an inverted L-shaped strip arranged with its horizontal leg underlying the horizontal leg of the element **20** and with its vertical leg extending downwardly in alignment with the vertical leg of the element **20**. The means **17** also includes a lower element **22** which consists of a strip having a vertically disposed mid portion **25** and an upper horizontal arm **23** and lower horizontal arm **24** extending in opposite directions from the mid portion **25**. The element **22** is arranged so that the upper end portion **23** underlies the horizontally disposed leg of the element **21** and the lower arm **24** extends away from the vertical leg of the element **21**. The horizontal, superimposed portions of the elements **20**, **21** and **22** are connected together by a pair of bolts **26** which extend through elongated, registering bolt holes **27**, cut in each of the horizontal portions, and are threadably engaged by nuts **28**. An anchoring means **17** is mounted upon each wall of the rim of the chimney **18** with the vertical leg of the element **21** at the inward side of the chimney wall and the vertical leg of the element **22** engaging the outside

of the chimney wall. The upper end of the vertical legs of each of the elements **20** extends into the adjacent portion of the groove **19**. To secure the anchoring means **17** and thus the casing **15** firmly to the chimney **18**, a bolt **31** is threaded through the vertical leg of the element **21** each of the anchoring means **17** and through a nut **32** secured to said leg, with the shank end of the bolt **31** bearing against the inner surface of the wall of the chimney **18**, when the bolt **31** is tightened.

On the lower end of the housing **15** is an apertured plate **33** which extends therearound and serves to close the space between the lower end of the casing **15** and the chimney **18**. The portions **24** of the elements **22** of the anchoring means **17** overlie the plate **33** and are secured thereto by means of bolts **34**. The plate **33** has a plurality of openings **35** therein at points between the anchoring means **17**.

In the rare instance in which a downward movement of air enters the top of the casing **15**, it will follow the path of least resistance which lies along the inner surface of the outwardly sloping sides **16** and will thus be conducted to the openings **35** in the plate **33** through which it will pass out of the casing **15** without actually entering the chimney **18** or causing any reversal of the direction of movement of the draft in the chimney.

What is claimed is:

1. In a wind deflector for a chimney top, a truncated pyramidical casing having a smaller upper end and a larger lower end, said lower end having a plate extending therearound, said plate having a free edge defining an opening for reception of a chimney top, said casing having side walls, anchoring means located at each side wall of the casing and within the casing, each anchoring means comprising an upper element positioned within said casing and engaging and depending from the upper end of said casing, a lower element positioned within said casing and engaging and depending from an intermediate portion of said casing, an intermediate element positioned within said casing beneath said upper element and inwardly of said lower element and secured to said upper and lower elements, said lower element having a portion abutting the casing plate, and bolt means on said intermediate element for clamping engagement with the inward side of a chimney wall in opposition to said lower element's engagement with the outside of the chimney wall.

2. In a wind deflector for a chimney top, a truncated pyramidical casing having a smaller upper end and a larger lower end, said lower end having a plate extending therearound, said plate having a free edge defining an opening for reception of a chimney top, said casing having side walls, anchoring means located at each side wall of the casing and within the casing, each anchoring means comprising an upper element positioned within said casing and engaging and depending from the upper end of said casing, a lower element positioned within said casing and engaging and depending from an intermediate portion of said casing, an intermediate element positioned within said casing beneath said upper element and inwardly of said lower element and secured to said upper and lower elements, said lower element having a portion abutting the casing plate, and bolt means on said intermediate element for clamping engagement with the inward side of a chimney wall in opposition to said lower element's engagement with the outside of the chimney wall, said upper anchoring element being of erect L-shaped form and having a vertical leg having an upper end securably engaged by the upper end of the casing and a horizontal leg, said intermediate element being of inverted L-shaped form and having a horizontal leg underlying the horizontal leg of the upper element and a depending vertical leg through which said bolt is thread-

ed, said lower anchoring element having an upper horizontal arm underlying the horizontal leg of the intermediate element, bolt means traversing and securing together the horizontal legs and the horizontal arm, said lower element further comprising a vertical midportion depending from said upper horizontal arm, and a lower horizontal arm on the lower end of said midportion, said lower arm overlying the casing flange, and secured to the flange.

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