Nov. 24, 1953 A. W. GRAY 2,660,106

CHIMNEY COWL

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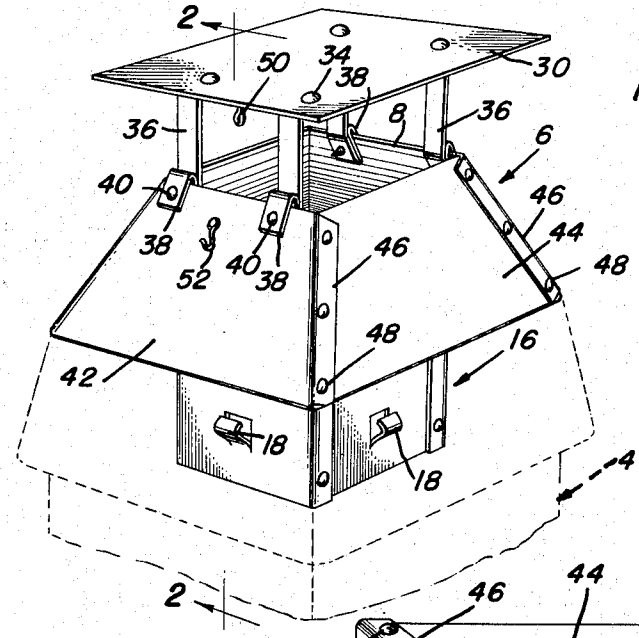


Fig. 1

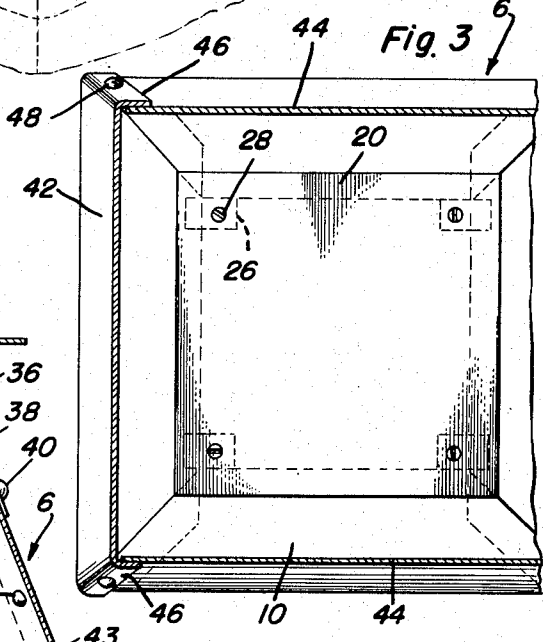


Fig. 3

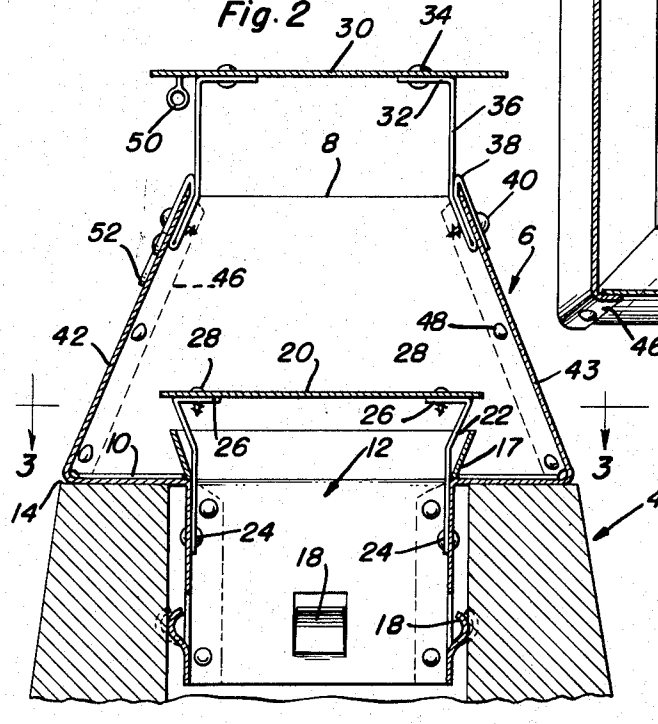


Fig. 2

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CHIMNEY COWL

Arthur W. Gray, Rockland, Maine

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1 Claim. (Cl. 98—83)

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The present invention relates to a chimney cowl having certain new and useful improvements which, additively considered, provide a construction which is more aptly suited to accomplish results which are calculated to better fulfill the over-all requirements of the trade in general.

Another object of the invention is to provide a novelty constructed cowl, to improve upon and reduce the number of parts entering into the completed structure, thereby not only increasing the efficiency of the structure as a whole, but rendering same less costly to manufacture and to otherwise simplify factors of assembling and sale.

A further object of the invention is to structurally, functionally and otherwise improve upon similarly constructed prior art chimney caps and cowls and, in so doing, to provide a construction in which manufacturers, builders, users and fire control authorities will find their respective needs fully met, contained and effectually available.

More particularly the invention has to do with a sheet metal or equivalent simplified cowl construction which is characterized by an adaptor neck designed to fit into the duct of the chimney, said neck having resilient detents which when brought into frictional contact with the chimney walls provides reliable means for applying and holding the cowl in operative position on the chimney.

Another object of the invention appertains to a cowl construction whose principal body is of truncated pyramidal form and which constitutes a holder for a flat baffle plate, the latter being attached in axial alignment with said adaptor neck.

Then, too, an attachable and detachable spark arresting plate is provided and detachably bracketed to the truncated upper end of the stated body or hood.

Other objects and advantages will become more readily apparent from the following description and the accompanying sheet of illustrative drawings.

In the accompanying sheet of drawings wherein like numerals are employed to designate like parts throughout the views:

Figure 1 is a perspective view showing, in dotted lines, a fragmentary portion of a conventional brick or equivalent chimney and showing, in addition, the improved chimney cowl, the manner in which it is constructed and applied.

Figure 2 is a view on an enlarged scale taken approximately on the plane of the vertical line

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2—2 of Figure 1, looking in the direction of the arrows.

Figure 3 is a horizontal section on the line 3—3 of Figure 2, looking in the direction of the arrows.

Referring now to the drawings and first to Figure 1, the conventional brick or equivalent chimney is denoted by the numeral 4. The attachable and detachable cap or cowl is, as before stated, of sheet metal or equivalent material and it is characterized primarily by a truncated pyramidal body or hood 6. The truncated upper end of the hood is denoted at 8 and the basal portion, in the form of an imperforate wall, is denoted at 10. This wall defines axial opening means 12 in alignment with the exit 8 and the portion 10 constitutes a rigid ledge which rests firmly on the top 14 of the chimney. These details are best shown in Figure 2. The aforementioned adaptor neck is denoted by the numeral 16 and this is preferably rectangular in cross-section and depends below the base or ledge 10 where it is adapted to telescope into the duct of the chimney 4 in the manner illustrated. Said neck is provided in its four walls with struck out arcuately bent tongues which latter are denoted by the numerals 18 and are so bent and arranged as to provide friction detents. The natural tendency for the detents is to swing outwardly in relation to the axis of the neck and thus impinge against the chimney walls and to aptly retain the neck in any desired position.

Situated in alignment with the upper and lower opening means 12 and 8 respectively is a flat substantially rectangular baffle plate 20. This is preferably of a size greater than the size of the opening means 12. It is situated within the chamber formed by the hood, just above the top of the chimney and has its marginal edges spaced from the wall portions of said hood. Approximately L-shaped brackets are provided and these are denoted by the numerals 22 and they have their long arms riveted or otherwise secured as at 24 to the neck. The lateral shorter arms 26 underlie the marginal edge portions of the baffle plate and are fastened thereto by appropriate fasteners 28.

There is a similar rectangular baffle plate provided on the exterior and above the truncated portion of the hood and for sake of distinction this is denoted by the numeral 30 and may be best described as a readily applicable and removable spark arrester and down draft regulator. This plate is larger in area than the baffle plate 20 and is also larger, as a matter of fact, than the truncated exit opening means 8. Here again L-

shaped brackets are provided and the short upper end portions **32** underlie the marginal portions of the plate and are riveted or otherwise fastened thereto as at **34**. The depending long arms **36** are formed into attaching hooks **38** and these hooks are engaged over the upper edge portions of the hood and are secured in place by appropriate fasteners **40**.

It is preferable that the hood and neck be made up of complemental parts for example a pair of inclining walls **42—42** and another pair of similarly inclined walls **44—44**, all of said walls being generally trapezoidal in form. The end portions of the walls **42** are formed with flanges **46—46** which overlap the walls **44** and are riveted or otherwise secured thereto as at **48**.

By removing the fastenings **40** and detaching the brackets the spark arresting plate may be bodily removed. There may be certain seasons of the year when it is thought desirable to remove said plate **30** and under the circumstances is preferably provided with an eye-screw **50** associable with a pivoted attaching and retaining hook **52**, the latter being carried by that wall of the hood which is directly below the eye **50**.

It is believed that a chimney cowl constructed as herein shown and described will transform an ordinary chimney into one which functions more satisfactorily due to the fact that the cowl will better regulate draft requirements and will cope amply with weather conditions involving rain, snow and also high winds.

Referring again to the neck **16**, it will be seen that the upper extending end embodies suitably welded outwardly flaring collar **17** which provides a water guard and which prevents accumulating rain water from flooding down into the chimney; that is, under ordinary circumstances.

It is thought that persons skilled in the art to which the invention relates will be able to obtain a clear understanding of the invention after considering the description in connection with the drawings. Therefore a more lengthy description is regarded as unnecessary.

Minor changes in the shape, size and arrangement of details coming within the field of invention claimed may be resorted to in actual practice, if desired.

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

A chimney cowl comprising a hollow sheet material truncated pyramidal hood having a flat horizontal ledge constituting a supporting base and adapted to rest atop the chimney, the base being provided with central opening means and being further provided with an integral depending adapter neck, said neck being provided with resilient friction held detents, the body portion of said hood embodying complemented trapezoidal walls certain of which have end flanges overlapping and secured to cooperating ends of the complemental walls, said base being centrally provided with an upstanding outwardly flaring collar, the collar circumscribing said central opening means, a flat baffle plate within the confines of said hood and in axial alignment with said opening means and neck and disposed in close spaced relation above said collar, said baffle plate being provided with brackets depending therefrom and attached to said neck, a second baffle plate disposed on a plane above and in axial alignment with the truncated upper end of said hood, and brackets marginally attached to the edge portions of said baffle plate and depending therefrom and having hooks on their lower ends detachably connected to the upper edges of the wall portions of said hood.

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