Jan. 30, 1940. D. FRIEDMAN 2,188,709

ADJUSTABLE CHIMNEY COWL

Filed March 3, 1939 2 Sheets-Sheet 1

Fig. 1.

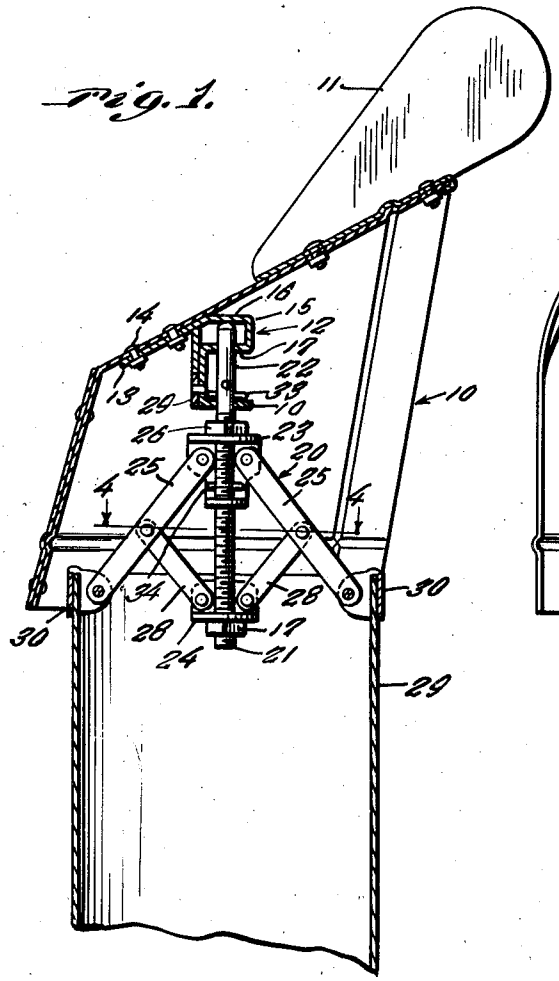


Fig. 2.

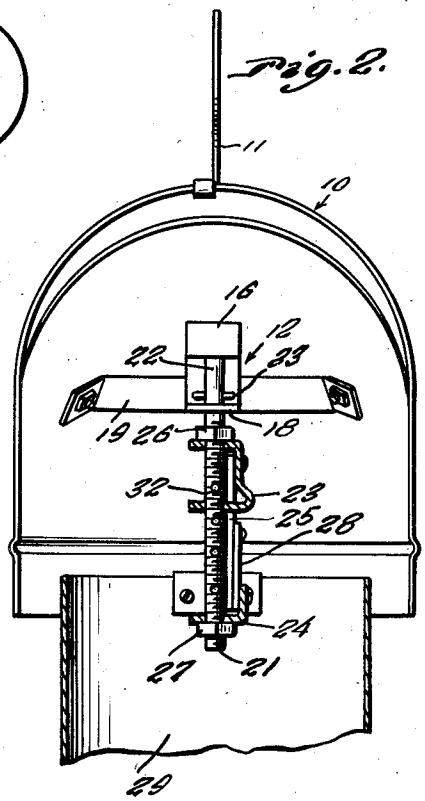


Fig. 5.

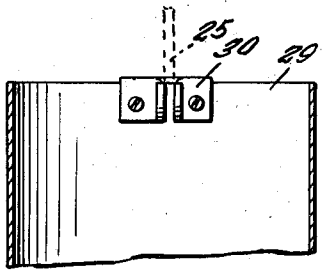
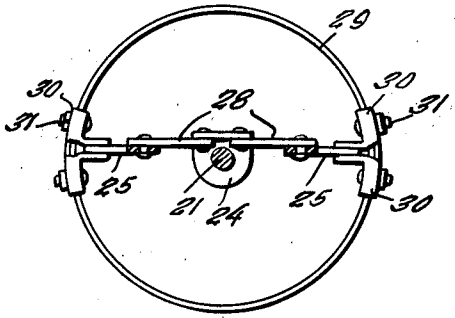


Fig. 4.



Inventor

Daniel Friedman

By Clarence A. O'Brien and Hyman Berman

Attorneys

Jan. 30, 1940. D. FRIEDMAN 2,188,709

ADJUSTABLE CHIMNEY COWL

Filed March 3, 1939 2 Sheets-Sheet 2

Fig. 5.

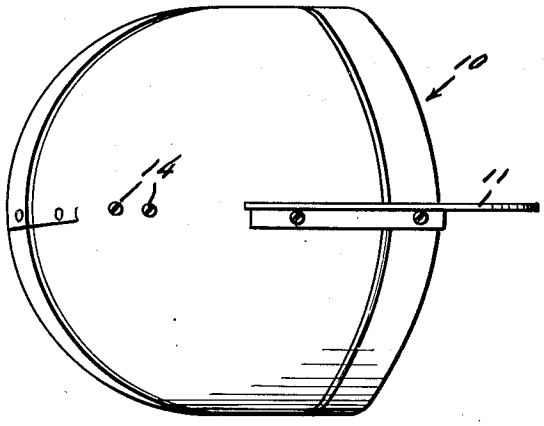


Fig. 7.

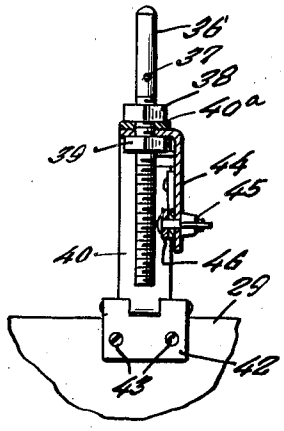
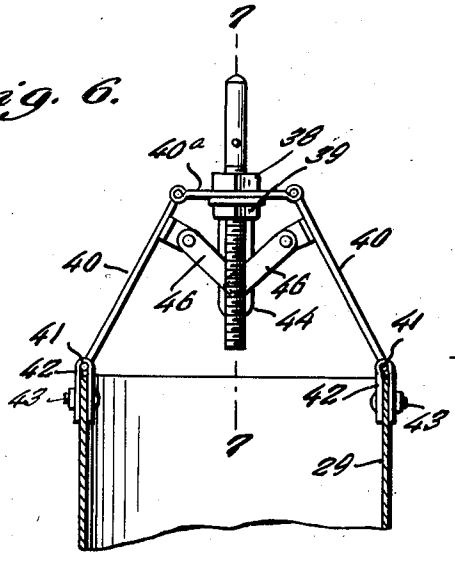


Fig. 6.



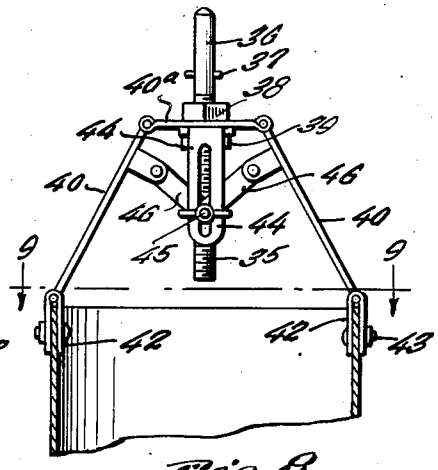
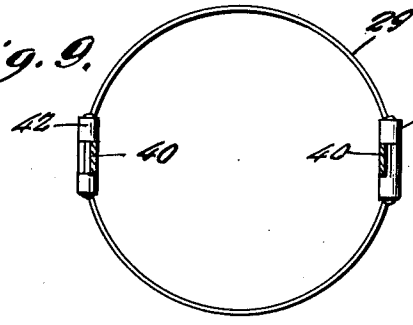


Fig. 8.

Fig. 9.



Inventor

Daniel Friedman

By Clarence A. O'Brien and Hyman Berman

Attorneys

Patented Jan. 30, 1940 2,188,709

UNITED STATES PATENT OFFICE

2,188,709

ADJUSTABLE CHIMNEY COWL

Daniel Friedman, Chicago, Ill.

Application March 3, 1939, Serial No. 259,686

3 Claims. (Cl. 98—68)

This invention relates to chimney cowls in general and has more particular reference to an improved structural arrangement in this classification possessed of distinctive design and configuration but characterized particularly by the specific means for supporting and attaching a bonnet-like hood on a chimney pipe or equivalent duct.

I am aware that streamlined chimney cowls having wind vanes and equivalent deflectors are broadly old. Also, I am sufficiently conversant with the field of invention and general state of the prior art to realize that rotary hoods are not new. It follows, therefore, that my primary aim is to generally improve upon structures in this classification by providing an arrangement which is characterized by simplicity and greater adaptability and efficiency.

Before proceeding further I feel disposed to call attention to the fact that the subject matter of this application is structurally similar to that shown and disclosed in my co-pending application Serial No. 259,685, filed in the United States Patent Office under date of March 3, 1939. Therefore, in order that the reader may obtain a comprehensive understanding of the succeeding description and claims attention is called to said co-pending case.

As pointed out in the introductory portion of the co-pending application I have evolved and produced a bonnet-shaped hood having a wind vane but particularly new in that it is provided on its interior with a cross brace and an associated bracket, the bracket being of such form as to adapt it for association with a single centralized upstanding accommodation and supporting spindle, the latter forming a part of a mounting fixture.

The principal novelty, as will be seen from the succeeding claims, in this application has to do with the adapter and mounting fixtures, these being of an adjustable type and the two embodiments shown being characterized by certain generic features, namely, diametrically opposed supporting links and expanding and contracting toggle links cooperable therewith.

Other features and advantages will be evident from the description and concluding claims.

In the accompanying pictorial drawings wherein the preferred embodiments are specifically disclosed and wherein like reference characters designate corresponding parts throughout the views:

Figure 1 is a fragmentary sectional end elevational view showing a portion of the chimney pipe, the hood and special attaching fixture for rotatably supporting the hood.

Figure 2 is what may be called an open front elevation of the hood observing Figure 1 in a direction from right to left, certain of the attaching fixtures appearing in section.

Figure 3 is a top plan view of Figure 1.

Figure 4 is a horizontal section on the line 4—4 of Figure 1.

Figure 5 is a fragmentary detail view showing one of the pipe engaging clips.

Figure 6 is a view, with the hood removed, showing a modified adapter and attaching fixture of the variable or adjustable type.

Figure 7 is a vertical section on the line 7—7 of Figure 6.

Figure 8 is a view like Figure 6 observing the opposite side of the structural arrangement.

Figure 9 is a horizontal section on the line 9—9 of Figure 8.

Referring now to the drawings by distinguishing reference characters it will be observed that the bonnet style hood, this being of sheet metal, is denoted by the numeral 10. It is open at its bottom and open at the front. It is of streamlined form and provided on its crown portion with a suitably shaped wind vane 11.

On its interior it is provided with an accommodation bracket 12. This is formed from strap metal.

This bracket 12 comprises a strap 13 bolted or otherwise secured to the roof of the hood as at 14. The free end of the strap is of double-U form. The upper U-shaped member 15 provides an end thrust element 16. The superposed apertured parts 17 and 18 provide guides. Secured to the bracket 12 and to the side walls of the hood is a cross brace 19.

The mounting means forming the centralized single spindle for the bracket 12 is denoted generally by the numeral 20. In the modification shown to advantage in Figures 1 and 2, I employ a rod this being screw-threaded at its lower end, said rod 21 having its upper end plain as at 22 to form the spindle and this extends out through the apertures in the limbs 17 and 18 and rests against the end thrust element 16 to provide the desired rotary mounting for the hood 10. I next call attention to an upper slide 23 and a lower companion slide 24. The expansion and contracting links 25 are pivoted to the upper slide 23 and said slide is locked against upward movement by a lock nut 26 on the threaded part of the rod. A similar adjusting and retention nut 27 on the threaded

rod cooperates with the slide 24 to regulate its position. A pair of shorter links 28 are pivoted to the intermediate portions of the links 25 and function as a toggle unit. The lower ends of the adjusting and supporting links 25 are pivotally connected with diametrically opposed clips, these being shaped to engage over the pipe 29. The clips are employed in pairs denoted by the numeral 30 and are secured by bolts or the like 31 to the pipe.

It will be noticed that the screw-threaded rod is provided with vertically spaced holes 32 to accommodate locking pins 33 and 34, the upper pin 33 coacting with the bracket 12 and the lower pin 34 coacting with the slide 23. The pins can be placed in the desired holes 32 depending on the size of the pipe on which the fixture 20 is adapted to be mounted. Obviously, the pin 33 serves to interconnect the hood and spindle to maintain the parts assembled. The toggle and nut arrangement serves to adjust the links 25 to, in turn, adjust the clips 30 to adapt the fixture 20 to the chimney pipe 29. Consequently, this device is suitable for pipes of varying diameters.

Somewhat the same generic arrangement is shown in the modification in Figures 6 to 9. Here the rod 35 has its upper end formed into a spindle 36 provided with an assembling pin 37. A plate is disposed between the binding nuts 38 and 39 and provides a support for the hingedly mounted links 40. The links 40 are pivotally attached as at 41 to U-shaped clips 42 which saddle over the pipe 29, being attached thereto by suitable fastening 43. The plate 40a accommodates the slotted pendant 44, this serving to accommodate a bolt and wing nut assembly 45 to regulate the toggle links 46. The toggle links are pivotally attached to the intermediate portion of the arms or main supporting links 40. Thus we have coacting means between the rod and toggle links for adjusting the arms 40 in and out to regulate the position of the attaching clips in relation to the spindle.

The gist of the novelty in this case, as is evident, is found in the single screw-threaded centralized spindle bolt having a pair of diametrically opposite links or arms pivoted and adjustably mounted thereon, there being a toggle device interposed between the arms and coacting with the bolt and said arms having clips or equivalent devices at their free ends attachable to the chimney pipe.

It is thought that the description taken in connection with the drawings will enable a clear understanding of the invention to be had. Therefore, a more lengthy description is thought unnecessary.

While the preferred embodiment of the invention has been shown and described, it is to be understood that minor changes coming within the field of invention claimed may be resorted to if desired.

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

1. A mounting fixture for a chimney cowl comprising clips attachable to a chimney pipe, a pair of diverging arms hingedly connected with said clips, a spindle bolt, means adjustably connecting the inner converging end of said arms with said bolt, toggle links connected with said arms, and means for adjustably connecting the toggle links with said bolt.

2. In a supporting and mounting fixture for a chimney hood of the class described, a bolt screw-threaded at one end and smooth at the other end, the latter end constituting a supporting spindle, upper and lower slides on the screw-threaded portion of said bolt, adjusting and retaining nuts on the threaded portion of the bolt cooperable with the slides, a pair of outwardly and downwardly diverging foldable arms pivotally attached to the upper slide, clips pivotally attached to the lower ends of said arms and adapted for connection with a chimney pipe, and a pair of toggle links pivotaly connected with the intermediate portions of the respective arms, the inner ends of said toggle links being pivotally attached to the remaining slide.

3. In a hood mounting for chimney cowls, a bolt threaded at one end and smooth at the opposite end, the latter end forming a hood accommodation spindle, nuts adjustably mounted on the threaded portion of the bolt, a plate clamped between said nuts, a pair of foldable arms pivotally attached to the ends of said plate, U-shaped clips, said clips being hingedly connected with the free ends of said arms and adapted for attachment to a chimney pipe, a slotted pendant attached to and depending from said plate, a pair of toggle links, said links being pivotaly connected at their outer ends with said arms, and adjustable means connected to the inner ends of the links and also connected with said slotted pendant.

DANIEL FRIEDMAN.