G. THORMANN.

CHIMNEY COWL OR TOP.

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966,370.

Patented Aug. 2, 1910.

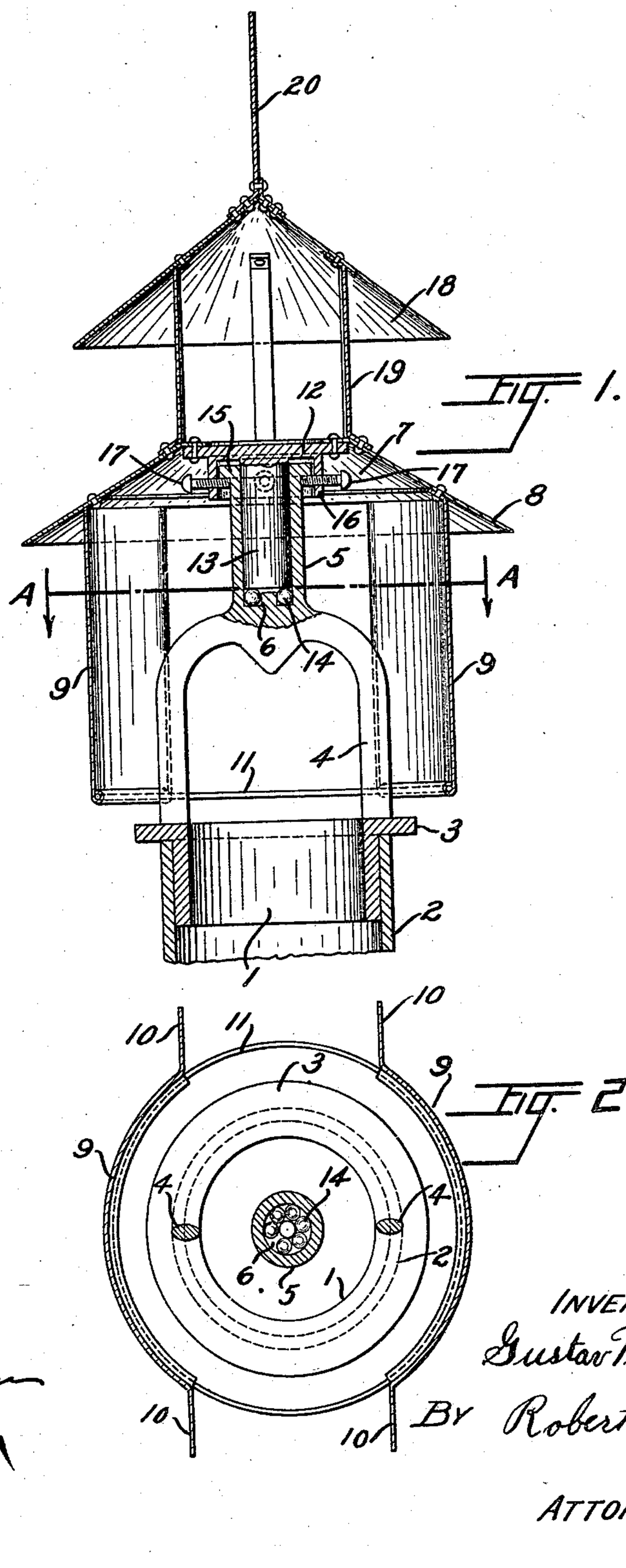

Fig. 1.

Fig. 2.

WITNESSES:

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CHIMNEY COWL OR TOP.

966,370. Specification of Letters Patent. Patented Aug. 2, 1910.

Application filed April 12, 1909. Serial No. 489,414.

To all whom it may concern:

Be it known that I, GUSTAV THORMANN, a citizen of the United States, and residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Chimney Cowls or Tops, of which the following is a complete specification.

The main objects of this invention are to provide an improved construction of chimney cowls or tops of that class adapted to adjust themselves with respect to the direction of the wind; to provide a chimney top of such construction that it will operate with a minimum amount of resistance and respond to the slightest changes in the direction of the wind; and to provide a device adapted to protect the chimney against back drafts of air, and which will be noiseless in its operation.

A specific construction embodying this invention is illustrated in the accompanying drawings, in which:

Figure 1 is a vertical central section of a cowl or chimney top embodying this invention. Fig. 2 is a section taken on line A—A of Fig. 1.

In the construction shown in said drawings, a sleeve 1 of cast or sheet metal, or other desired construction, is adapted to fit tightly in the top of a chimney or stove pipe 2 and is provided on its upper end with an outwardly directed flange 3 adapted to rest on the top of said chimney. Rigidly secured on said flange and extending upwardly therefrom is the bracket or yoke 4, on which is an upwardly directed bearing socket 5, which opens at its top and is provided in its bottom with a ball race 6. Supported from said bearing socket is the shield or guard 7 which comprises a conical roof 8 and side walls 9—9 extending downwardly therefrom, and each curved transversely to provide a cylindrically shaped shield. The lateral edges of said walls are turned outwardly and provide flanges 10 on either side of the openings between the walls. The bottom edges of said walls are turned upwardly and secured therein is the annular stay rod 11. Said rod acts to support the lower ends of the walls in position and may be secured thereto in any other preferred manner. Rigidly secured to the under side of said roof is a plate 12, having on the under side thereof a downwardly directed, cylindrical bearing member 13, which extends into said socket and rests at its lower end on balls 14 in said race 6. The shield may be secured to said socket in any desired manner but, as shown, the socket is provided with an outwardly directed flange 15 at its upper end, and the plate 12 is provided with a downwardly directed, annular flange 16 which incloses and extends below the flange 15. Set screws 17 extend through the flange 16 and extend beneath the flange 15 on said socket, so that the shield may rotate freely but cannot be raised off from the socket until the screws 17 are removed.

A conical hood 18 is supported above the roof 8 by means of posts 19, which are engaged at their lower ends to said roof, and on the top of said hood is a weather vane 20 of any desired construction which extends longitudinally in the direction of the openings between the walls 9, and acts to hold said openings in alinement with the direction of the wind.

The operation of the construction shown is as follows: When the device is secured on the chimney top the vane 20 acts to hold the shield in such position that one of the openings between the walls 9 is directed toward the wind and the other oppositely therefrom. The flanges 10, serve to direct the wind in a straight line through the shield and cause it to carry the smoke out through the opposite side from which the wind enters. The bearing member 13 being truly centered in the shield prevents binding between the same and the bearing socket, and the weight of the shield being supported entirely on the bearing balls permits the shield to turn freely and respond to the slightest changes in the direction of the wind.

If desired lubricant may be placed in the bearing socket to cause the operation of the shield to be perfectly noiseless and thus obviate a great deal of the annoyance oft-times caused by devices of this class. This can be done by simply removing the set screws and lifting the shield and thereby withdrawing the bearing member from the socket.

Although but one specific construction of this invention has been shown it will be understood that numerous details of the

construction may be changed or omitted without departing from the principles of this invention.

I claim:

1. A chimney cowl, comprising a sleeve adapted to be secured in a chimney, an inverted U shaped bracket secured on said sleeve and extending upwardly therefrom, an upwardly opening bearing socket on said bracket, ball bearings in the bottom of said socket, a conical roof, segment shaped walls depending from said roof and having parallel flanges at their lateral margins, an annular brace connecting the lower ends of said walls, a cylindrical bearing member extending downwardly from the roof into said socket and resting on said balls, a flange extending downwardly from the roof, and means on said flange adapted to hold the bearing member in the socket.

2. A chimney cowl, comprising a sleeve adapted to be secured in the top of a chimney, a forked bracket mounted on the sleeve, a bearing socket on said socket and having an outwardly directed flange at its top, bearing balls in said socket, a cylindrical bearing member extending into said socket and resting on said balls, a conical roof resting on said bearing member, segment shaped walls depending from said roof and each having an outwardly directed flange at each lateral margin, a flange depending from said roof and inclosing the upper end of said sleeve, set screws carried in said flange and adapted to extend beneath the flange on the sleeve, a hood supported on the roof, and a vane on the hood extending parallel with the flanges on said walls.

In testimony whereof I have hereunto subscribed my name in the presence of two witnesses.

GUSTAV THORMANN.

Witnesses:
W. W. WITHENBURY,
E. R. WALKER.