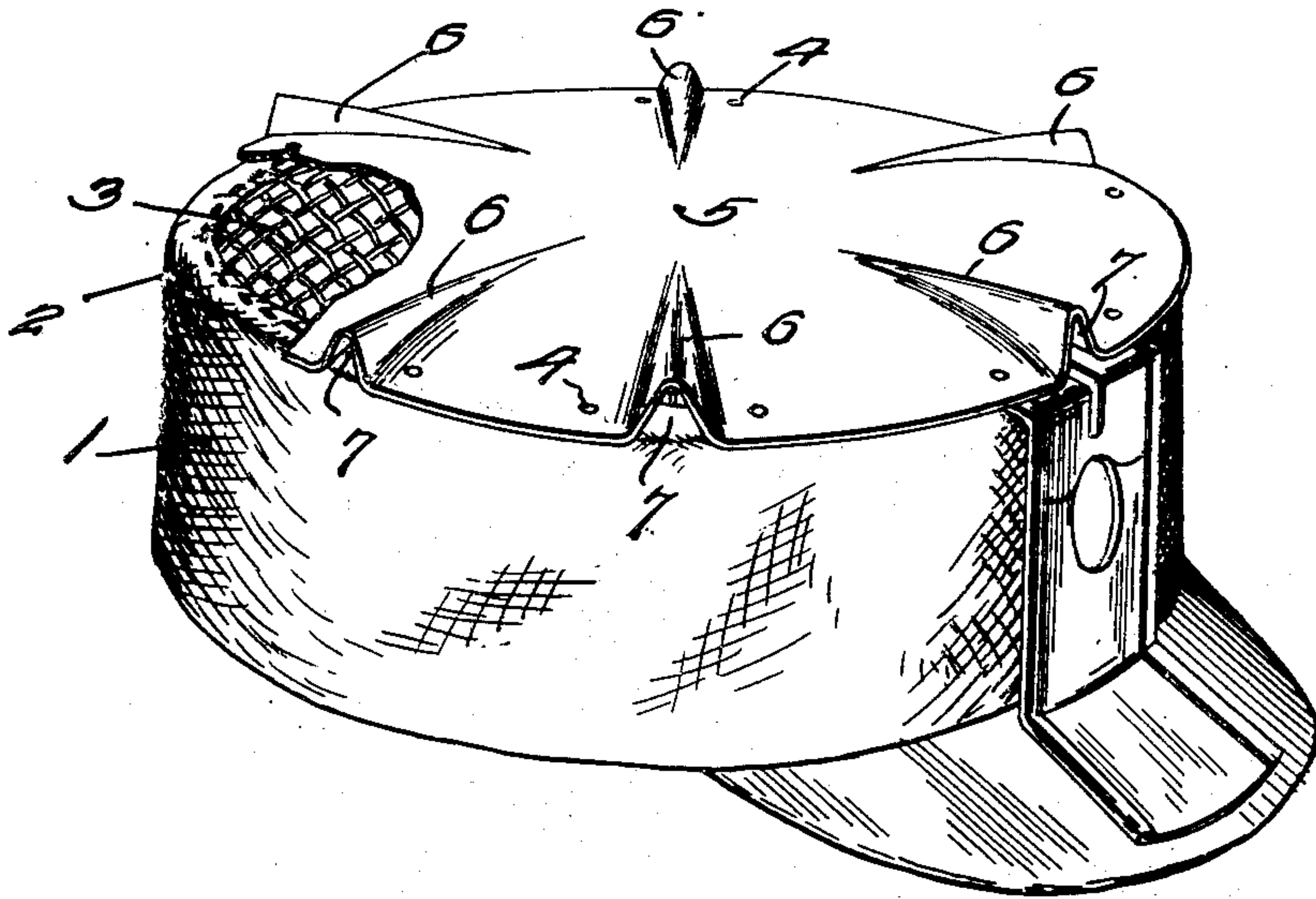


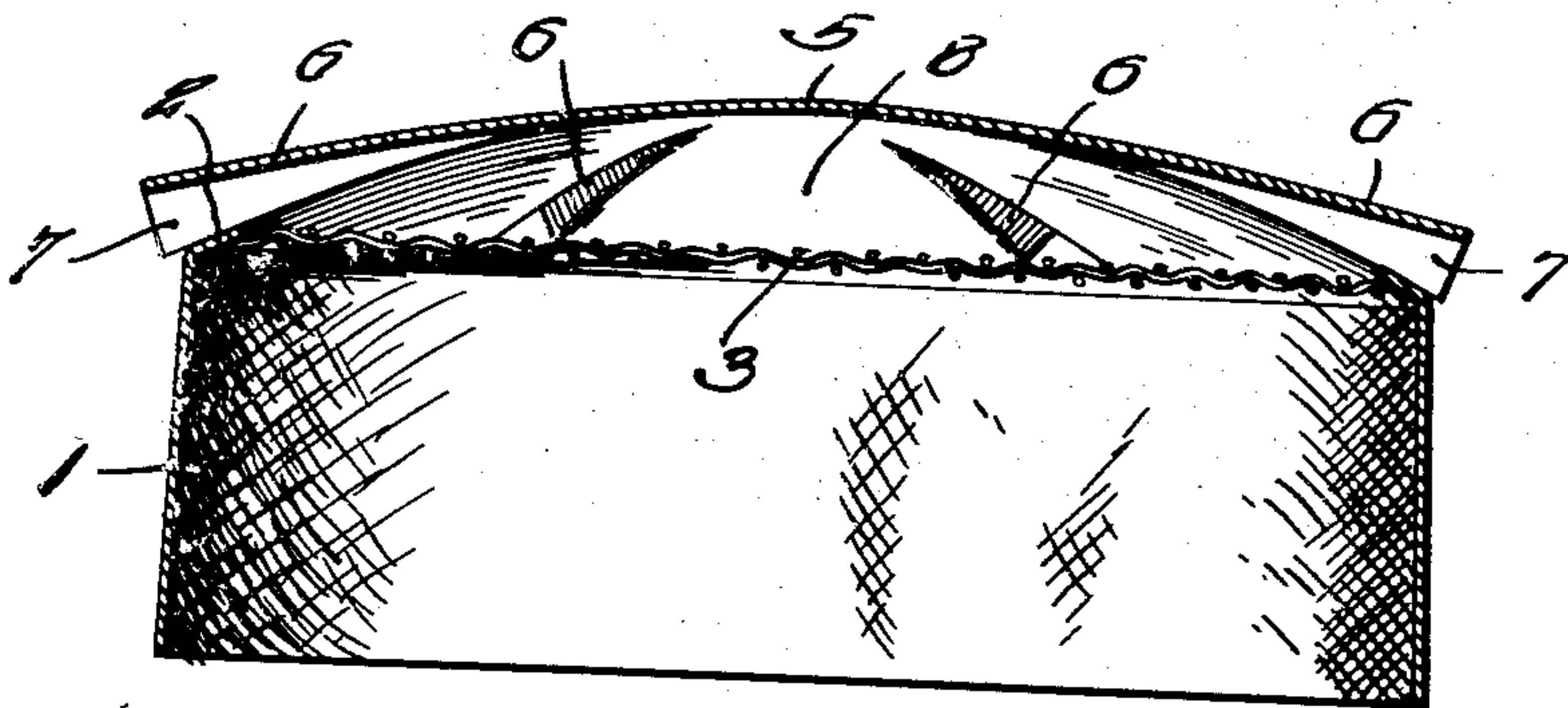
M. T. McDONOUGH.  
MINER'S CAP.  
APPLICATION FILED JAN. 16, 1920.

1,347,046.

Patented July 20, 1920.



*Fig. 1.*



*Fig. 2.*

Witness  
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# UNITED STATES PATENT OFFICE.

MARTIN T. McDONOUGH, OF WHEELING, WEST VIRGINIA.

## MINER'S CAP.

1,347,046.

Specification of Letters Patent.

Patented July 20, 1920.

Application filed January 16, 1920. Serial No. 351,752.

*To all whom it may concern:*

Be it known that I, MARTIN T. McDONOUGH, a citizen of Ireland, residing at Wheeling, in the county of Ohio and State of West Virginia, have invented new and useful Improvements in Miners' Caps, of which the following is a specification.

This invention relates to improvements in miners' caps, and its object is to provide a cap having a novel construction of crown-portion designed to afford ample ventilation so as to keep the head of the miner cool and prevent it from sweating, and also designed to protect the head of the miner from injury by falling particles of coal or ore.

The invention consists of the features of construction, combination and arrangement of parts, hereinafter fully described and claimed, reference being had to the accompanying drawing, in which:—

Figure 1 is a perspective view, partly in section, of a miner's cap embodying my invention.

Fig. 2 is a vertical section through the cap.

Referring to the drawing, 1 designates the body of the cap, made of fabric or other suitable material, and having an inverted upper edge 2. Arranged to cover the opening at the top of the body portion 1 is a crown portion 3 stitched or otherwise secured at its marginal edge to the edge 2. This crown portion 3 is composed of a suitable foraminous material, such as an open-work or net textile fabric, woven wire or the like, which provides a porous diaphragm to rest in contact with the head when the cap is fully pulled down, and serving to permit ample ventilation.

Arranged to overlie the crown portion 3, and riveted or otherwise secured to the edge portion 2, as at 4, is a shield plate 5 composed of sheet metal. This shield plate is circular in outline, corresponds substantially in diameter to the diameter of the body 1, and is of dished form, as shown.

At regular intervals the said shield plate 5 is provided with an annular series of upstanding, integral triangular or V-shaped offsets 6, providing ventilating channels 7 extending to the periphery of the shield and communicating with the atmosphere and with a ventilating chamber or space 8 formed between the concaved under side of said shield plate and the diaphragm 3.

The offsets 6 are arranged regularly and preferably vary in depth and width from their inner toward their outer ends, being of tapered form and deepest at their outer portions, thus providing air channels which will permit of the free and ready flow of fresh air to and the exhaust of vitiated air and vapors from the chamber 8. It will thus be understood that provision is made for keeping the head of the miner cool, and permitting of the evaporation of sweat and preventing its retention in the hair or upon the head, thereby relieving the wearer from resulting discomforts and preventing dandruff and other diseases of the scalp to which miners are commonly subjected, due to the retention of sweat within the cap. As the miner moves his head while at work, it will be evident that a circulation will be created, resulting in the inflow of air into the chamber 8 and into contact with the head of the wearer and in the carrying off of all hot air and moisture contained within said chamber or evaporated from the head of the wearer.

The plate 5, in addition to the functions above described, serves further as a guard or shield to protect the head of the wearer from falling or flying particles of coal or ore. This plate is strengthened by the offsets 6 to effectually resist all shocks from particles of materials falling thereon, such offsets not only providing air channels as described, but also forming reinforcing corrugations giving, in an exceedingly simple manner, maximum strength and durability to the shield plate.

From the foregoing description, taken in connection with the drawing, the construction, mode of use and advantages of my improved cap will be readily understood, and it will be seen that a cap is provided which affords substantial advantages in the way of keeping the head of the miner cool and preventing the retention of moisture and other deposits, in addition to protecting the head of the miner from injury.

Having thus fully described my invention, I claim:

1. A miner's cap comprising a body portion, a foraminous crown portion covering the opening in the top of the body portion, and a shield plate overlying said foraminous crown portion and having upstanding radial offsets extending to its periphery and forming air channels communicating with

the space between the shield plate and said foraminous head portion.

2. A miner's cap comprising a body portion, a foraminous crown portion covering  
5 the opening in the top of the body portion, and a shield plate overlying said foraminous crown portion and having upstanding V-shaped radial offsets extending to its periphery and forming air channels communi-  
10 cating with the space between the shield plate and said foraminous head portion.

3. A miner's cap comprising a body por-

tion, a foraminous crown portion covering the opening in the top of the body portion, and a circular dished shield plate having its  
15 concaved side overlying said foraminous crown portion, said shield plate being provided with upstanding V-shaped radial offsets extending to its periphery and forming  
20 air channels communicating with the space between the shield plate and said foraminous head portion.

In testimony whereof I affix my signature.  
MARTIN T. McDONOUGH.