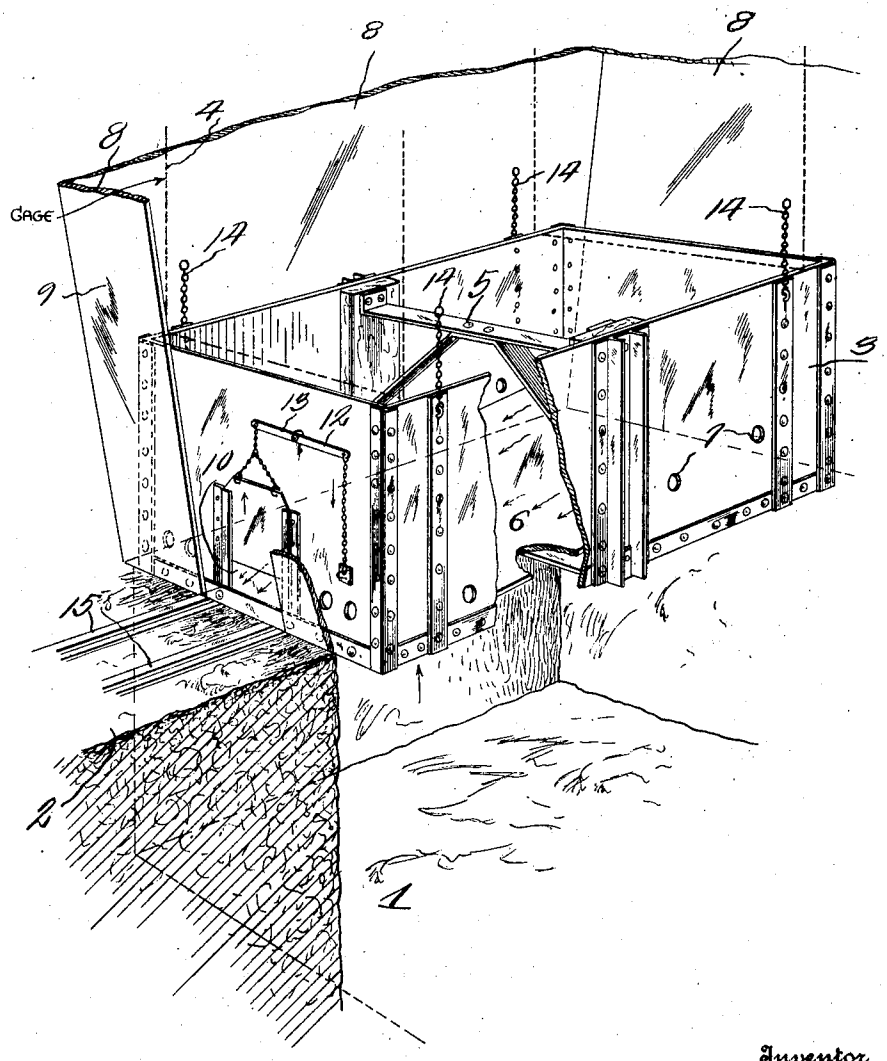
E. SPILLER.

SUMP BASKET.

APPLICATION FILED JULY 11, 1919.

**1,335,080.** Patented Mar. 30, 1920.




Inventor

Edward Spiller

By D. Swift

Attorney

# UNITED STATES PATENT OFFICE.

EDWARD SPILLER, OF ROYALTON, ILLINOIS.

## SUMP-BASKET.

1,335,080. Specification of Letters Patent. Patented Mar. 30, 1920.

Application filed July 11, 1919. Serial No. 310,195.

*To all whom it may concern:*

Be it known that I, EDWARD SPILLER, a citizen of the United States, residing at Royalton, in the county of Franklin, State of Illinois, have invented a new and useful Sump-Basket; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention relates to a sump basket adapted to be disposed within a sump of a mine, whereby the coal, water and so forth that generally accumulates in a sump, especially that which falls from the cage as the same is being hoisted, will drop into the sump basket. It is also the object of the invention to provide means whereby the sump basket may be connected to the bottom of the cage so that said sump basket may be raised, to the bottom landing, and when the sump basket is raised to this landing, it is the object to allow the contents thereof to be deposited in cars on the bottom level, then the sump basket lowered to its position within the sump, cage uncoupled from said sump and the refuse within the cars on the bottom landing deposited in the cage and hoisted to the surface. It is the present practice to clean out sumps every night, by four or five men, and the cleaning out of the same consumes from 10 to 12 hours of their time, therefore it is a further object to save this extra labor and time.

A further object is to provide the lower end of the shaft adjacent the sump hole with a metallic lining, said metallic lining being inclined inwardly so that coal that might drop from the cage or from the cars as the same is being loaded on the cage at different landings will be deflected so that the lumps of coal will be deposited within the sump hole.

With the above and other objects in view the invention resides in the combination and arrangement of parts as hereinafter set forth, shown in the drawings, described and claimed, it being understood that changes in the precise embodiment of the invention may be made within the scope of what is claimed without departing from the spirit of the invention.

The single view in the drawings represents a perspective view of a portion of the sump hole, showing the sump basket as having been raised and in position for discharging its contents on the bottom landing.

Referring to the drawings, the numeral 1 designates a conventional form of sump hole, which is at the bottom of a mine shaft and 2 the bottom landing. A metallic rectangular basket 3 is provided, which basket is adapted to fit into the bottom of the sump hole 1. When the basket 3 is in position in the sump hole, the cage 4 is adapted to rest upon the cross brace 5 and the top of the basket 3, that is when coal is being placed in the same from the bottom landing. The bottom 6 of the basket inclines forwardly and the side walls of the basket are provided with apertures 7, through which apertures water may drain into the sump hole and percolate into the ground or be pumped out by machinery, said holes allowing the water to drain from the coal within the basket when said basket is raised to the position shown in the drawings. When the basket is disposed within the sump hole coal in lump or other form that may fall from the cage as it is being hoisted from different levels of the mine will during its downward course engage inclined walls 8 of the casing 9, and by means of said walls will be prevented from entering the bottom landing 2, therefore said casing will cause all articles that fall down the shaft to be deflected into the sump basket. The forward end of the sump basket is provided with an opening 10, said opening being normally closed by a sliding closure 11, which closure may be opened as desired by a downward pull upon the end 12 of the lever 13.

When it is desired to empty the sump basket the cage 4 is lowered and the chains 14 carried by the sump basket are attached to the cage, then the cage is raised which raises the sump basket out of the sump hole, said sump basket being raised until it assumes the position shown in the drawings, then cars which are on the tracks 15 of the bottom landing are moved into position so that when the slidable closure 11 is moved upwardly and the contents of the sump basket slide down the inclined bottom 6, said contents will be deposited either in the cars, or on the floor of the bottom landing, from which position the same may be easily and quickly shoveled into cars. After the material has been removed from the sump basket, the cage is lowered and the sump basket

again lowered to its position within the sump hole 1. Then the chains 14 are disconnected from the cage 4, and the cars on the tracks of the bottom landing may be run into the cage and the same hoisted to the surface of the ground. It is to be understood that as many sump baskets may be used as are necessary, however, it is preferable to use the same number as there are cages in the shaft.

The invention having been set forth what is claimed as new and useful is:—

1. A sump basket for gathering and removing sump from a sump hole comprising a rectangular receptacle adapted to be deposited in said sump hole, a discharge opening in one wall of said receptacle, means whereby said rectangular receptacle may be hoisted to one of the mine landings and the contents of said receptacle deposited on one of the mine landings.

2. A sump basket for gathering and removing accumulation of material from sump holes of mines, said sump basket comprising a rectangular receptacle adapted to fit into the sump hole, said rectangular receptacle having a discharge opening at one of its ends, means for closing said discharge opening, the body of said receptacle being inclined so that the material therein will slide toward the discharge opening, drainage openings, whereby the water will be allowed to drain from the material within the receptacle, means whereby said receptacle may be attached to a mine cage, so that said receptacle may be raised to a mine landing and the contents allowed to be discharged from said receptacle, and means whereby said receptacle will be replaced within the sump hole.

3. A sump basket for gathering and removing accumulation of material from sump holes of mines, said sump basket comprising a rectangular receptacle adapted to fit into the sump hole, said rectangular receptacle having a discharge opening at one of its ends, means for closing said discharge opening, the bottom of said receptacle being inclined so that the material therein will slide toward the discharge opening, drainage openings, whereby the water will be allowed to drain from the material within the receptacle, a casing surrounding the walls of the shaft of the mine, said casing having downwardly and inwardly inclined walls, the lower end of said casing terminating adjacent the upper edges of the sump basket and forming means for deflecting material that may drop into the sump basket, and means whereby said receptacle may be attached to a mine cage, so that said receptacle may be raised to a mine landing, and the contents thereof allowed to be discharged.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDWARD SPILLER.

Witnesses:
R. L. MINTON,
W. T. CAHILL.