(No Model.)

R. J. MASBACH.

PROTECTOR FOR LEADERS.

No. 439,669. Patented Nov. 4, 1890.

Fig. 1.

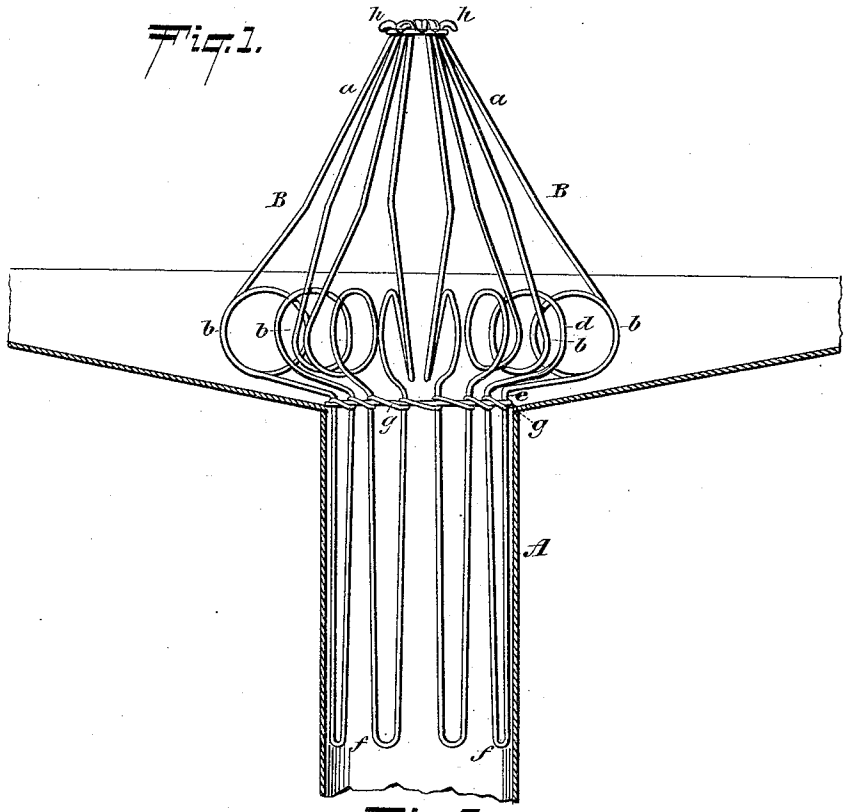
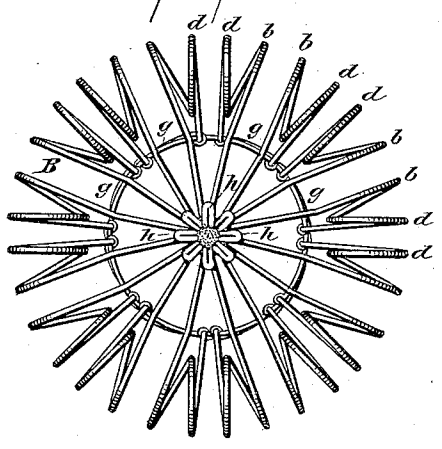


Fig. 2.



WITNESSES:

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PROTECTOR FOR LEADERS.

SPECIFICATION forming part of Letters Patent No. 439,669, dated November 4, 1890.

Application filed April 11, 1890. Serial No. 347,524. (No model.)

To all whom it may concern:

Be it known that I, ROBERT J. MASBACH, a resident of the city of New York, in the county and State of New York, have invented an Improved Protector for Leaders, of which the following is a specification.

My invention relates to an improved leader-protector.

It has heretofore been the custom in making leader-protectors to bind the ribs close together; but it has been found that the rain-water carrying leaves, &c., presses with such force against the bars of the leader that the leaves are very often forced through or else piled up on the top of the protector and completely clog up the protector and leader.

The object of my invention is to obviate this difficulty, which I accomplish by forming the roof of my protector substantially cone shape to allow the leaves, &c., to run off, and by forming a dam inside the ribs of the protector to prevent any leaves that may have forced their way between such ribs from passing through the leader, which will be more fully set forth in a subsequent part of the specification, reference being had to the accompanying drawings, forming a part of the same, wherein—

Figure 1 represents a side elevation of my improved leader-protector in position, and Fig. 2 shows a plan view of the upper portion of the same.

In the drawings, the letter A represents the leader-tube, in which my leader-protector B is placed.

My protector is or can be made entirely of one piece of wire, which is bent as follows: The inclined upper wire *a* is continued from the peak outward and downward to the point *b*, where it is coiled to form a loop *d*, then carried inward to *e*, where it is bent quite sharply, and continued downward to any length, as *f*. It is there doubled and continued upward and bent corresponding to the first strand in inverse order. When the starting-point or peak *h* is reached, the wire is again bent sharply, and the operation continued until a sufficient number of strands have been formed. I place any suitable binder *g* beneath the bends *e* to hold the wires the proper distance apart. At the top or peak *h*, I either solder the wires together or bend them over and wrap with wire. It will be seen that two coils *d d* always lie between two diverging wires *a*, thus forming what might be termed a double dam against the flow of rain-water carrying leaves or other refuse. The entire structure can be formed in long strips, and then bent into the tubular form and tied at *g* and *h*. The coils *d d* form a ring in the interior of the body of the leader-protector.

The advantages of this invention are its cheap construction, its great simplicity, and the effectiveness with which the leaves and other floating refuse can be kept from the leader and the free flow of water insured.

Having now described my invention, what I claim is—

1. A leader-protector made throughout of one piece of wire and held by means of binders, the lengths of wire in the protector diverging from the top and being then bent into coils, said coils lying between the diverging wires, thus forming a double dam, as specified.

2. The leader-protector B, constructed of wires that are joined at the top, diverge therefrom till they join the coils *d*, and are then extended down to form the tubular lower shank, as specified.

3. The leader-protector B, having a ring of wire coils *d d* on the inner side, as specified.

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Witnesses:
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