(No Model.)

C. H. DODGE.

STRAINER FOR RAIN WATER PIPES.

No. 504,384. Patented Sept. 5, 1893.

FIG. 1.

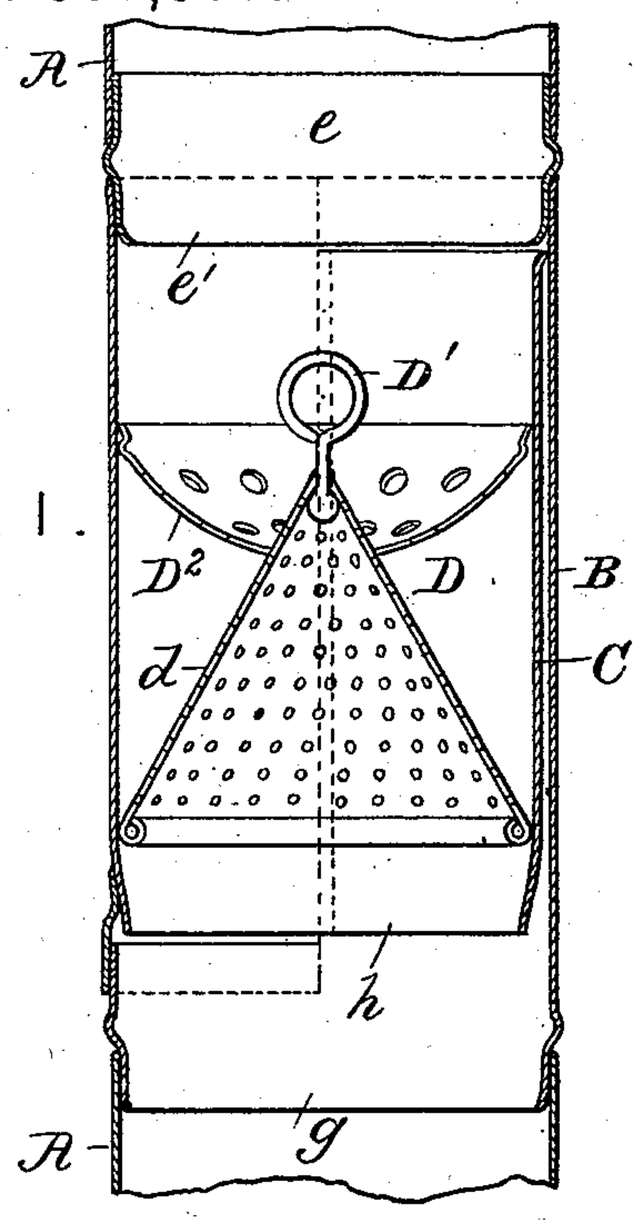


FIG. 2.

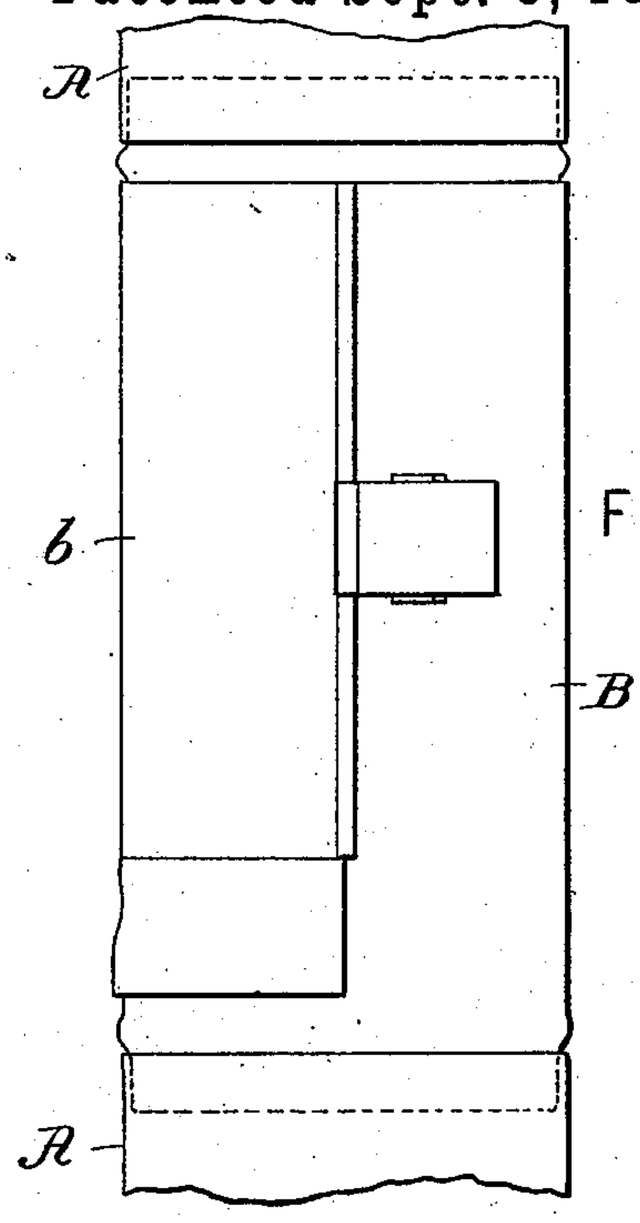


FIG. 3.

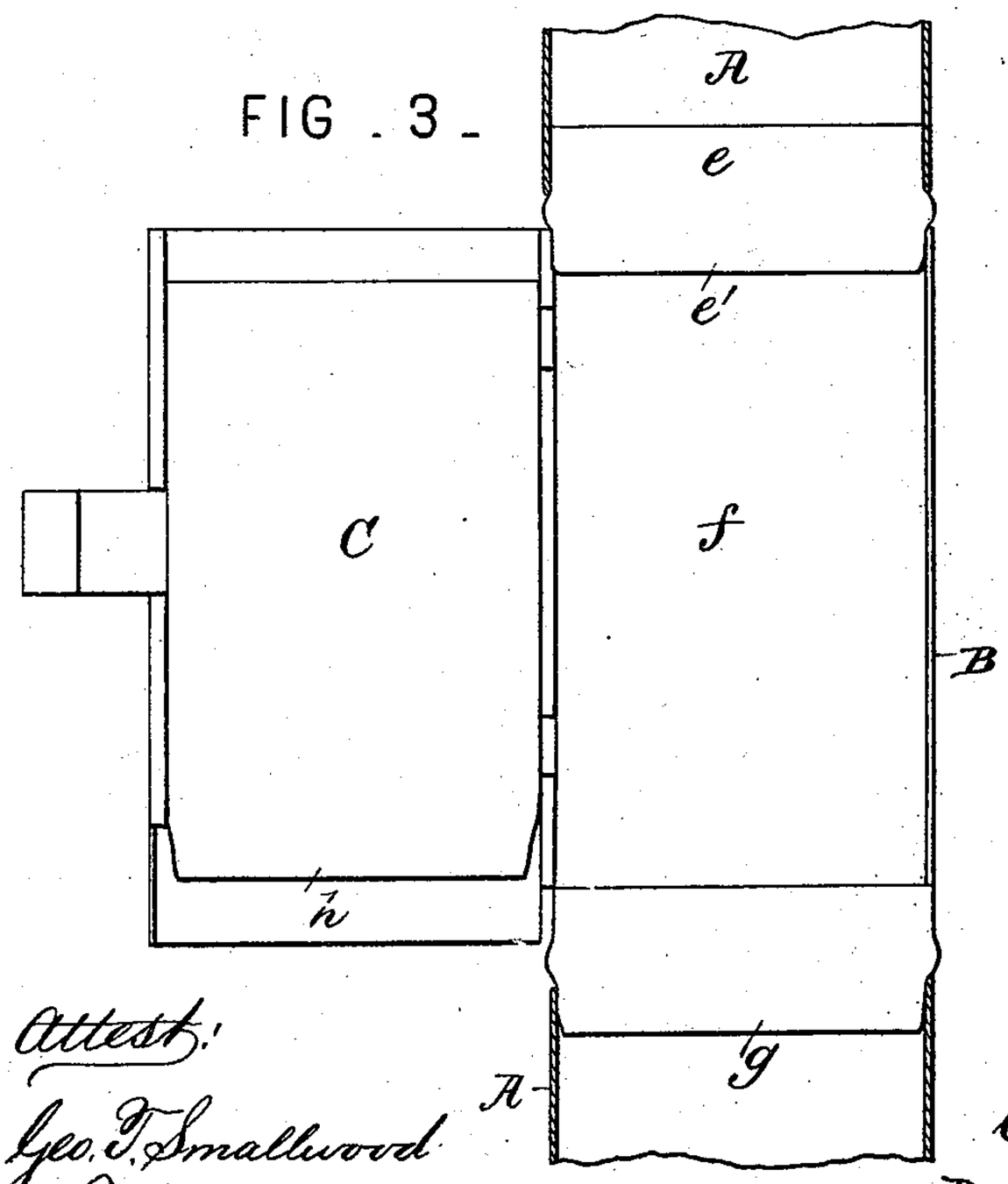
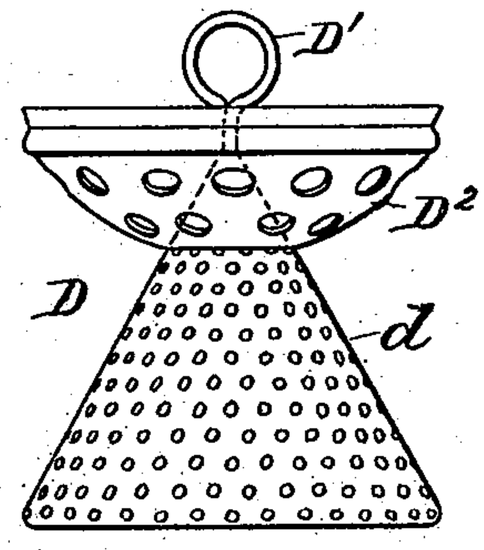


FIG. 4.



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UNITED STATES PATENT OFFICE.

CHARLES H. DODGE, OF RIPON, WISCONSIN.

STRAINER FOR RAIN-WATER PIPES.

SPECIFICATION forming part of Letters Patent No. 504,384, dated September 5, 1893.

Application filed June 11, 1892. Serial No. 436,389. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. DODGE, a citizen of the United States, residing at Ripon, in the county of Fond du Lac and State of Wisconsin, have invented certain new and useful Improvements in Strainers for Rain-Water Pipes; 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of the present invention is to provide a simple and efficient strainer for rain water conductors which can be inserted as a pipe section into any conductor or down spout, and which can be readily cleared of leaves or other matter caught therein, and the invention consists of the improved strainer as hereinafter fully described and claimed.

Figure 1 is a vertical sectional view of a pipe section embodying this invention. Figs. 2 and 3 are views of the pipe section with the hinged strainer closed and opened respectively. Fig. 4 is a detached view of the removable strainer.

A is a down spout or rain water conductor and B a short section thereof containing the strainer, which section is inserted as a section of the conductor near the ground, where it will be in a convenient position for access for clearing it of leaves or other matter, or for removing it when desired.

In the front side of the section B there is a door *b*, hinged on one of its side edges, and fastened by a catch, this door forming when closed a part of the pipe. On the inside of the door there is a short pipe or cylinder C, carrying the strainer D and which swings out with the door when the latter is opened, and occupies the interior of the pipe section B when the door is closed. The section B as a whole, is formed of the upper part *e*, into which the adjacent upper section of the conductor fits, and having the lower inwardly crimped edge *e'* to throw the water inward upon the strainer within the pipe C; the central part *f*, to which is hinged the door *b* carrying the strainer pipe as above described, and the bottom part *g* fitting into the adjacent lower section of the conductor; the door *b* closing onto the upper and lower edges at its top and bottom. The strainer pipe C, it will be seen, has its upper edge slightly flared outward, and its lower edge crimped inward to throw the water entirely within the bottom section *g*. The inwardly projecting shoulder *h* of the pipe C, supports the strainer D. This consists of an inverted cone shaped strainer *d* of fine wire, the cone being provided with a ring D' at its apex, and on the cone near its top is mounted the saucer shaped coarse strainer D^2. The strainer sets into the pipe C the lower edge of the cone *d* resting on the shoulder *h*, and by means of the ring the whole strainer, comprising both the cone and the saucer, can be readily removed for cleaning or other purposes. During the winter it is removed entirely, leaving the pipe open through, so that it will not become clogged by freezing. The cone shape given to the strainer provides a relatively large amount of straining surface and it does not become clogged as quickly, from the accumulation of leaves and other matter, as it otherwise would.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A pipe section for conductors having a door in its side, in combination with a strainer whose maximum cross-section fills the inside diameter of the pipe-section and which is carried on the door, substantially as set forth.

2. A strainer for a conductor, consisting of a cone shaped strainer having a handle at its apex, and a saucer shaped strainer of coarser mesh and of the same diameter as the base of the cone encircling the latter near the apex, substantially as and for the purpose set forth.

3. A strainer for a conductor, consisting of a pipe-section having a door in the side, a cone-shaped strainer carried on the inside of said door and a saucer-shaped coarser strainer superposed upon said cone-shaped strainer, all movable in, and out of, said pipe section with the opening and closing of said door, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES H. DODGE.

Witnesses:
GEO. W. CARTER,
A. E. DUNLAP.