No. 803,316. PATENTED OCT. 31, 1905.

S. VOGEL.

EAVES TROUGH AND DRAIN PIPE.

APPLICATION FILED FEB. 7, 1905.

Fig. 1.

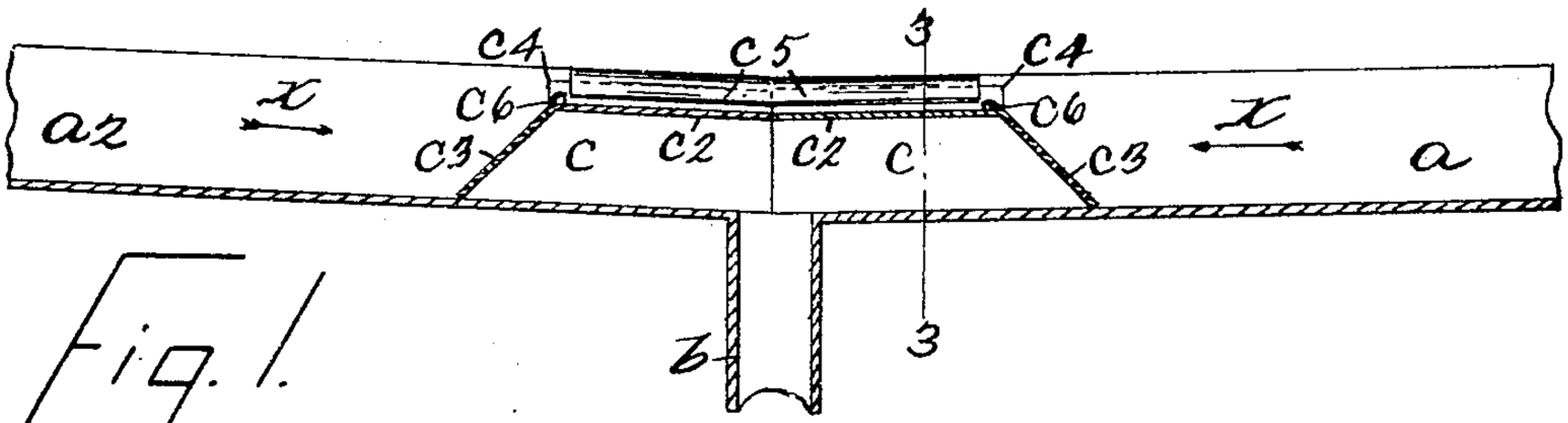


Fig. 2

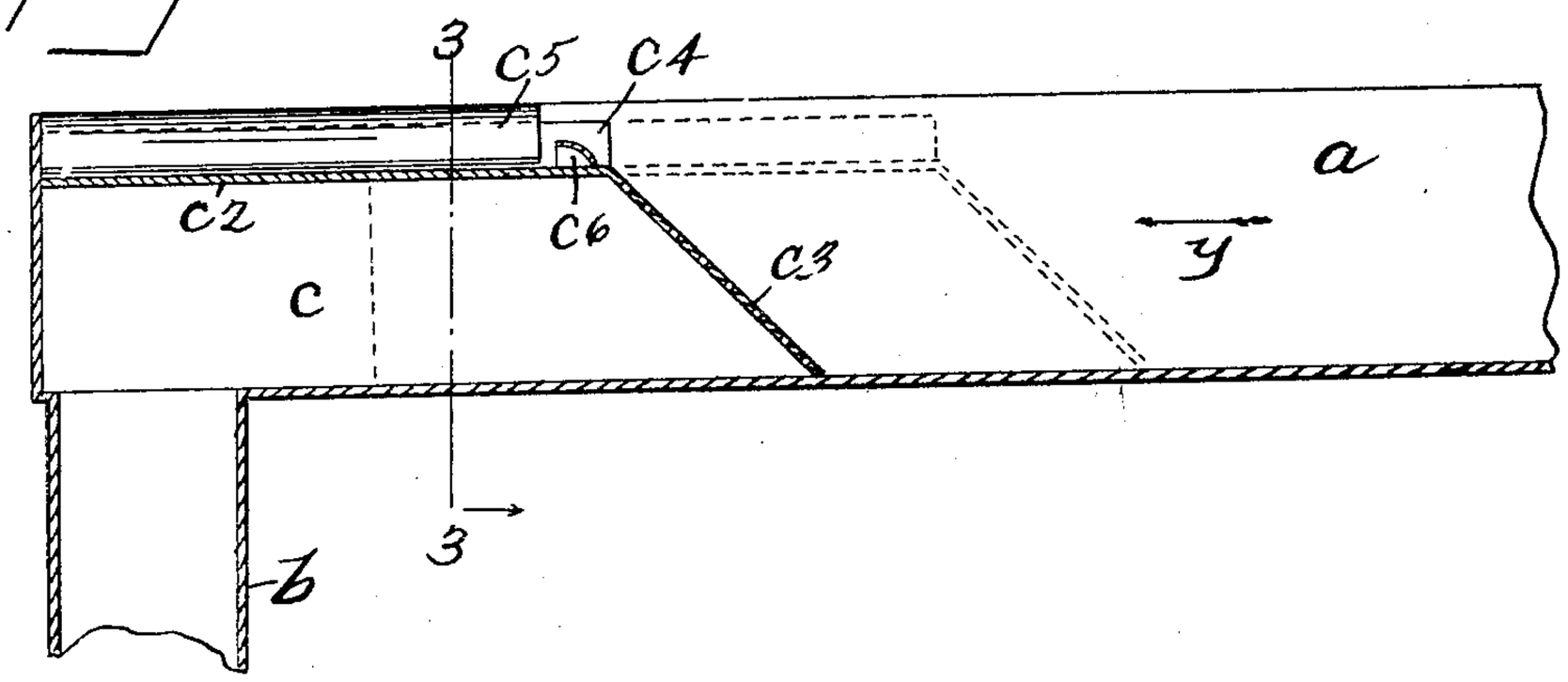
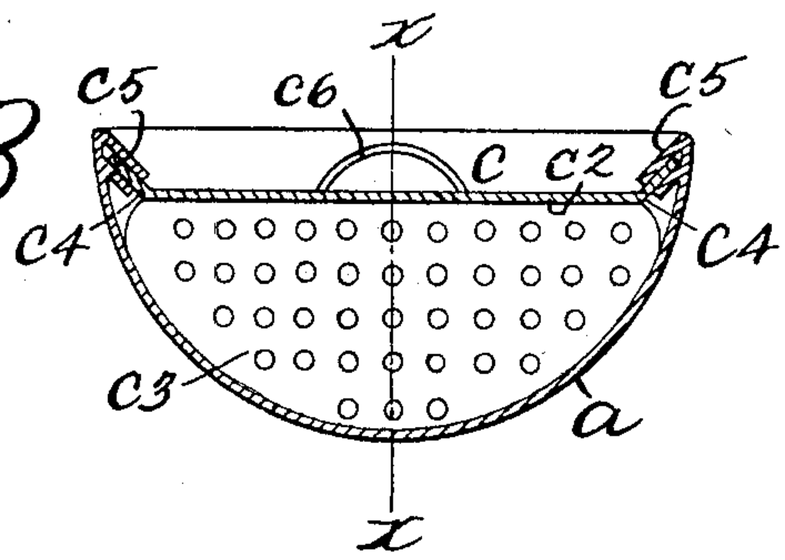


Fig. 3



WITNESSES

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EAVE-TROUGH AND DRAIN-PIPE.

No. 803,316. Specification of Letters Patent. Patented Oct. 31, 1905.

Application filed February 7, 1905. Serial No. 244,543.

To all whom it may concern:

Be it known that I, SIEGFRIED VOGEL, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Eave-Troughs and Drain-Pipes, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to eave-troughs or leads and drain-pipes; and the object thereof is to provide an eave-trough or lead with means whereby the entrance to the drain-pipe is covered and protected and whereby the clogging or freezing of the drain-pipe will be prevented.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which—

Figure 1 is a longitudinal section of a double eave-trough or lead provided with my improvement and on the line x x of Fig. 3, but on a smaller scale; Fig. 2, a similar view of a single eave-trough or lead on a larger scale than Fig. 1, and Fig. 3 a cross-section on the line 3 3 of Fig. 2.

In Fig. 1 of the drawings I have shown an eave-trough or lead composed of two parts a and a^2, and this eave-trough or lead is of the form usually employed in connection with two or more houses, the said eave-trough or lead being provided centrally with a drain-pipe b and the separate parts of the eave-trough or lead being inclined downwardly toward said drain-pipe in such a manner that the water in the separate parts of the eave-trough or lead flows in the direction of the arrows x toward the drain-pipe b. In this form of construction I provide two combined shields and strainers c, which are employed over the drain-pipe b, and each consist of a top plate c^2 and a downwardly-inclined portion c^3, and the top plates c^2 are provided with upwardly and outwardly directed side flanges c^4, which are inserted into keepers c^5, and said combined shields and strainers are removable from the keepers c^5; but when in the position shown in Fig. 1 they cover the ends of the drain-pipe b and also prevent any foreign substances or any large substances from flowing into the drain-pipe, the strainers c^3 being of such shape as to close the eave-trough or lead.

Each of the combined shields and strainers is provided at its outer end with a thumb and finger piece c^6, whereby it may be manipulated so as to insert it into position, as shown in Fig. 1, or remove it from such position, and when said combination shields and strainers are in the position shown in Fig. 1 they prevent snow or other substances or material from falling into the drain-pipe or being thrown into the drain-pipe and at the same time strain the water which flows through the eave-trough or lead into the drain-pipe.

In Fig. 2 I have shown my improvement applied to a single eave-trough or lead in which the water flows in the direction of the arrow y, and in this case the drain-pipe b is at the end of the eave-trough or lead, and with this exception the construction is the same as that shown in Fig. 1; but in this form of construction only one shield and strainer is employed.

Although Fig. 3 is described as a section on the line 3 3 of Fig. 2, it is also a section on the line 3 3 of Fig. 1, but on a larger scale, and Fig. 3 also shows the shape of the eave-trough or lead in cross-section and the shape of the strainer part c^3 of the combined shields and strainers c.

My invention, however, is not limited to any particular shape of eave-trough or lead nor to the material of which the same is composed, and various changes in and modifications of the construction herein described may be made without departing from the spirit of my invention or sacrificing its advantages.

By making the shield and strainer or shields and strainers detachable they may be easily removed for the purpose of bending the adjacent parts of the eave-trough or lead around the connection of the drain-pipe, and new shields and strainers may be placed in position or substituted for the old ones whenever desired.

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

1. An eave-trough or lead provided with the usual drain-pipe, and a shield and strainer comprising a horizontal top portion and a downwardly-directed perforated end portion, the top portion being provided with side flanges, and the top of the trough being provided with side keepers adapted to receive

said flanges whereby the shield and strainer may be slid into position over the drain-pipe, substantially as shown and described.

2. An eave trough or lead composed of two parts inclined in reverse directions and provided at the connection of said part with a drain-pipe, and a detachable shield and strainer comprising a horizontal top portion and downwardly-directed and perforated end portions, the horizontal top portion being provided with side flanges and the trough being provided with side-keepers adapted to receive said flanges whereby the shield and strainer may be slipped into position over the drain-pipe, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 6th day of February, 1905.

SIEGFRIED VOGEL

Witnesses:
F. A. STEWART,
C. J. KLEIN.