(No Model.) 2 Sheets—Sheet 1.

C. KALTENBACH.

EAVES TROUGH.

No. 248,328. Patented Oct. 18, 1881.

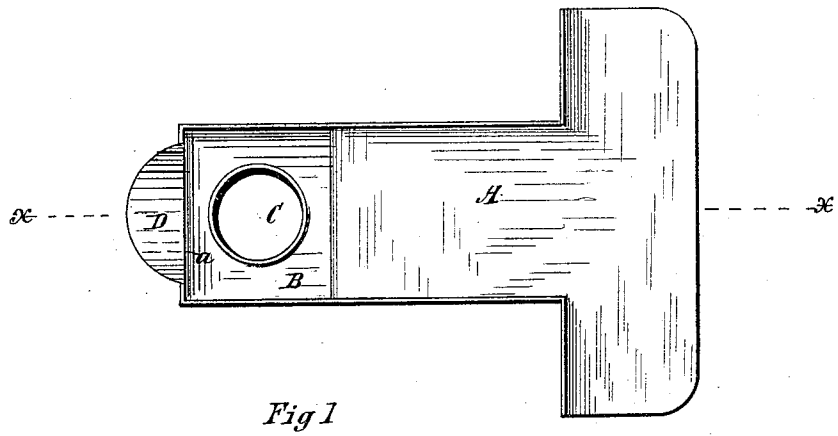


Fig 1

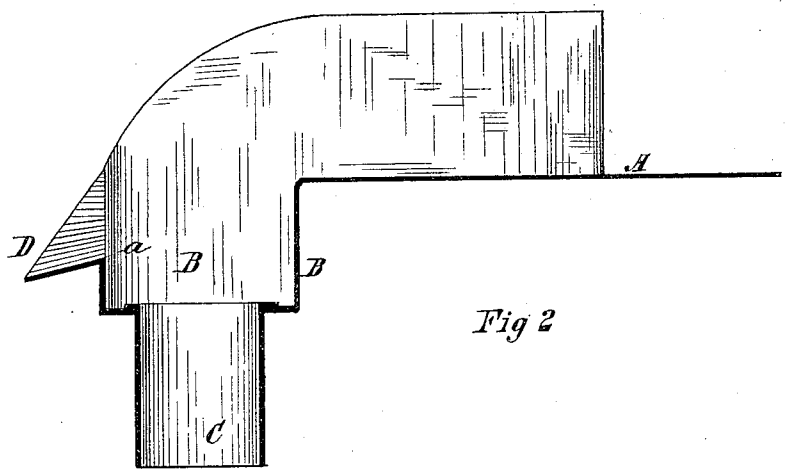


Fig 2

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(No Model.) 2 Sheets—Sheet 2.

C. KALTENBACH.

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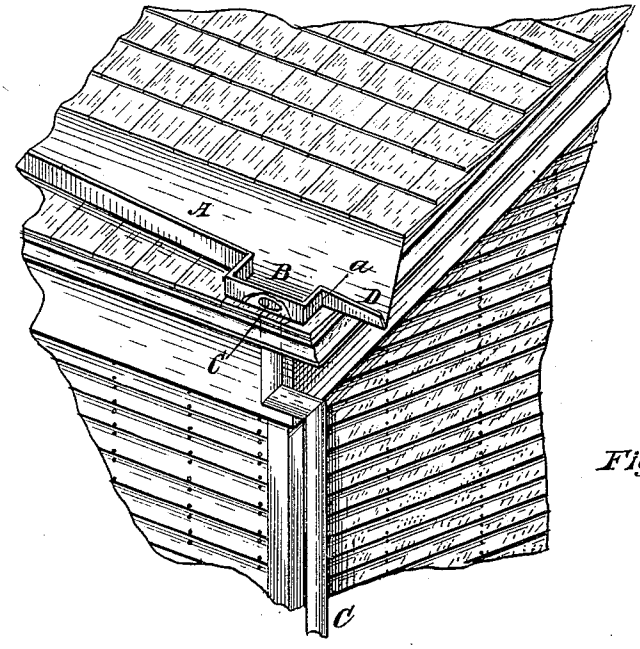


Fig.3.

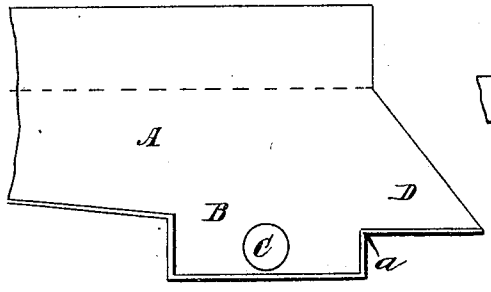


Fig.4

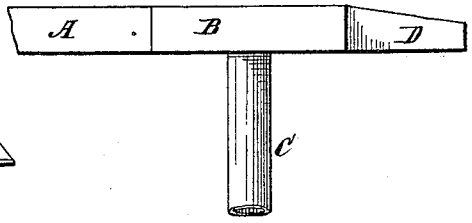


Fig.5.

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UNITED STATES PATENT OFFICE.

CHARLES KALTENBACH, OF CHICAGO, ILLINOIS.

EAVES-TROUGH.

SPECIFICATION forming part of Letters Patent No. 248,328, dated October 18, 1881.

Application filed April 4, 1881. (No model.)

To all whom it may concern:

Be it known that I, CHARLES KALTENBACH, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Gutters and Spouts for House-Roofs, of which the following is a specification.

The object of the invention is to prevent the water from backing up in the gutter and on the roof, and at the same time turn or force the water into the spout, so that it shall carry off the water at all times, as designed, except when it rains so hard that the water from the gutter is brought to the spout faster than the spout can carry it away, or when the mouth of the spout is obstructed by ice, as in winter, in which events the excess or the whole, as the case may be, is carried away from the house by an extra spout or trough provided for the purpose, so that the water shall under no circumstances back up in the gutter or on the roof.

To this end the invention consists in providing at the lower end of the gutter a recess or receptacle large enough to receive the water from the gutter, the top of the receptacle being on a level with or rather below the lowest part of the bottom of the gutter, and in attaching the water-spout in the bottom of this receptacle, which bottom is below the bottom of the gutter, so that the receptacle shall force the water into the spout, instead of the end piece of the gutter forcing it in, as is usual, by causing the water to back up in the gutter for this purpose.

The drawings illustrate the invention.

Figure 1 is a top or plan view, showing a portion of a roof-gutter and the recess and spout intended for a flat roof. Fig. 2 is a longitudinal vertical section on line *x x*, Fig. 1. Fig. 3 is a perspective of a portion of a house with a gable-roof, showing a method of applying the invention to roofs of that class. Fig. 4 is a plan of a portion of the gutter adapted for gable-roofs, detached. Fig. 5 shows a view of same as shown in Fig. 4, looked at in the direction of the arrow.

Like letters of reference refer to like parts throughout the several views.

A designates the gutter, B the recess or receptacle, and C the water-spout.

D designates an overflow-spout attached to the outer or lower side of the receptacle, and designed to carry off beyond the building any overflow when it rains faster than spout C can carry it off, or is obstructed by ice or otherwise. The point *a* of the receptacle may be on a level with the bottom of the gutter, but operates best when placed a little lower and at sufficient height from the bottom of the receptacle to force all of the water down the spout to the full capacity of the spout. When it rains faster than the spout can carry it off, or the spout is obstructed, the overflow is carried off by trough D.

In using the invention with a flat roof, the gutter should be constructed as shown in Figs. 1 and 2, and the part A should extend from the receptacle B, placed outside the wall of the house, back onto the roof at the lowest point where the water settles, and be there so connected with the roof as to receive and conduct the water to the receptacle and spout.

Great difficulty is found in the use of the ordinary gutter and spout in freezing weather, as the water which backs up in the end of the gutter where the spout is attached freezes and stops the spout. This causes the water to back up in the gutter more and more, and onto the roof of the house. This is more especially the case with flat roofs. In removing the ice from the gutter the end of the gutter is generally knocked out, after which only a small part of the water running down the gutter will go into the spout, unless the end is replaced. Repairing thus becomes necessary after every winter season. By the use of my invention this difficulty is entirely obviated. If the receptacle is frozen full, the water in the gutter will pass over it and off by spout D, and when the receptacle thaws out spout C will operate as before, and no repairing is needed.

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

1. A roof-gutter, A, and spout C, in combination with a recess, B, having its bottom arranged below the gutter to force the water down the spout before overflowing, substantially as set forth.

2. A roof-gutter, A, provided with a recess, B, and spouts C D, all arranged to operate substantially as and for the purpose specified.

CHARLES KALTENBACH.

Witnesses:
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