No. 618,134.

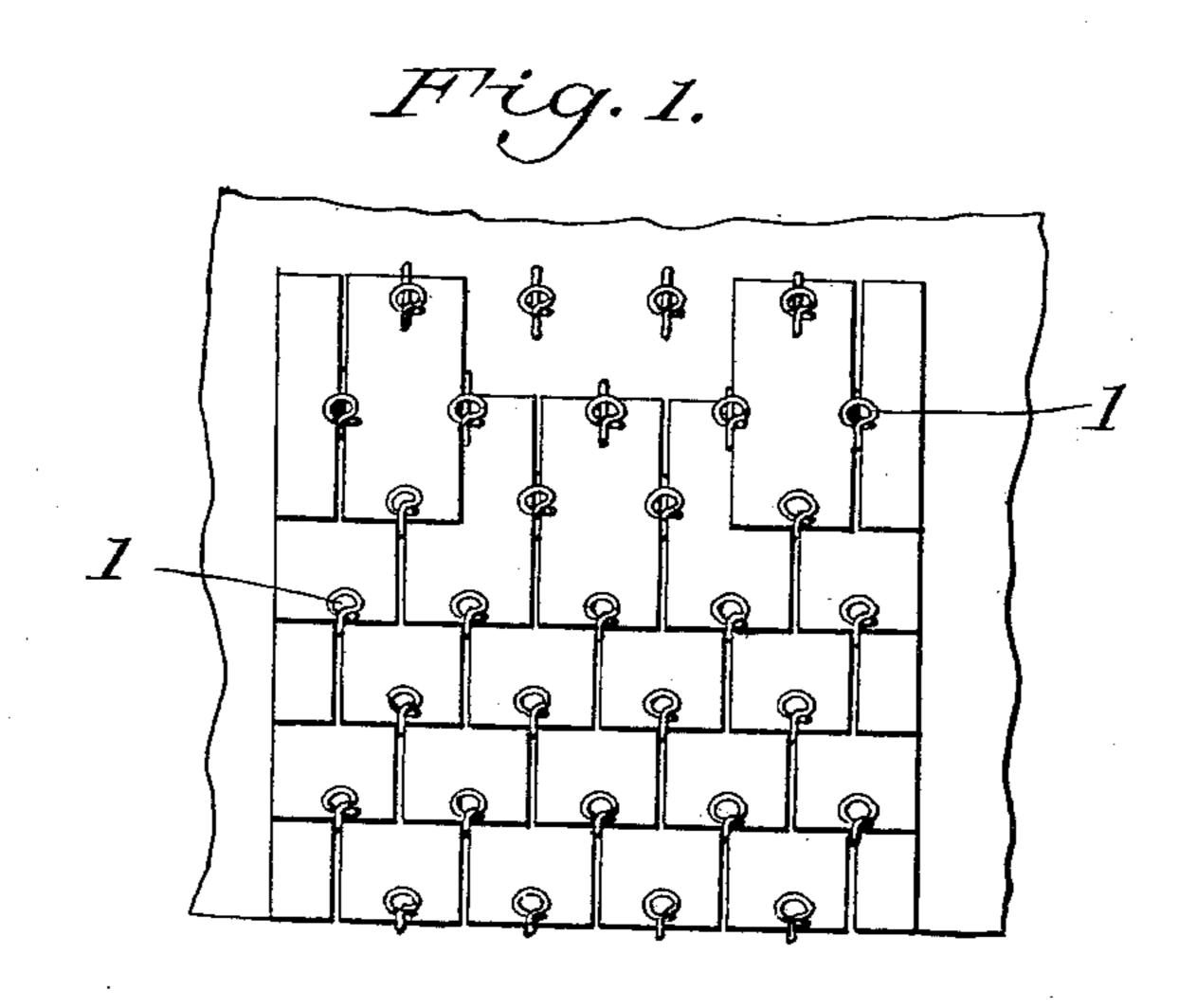
Patented Jan. 24, 1899.

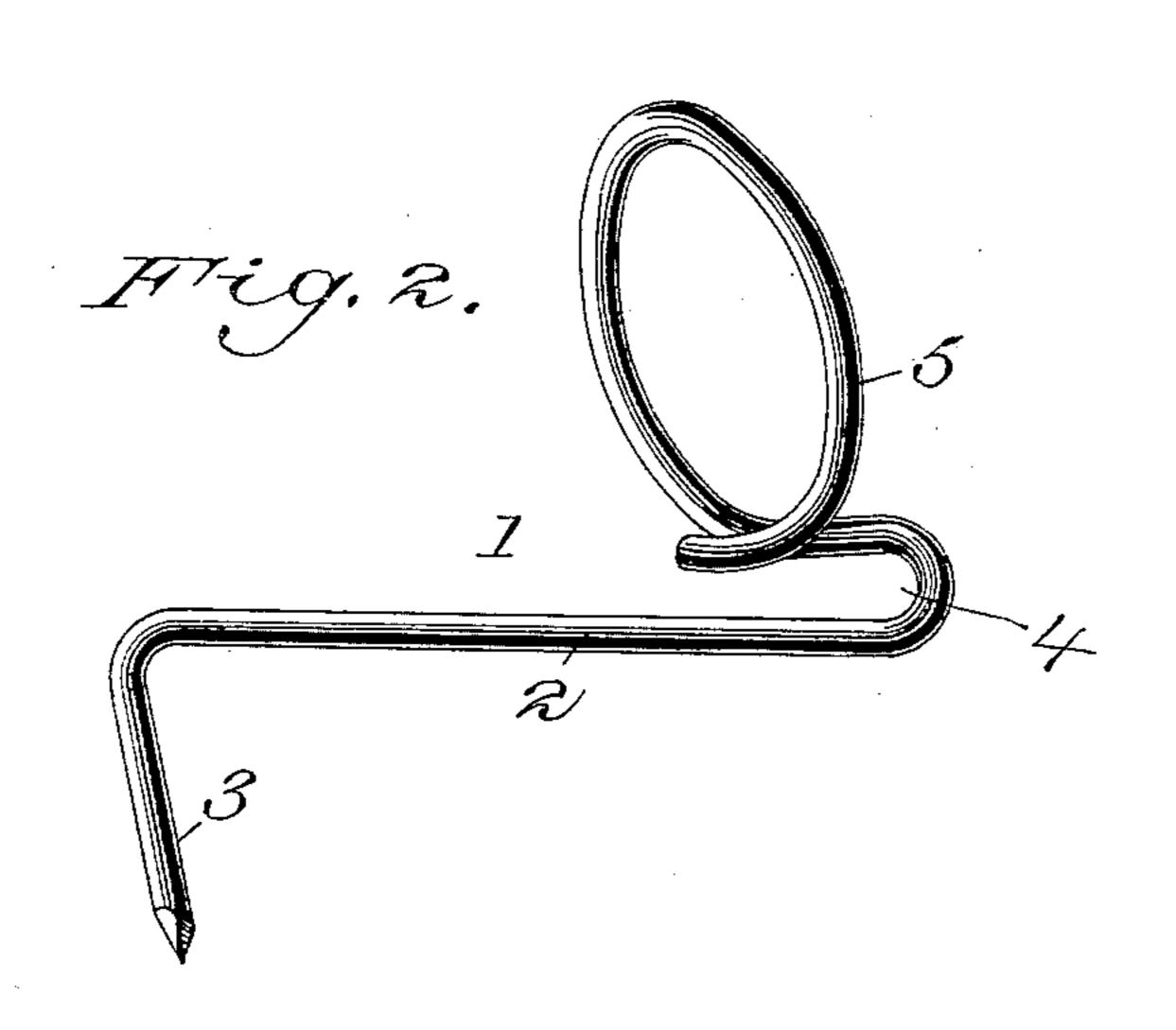
## W. T. RUSSELL.

## SNOW GUARD AND SLATE FASTENER.

(Application filed Dec. 16, 1897.)

(No Model.)





WITNESSES:

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## United States Patent Office.

WILLIAM T. RUSSELL, OF WELLESLEY, MASSACHUSETTS.

## SNOW-GUARD AND SLATE-FASTENER.

SPECIFICATION forming part of Letters Patent No. 618,134, dated January 24, 1899.

Application filed December 16, 1897. Serial No. 662, 229. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM T. RUSSELL, residing at Wellesley, in the county of Norfolk and State of Massachusetts, have invent-5 ed Improvements in Snow-Guards and Slate-Fasteners, of which the following is a specification.

The invention relates generally to improvements in roofs, and more particularly to a de-10 vice adapted for use in securing slates upon

roofs.

The object is to combine a wind-guard, snowguard, slate-holder, and antirattler in a single device possessing advantages in point of 15 simplicity, durability, inexpensiveness, and general efficiency.

The novelty of the invention lies in the terminal spring-loops of the fastening which serve as an antirattling slate-holder and a

20 snow-guard.

The accompanying drawings illustrate one embodiment of the invention, both separately

and applied.

Figure 1 is a view of a roof in course of con-25 struction, showing the manner of using the device; and Fig. 2 is an enlarged view in perspective of the device.

Like numerals indicate corresponding

parts.

30 1 represents the fastening device proper, formed of a single piece of spring-wire, the same comprising a shank 2, one end, 3, of which is pointed and bent downward for engagement with the framing of the roof. The 35 opposite end is bent upward and then extended parallel with the shank for a distance

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sufficient to form a spring-loop 4, designed to

serve as a slate-retaining hook.

5 represents a loop-spring formed by a continuation of the hook 4 and terminating ad- 40 jacent the latter at a point where the entire force or pressure thereof will be exerted upon the slate confined by the hook. This spring is inclined more or less to render it most effective in sustaining the weight of the snow 45 and to prevent its sliding.

Referring to Fig. 1, it will be seen that by the use of this fastening each slate is held at four points and under the constant tension of the spring snow-guards; also, that by rea- 50 son of the large number of guards employed and their even distribution over the roof snow will be held evenly and banking or sliding rendered improbable, if not impossible.

Having thus described my invention, what 55

I claim is—

A combined snow-guard and slate-fastener formed of a single piece of wire having attaching means at one end and bent upon itself, adjacent to the opposite end to provide a slate- 60 retaining hook and thence carried around into a loop-spring guard having a free end in advance of the open end of the hook, the loop being sufficiently expanded to bring such free end to bear yieldingly against the upper sur- 65 face of the slate, for the purpose specified.

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

WILLIAM T. RUSSELL.

Witnesses:

J. A. STURTEVANT, M. C. Russell.