

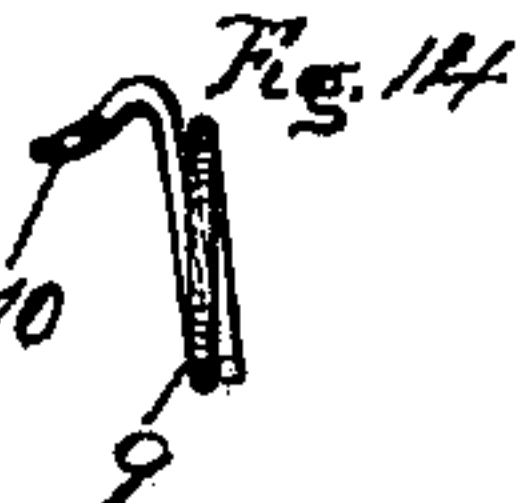
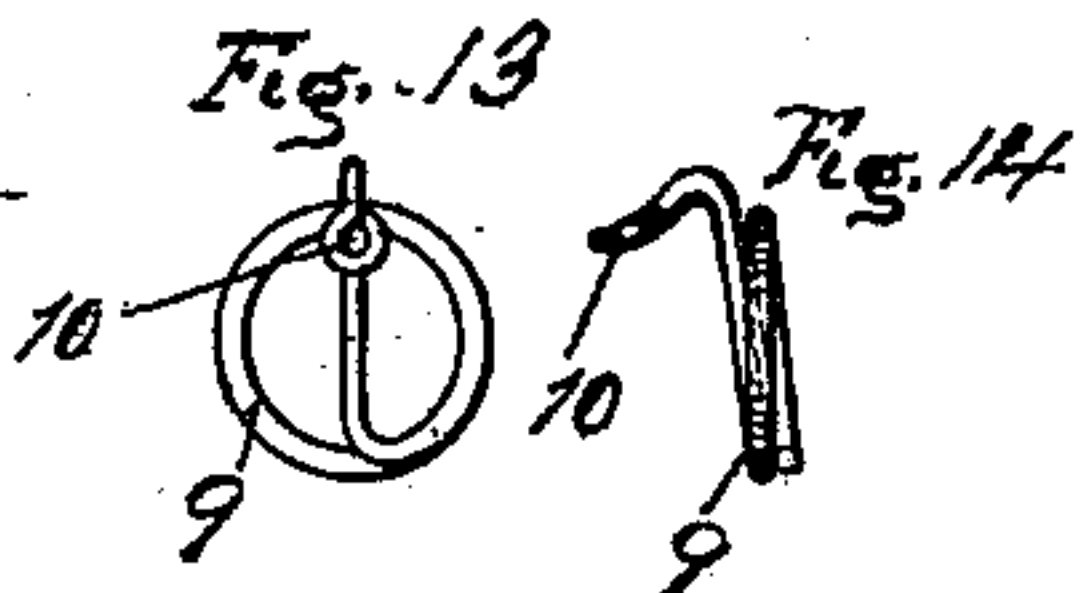
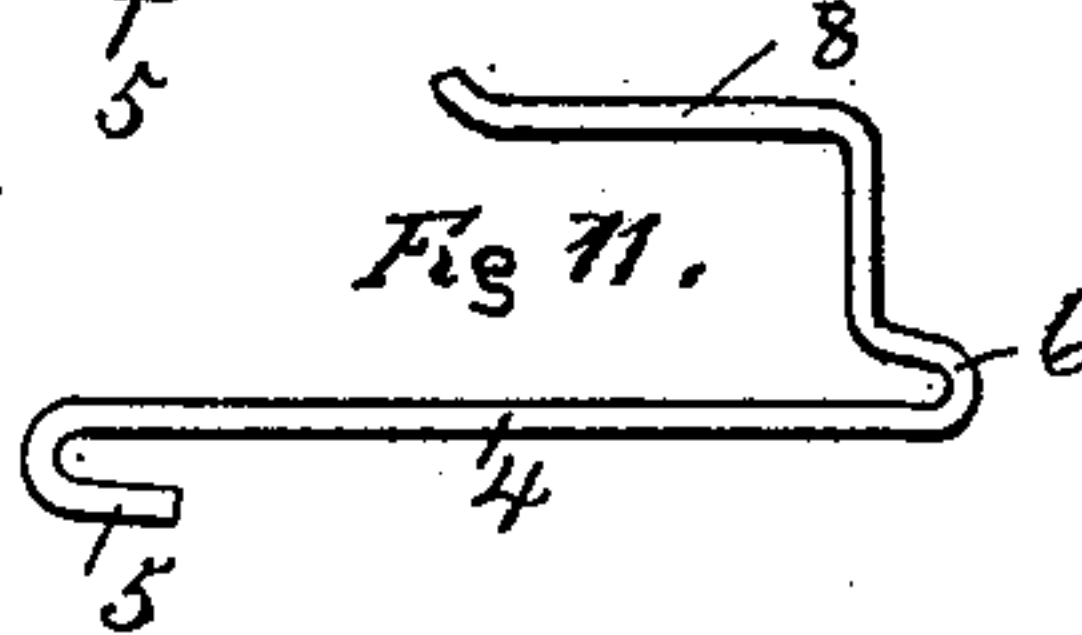
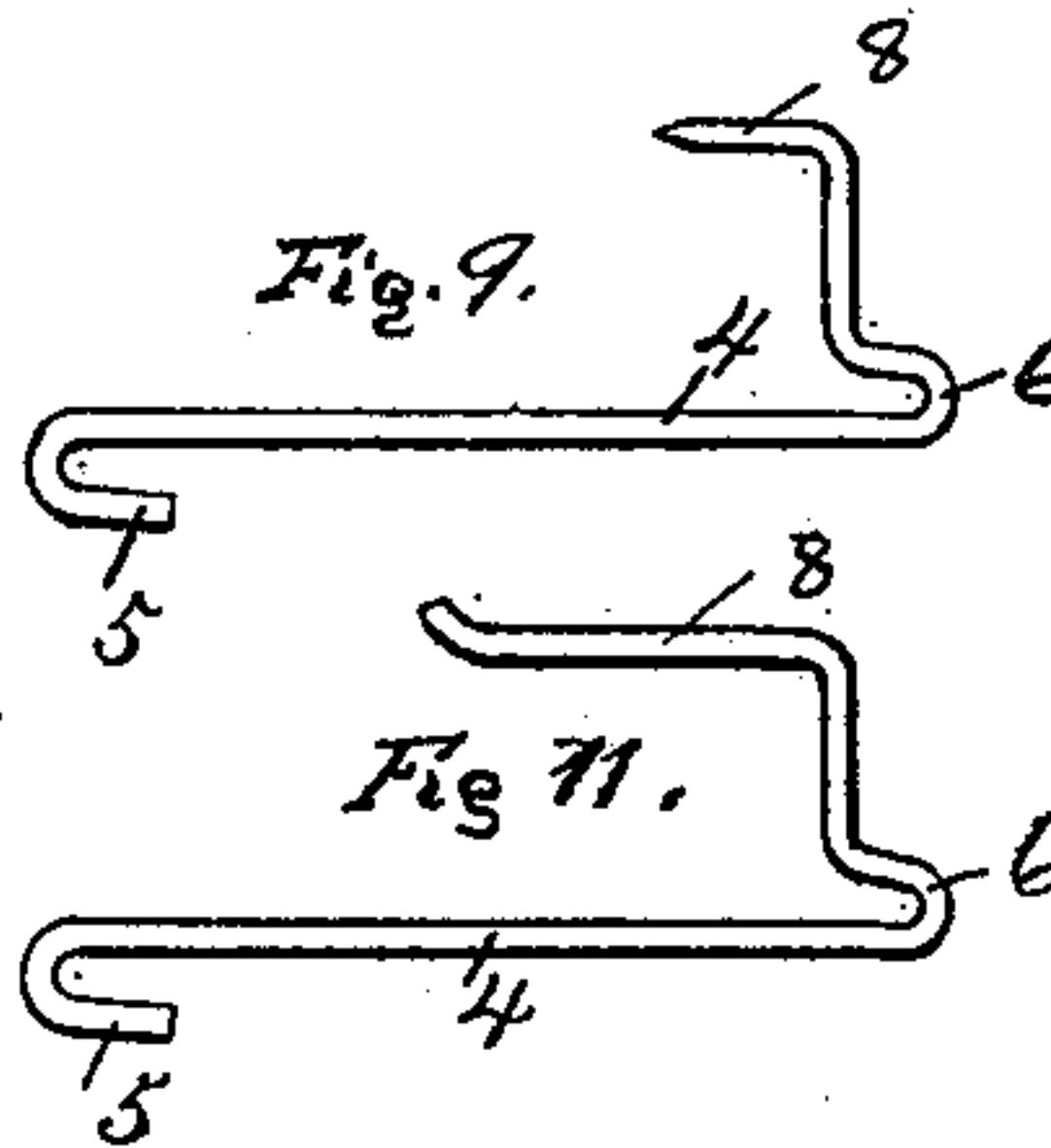
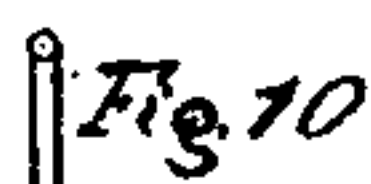
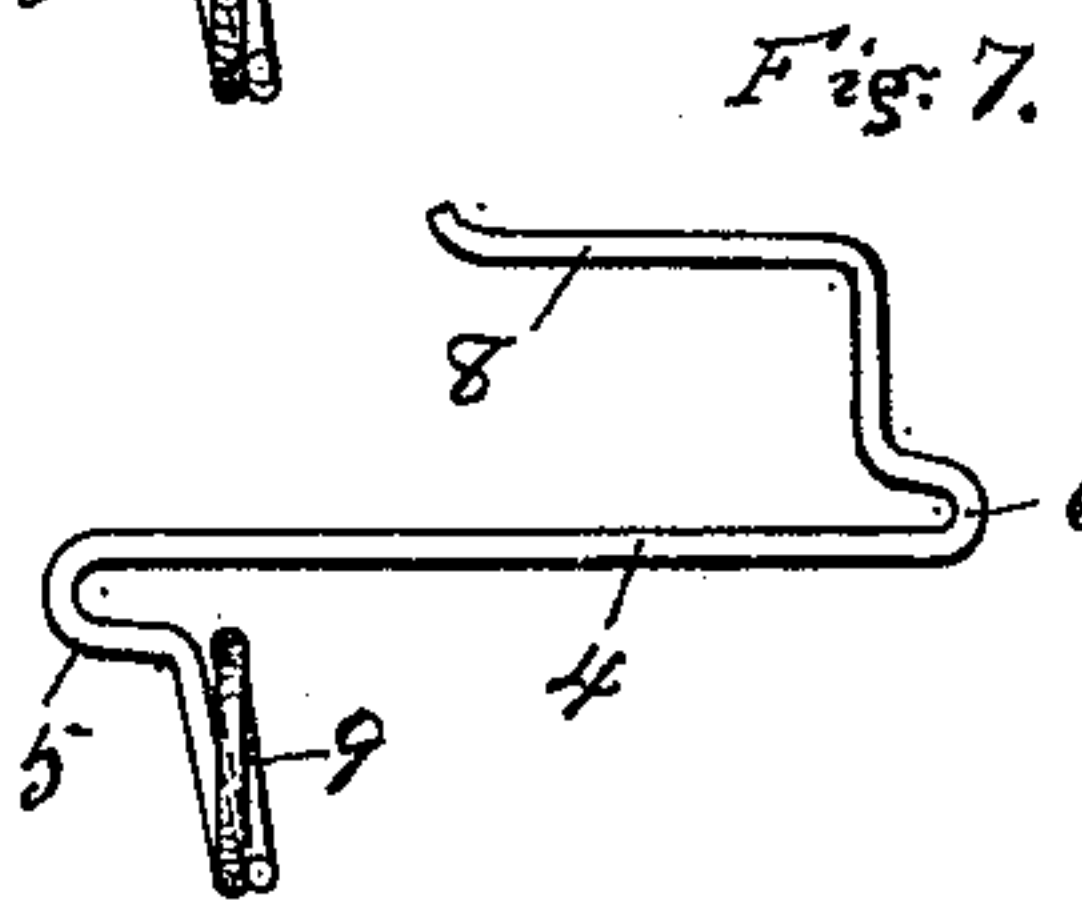
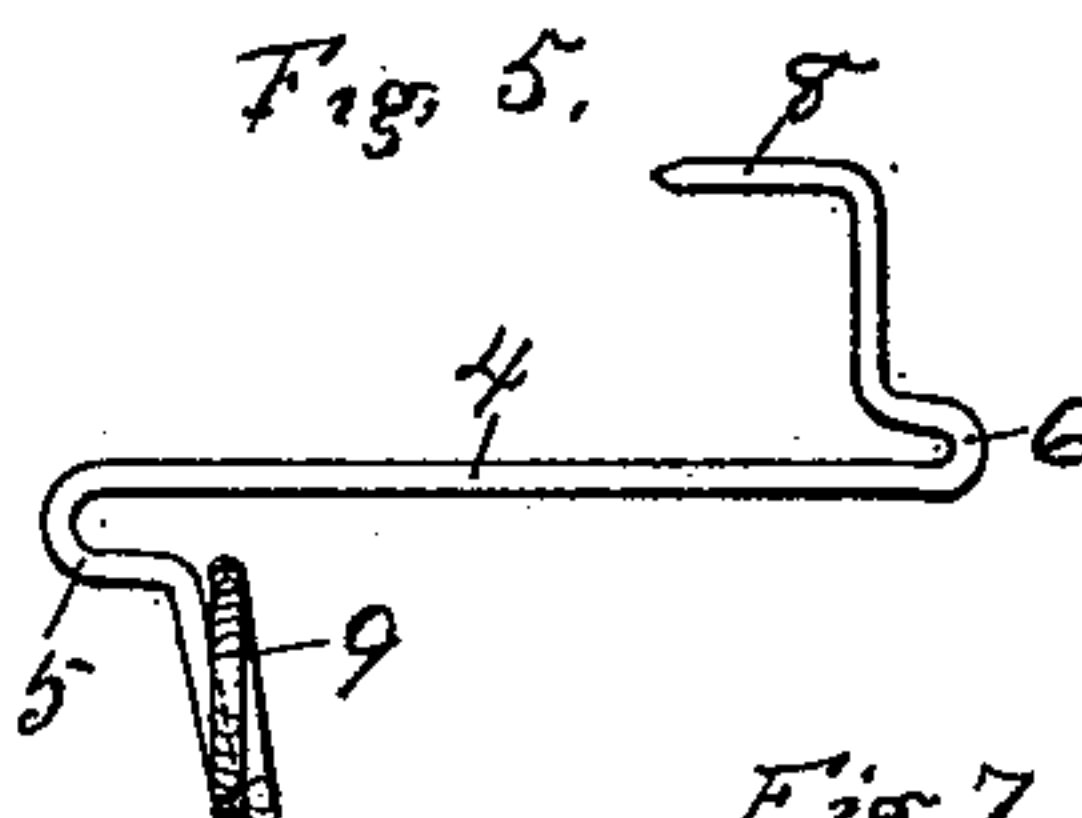
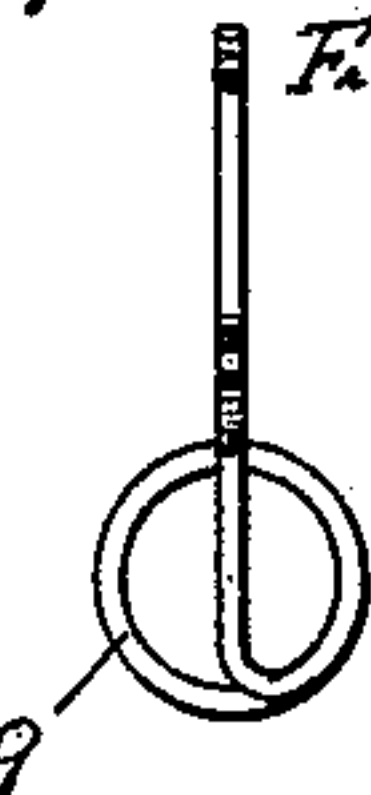
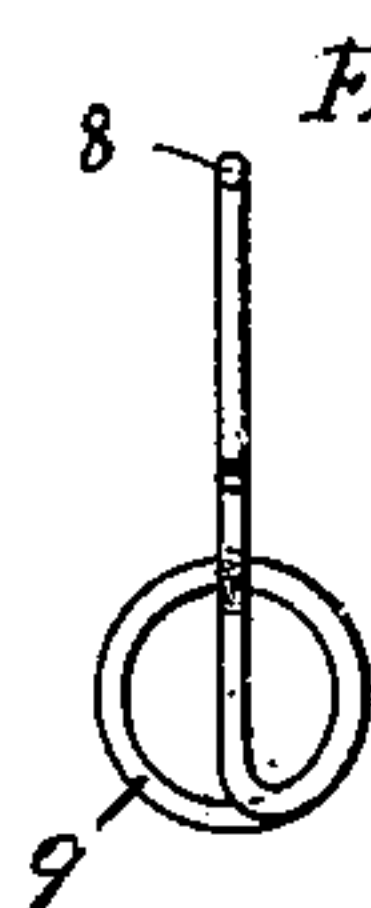
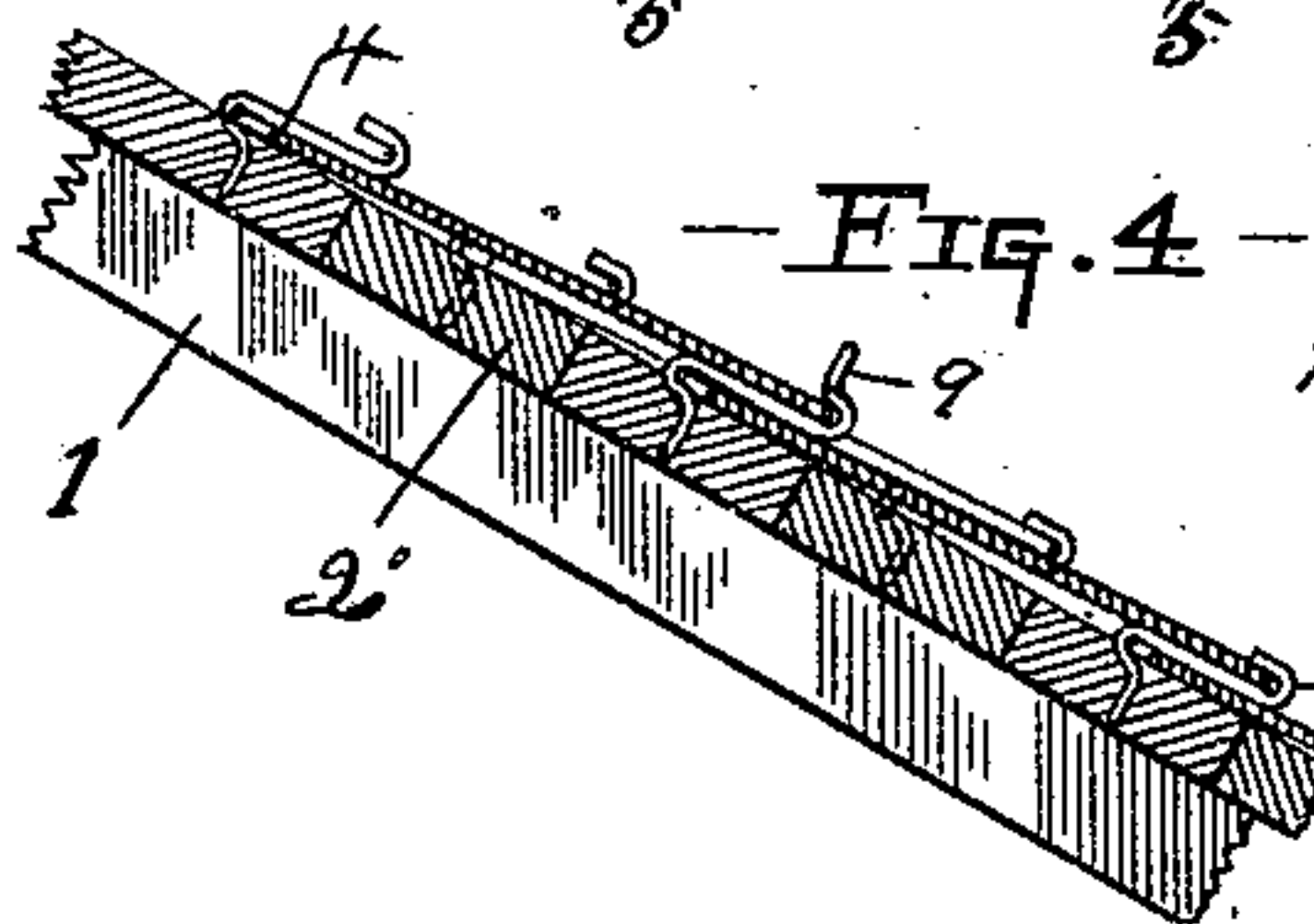
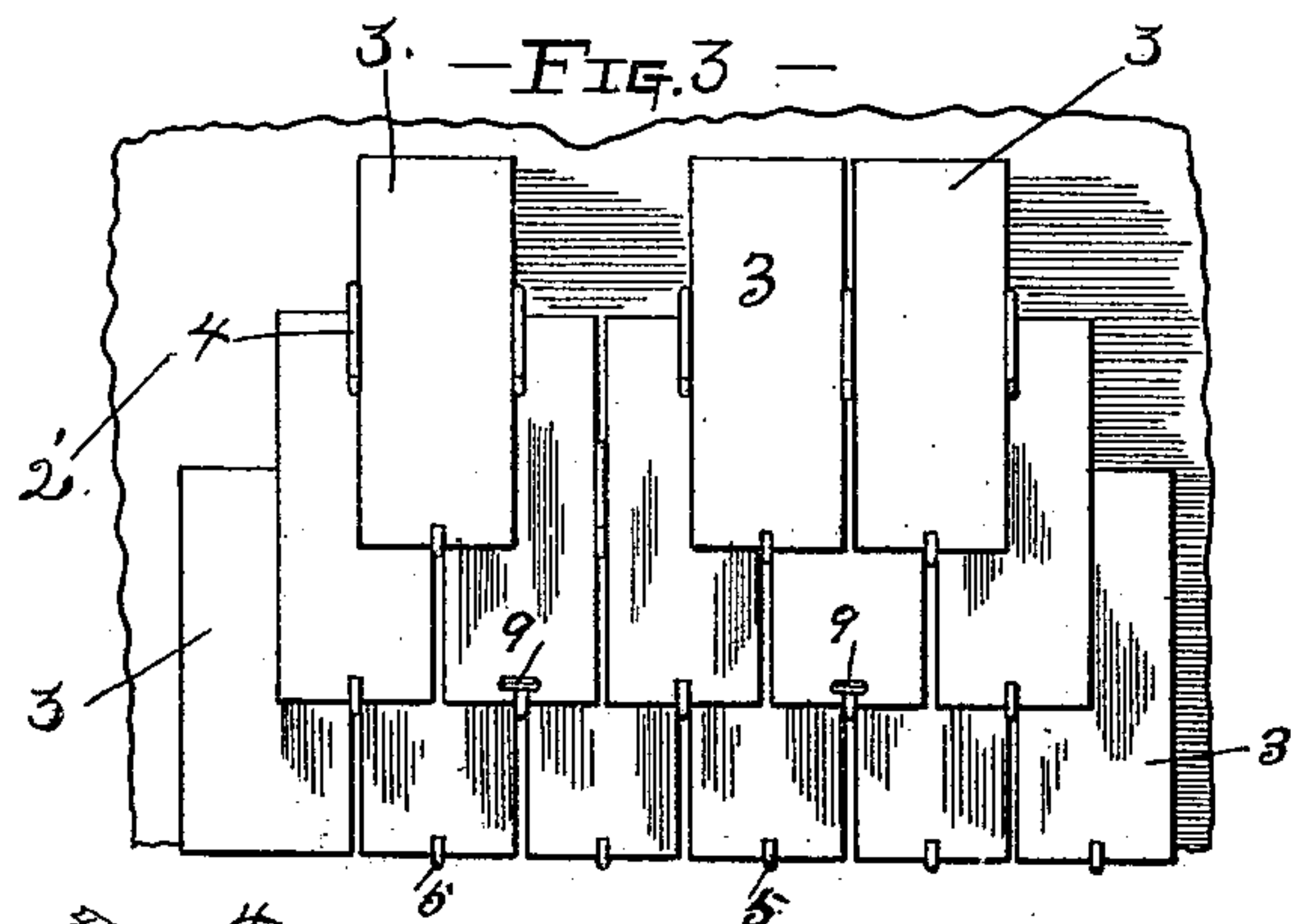
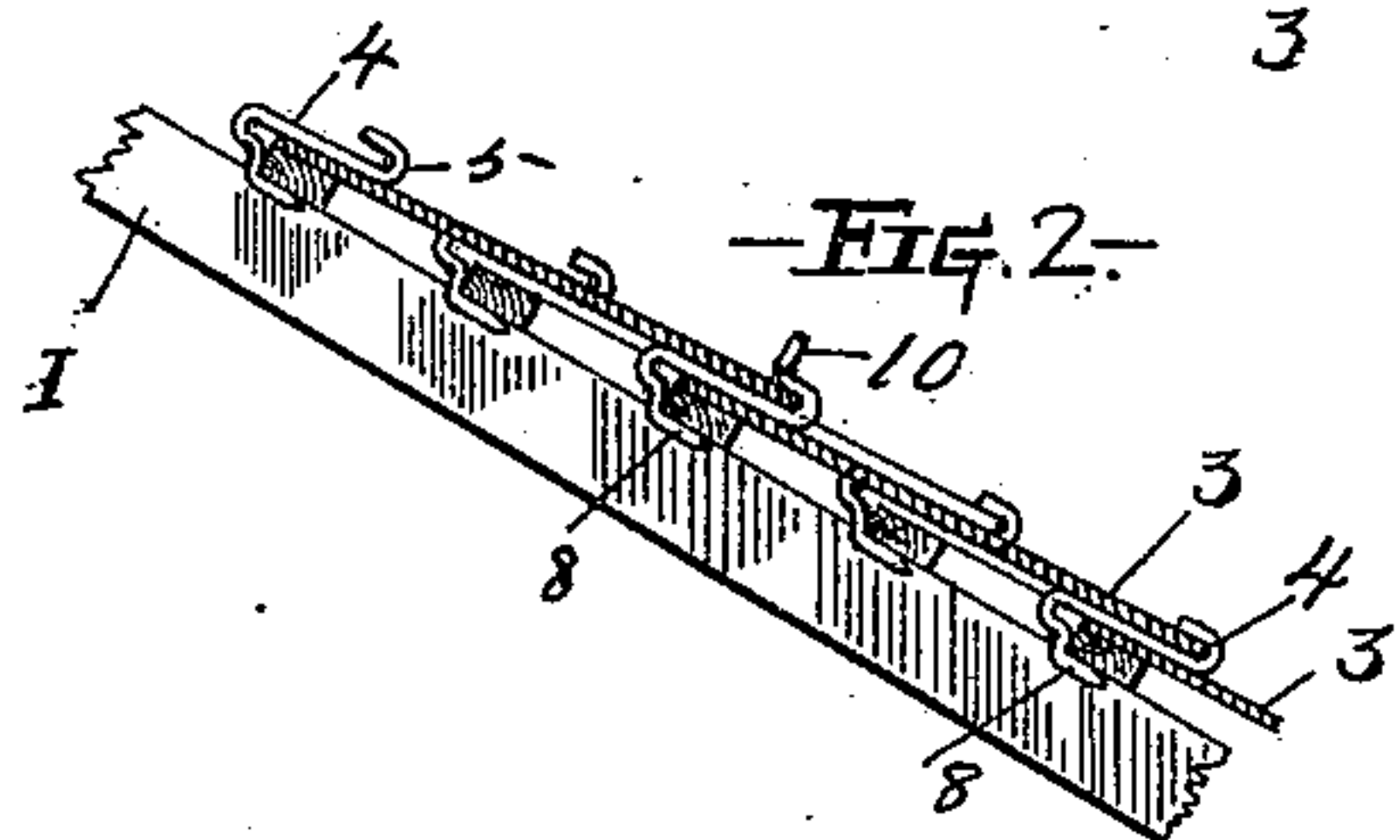
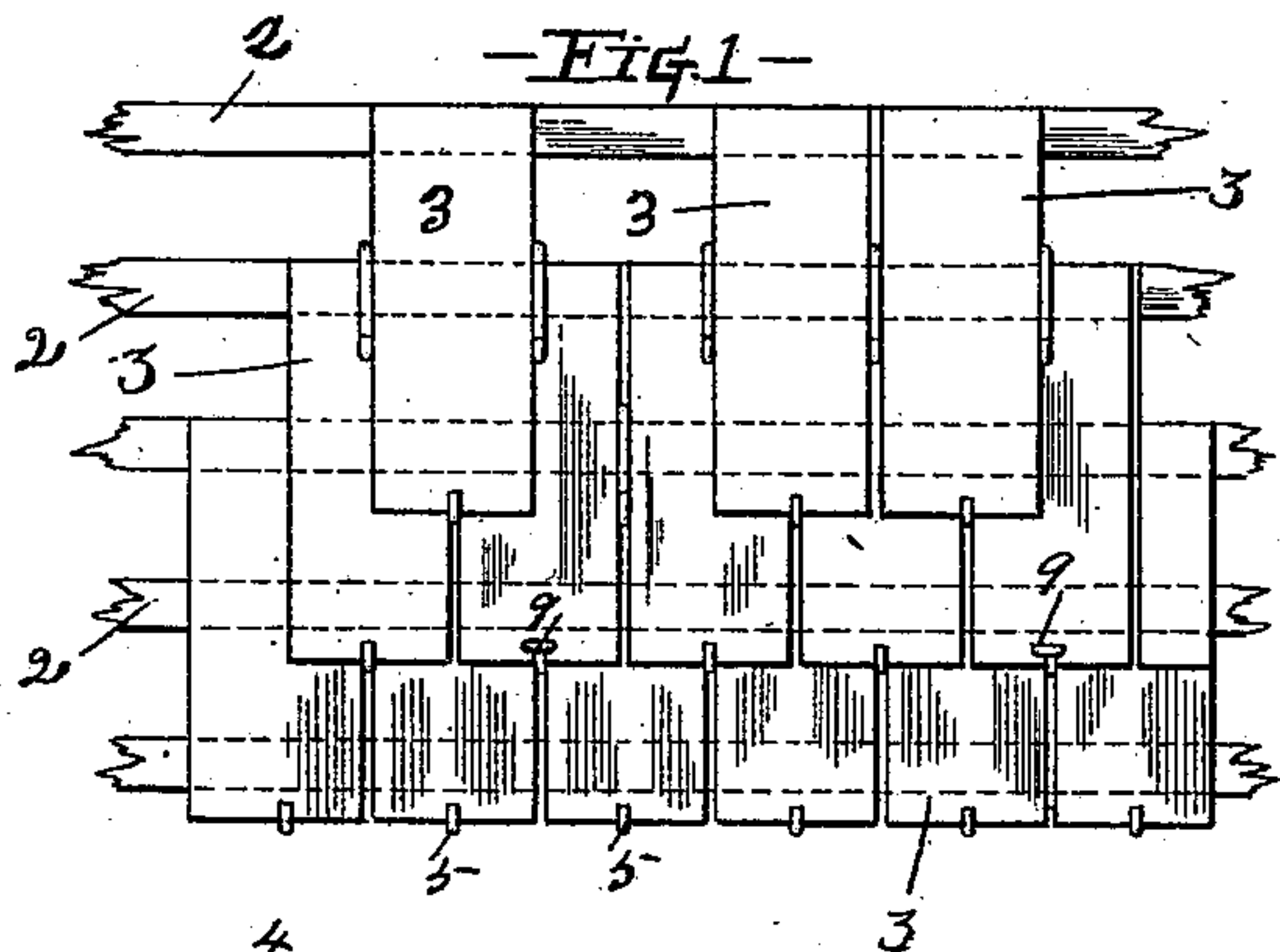
No. 623,988.

Patented May 2, 1899.

C. A. CONTANT.
SLATE ROOF FASTENING DEVICE.

(Application filed Apr. 30, 1898.)

(No Model.)



WITNESSES.
Adelaide Keane.
Edward F. Tierney

Claude A. Contant INVENTOR.
BY His ATTORNEYS. Chapin & Denny -

UNITED STATES PATENT OFFICE.

CLAUDE A. CONTANT, OF FORT WAYNE, INDIANA.

SLATE-ROOF-FASTENING DEVICE.

SPECIFICATION forming part of Letters Patent No. 623,988, dated May 2, 1899.

Application filed April 30, 1898. Serial No. 679,312. (No model.)

To all whom it may concern:

Be it known that I, CLAUDE A. CONTANT, a citizen of the United States, residing at Fort Wayne, in the county of Allen, in the State of Indiana, have invented certain new and useful Improvements in Slate-Roof-Fastening Devices; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements in detachable slate-roof-fastening devices.

It is well known that the usual punching or perforation of roofing-slates for the holding-nails causes more or less breakage and waste and causes a scaling off near such perforations which causes leakage, that in repairing a roof whose slates are thus nailed it is necessary to cut or break the nails to remove a slate, and that in so doing the roofer frequently breaks the slate overlying the one he desires to remove or replace.

The object therefore of my invention is to provide an improved means for rigidly but detachably securing the slates in position on a roof, siding, or like situation without the necessity for punching nail-holes therein, so arranged that a slate upon any part of the roof can readily be detached and replaced in repairing without the use of any cutting or other tool.

Another object of my invention is to provide a slate-roof-fastening device having a roof or snow-guard thereon, which may be either integral or detachable.

My improvement consists of a piece of non-corrosive wire of proper strength having upon its inner or upper end a hook or sharp point by which it is fixed in position, and also having upon said end a terminal loop adapted to permit a limited longitudinal adjustment of the underlying slate for the removal or replacement of the same, and is provided upon its outer end with a hook adapted to receive and secure the lower end of the slate when in position, the said hook being provided with an upright circular extension adapted to form a substantial and reliable snow-guard.

In the accompanying drawings, in which similar reference-numerals designate like parts, Figure 1 is a plan view of a small portion of a roof, showing one form of my improvement in position thereon. Fig. 2 is a transverse section of said roof, showing the manner of securing said fastening devices to the sheeting-strips. Fig. 3 is a similar view to Fig. 1, showing a roof having solid sheeting with my device in position. Fig. 4 is a transverse section of Fig. 3, showing a modified manner of securing said fastening devices to the sheeting. Figs. 5 and 7 are modified forms of my improvement having an integral roof or snow-guard. Figs. 6 and 8 are end views of the said Figs. 5 and 7, respectively. Figs. 9 and 11 are modified forms identical in construction to Figs. 5 and 7, respectively, excepting that the snow-guard is omitted in each instance. Figs. 10 and 12 are end views of Figs. 9 and 11, respectively. Fig. 13 is a detachable roof or snow-guard adapted to be mounted upon the forms of fastening devices shown in Figs. 9 and 11. Fig. 14 is a side view of the same.

Upon the rafters 1 of any proper roof are fixed in the usual manner and arrangement the parallel sheeting-strips 2, Fig. 1, a proper distance apart. On these strips the slates 3 are arranged in the usual order, excepting that they have a sufficient space between them to snugly admit my improvement 4, Figs. 1 and 3.

My improved fastening device has upon its lower end an upwardly-curved loop or hook 5, adapted to receive and secure the lower end of the slates 3. The other or upper end of my improvement is variously modified and secured in position, as will be hereinafter described.

The inner end of my improvement is so bent or folded upon itself as to form a loop 6 of sufficient width to loosely admit the upper end of the slate upon which it rests, Figs. 2 and 4, when it is desired to remove or replace a slate for repairs, in the manner hereinafter described.

The inner end of my device may have the modified form shown in Figs. 7 and 11, in which the extended end 8 is arranged in parallel relation to the body 4, thereby forming

a hook adapted to embrace the upper edge of the sheeting-strips 2. In case the said strips are of too great a thickness to be thus embraced by the said hook the end 8 has its extremity sharp-pointed and adapted to be driven in or inserted into the adjacent edge of said strips.

Any of the above-modified forms may be provided upon the hook 5 on the outer extremity thereof, as shown, with the upright circular integral roof or snow-guard 9. This snow-guard may be integral, as shown, being simply an extension of the said loop 5, or it may be made in a detached form, Figs. 13 and 14, and provided with a terminal eye 10, adapted to be snugly fitted over the free end of the said loop 5.

The manner of employing my improvement is obvious and, briefly stated, is as follows: The first row of slates at the eaves may be nailed onto the sheeting in the usual manner, or my device may be used therefor. The slates in this and all succeeding rows are placed a sufficient distance apart to snugly admit and contain my invention, which supports the respective slates at a point approximately midway their sides. When it is desired to detach or remove a slate 3 from any portion of the roof for repairs or other purposes, it can readily be done without the use of a cutting or other tool by simply pushing the said slate upward into the said loop 6 until the lower end of said slate is disengaged from its containing-loop 5, after which it can readily be removed or replaced at pleasure without detaching or deranging the fastening device 4, by which it is secured. Obviously my im-

provement in any of its forms can readily be detached from the sheeting at pleasure.

The roof-guard 9 in either modified form shown is a very efficient and reliable means of preventing accumulated masses of melting snow from sliding off the roof to the injury of both the eaves and the passers-by.

What I desire to secure by Letters Patent is—

1. A slate-roof-fastening device consisting of a piece of wire so folded upon itself as to form upon its lower or outer end a loop 5 for the purpose specified, and having upon its inner end a loop 6 adapted to afford a limited longitudinal adjustment of the slate 3, for the purpose specified, and having its upper end so bent as to be detachably secured to the roof-sheeting.

2. A detachable slate-roof-fastening device consisting of a piece of wire so folded upon itself as to form upon its lower or outer end a loop 5 for the purpose specified, and having the upright extension of said loop bent into a circular form of roof or snow-guard 9, and having upon its inner end a loop 6 to afford a limited longitudinal adjustment of the slate 3 to admit of its removal from its engagement with the said hook 5, and having its upper extremity so bent as to be detachably secured to the roof-sheeting, substantially as described.

Signed by me at Fort Wayne, Allen county, State of Indiana, this 27th day of April, A. D. 1898.

CLAUDE A. CONTANT.

Witnesses:

ADELAIDE KEARNS,
DANIEL PETGUE.