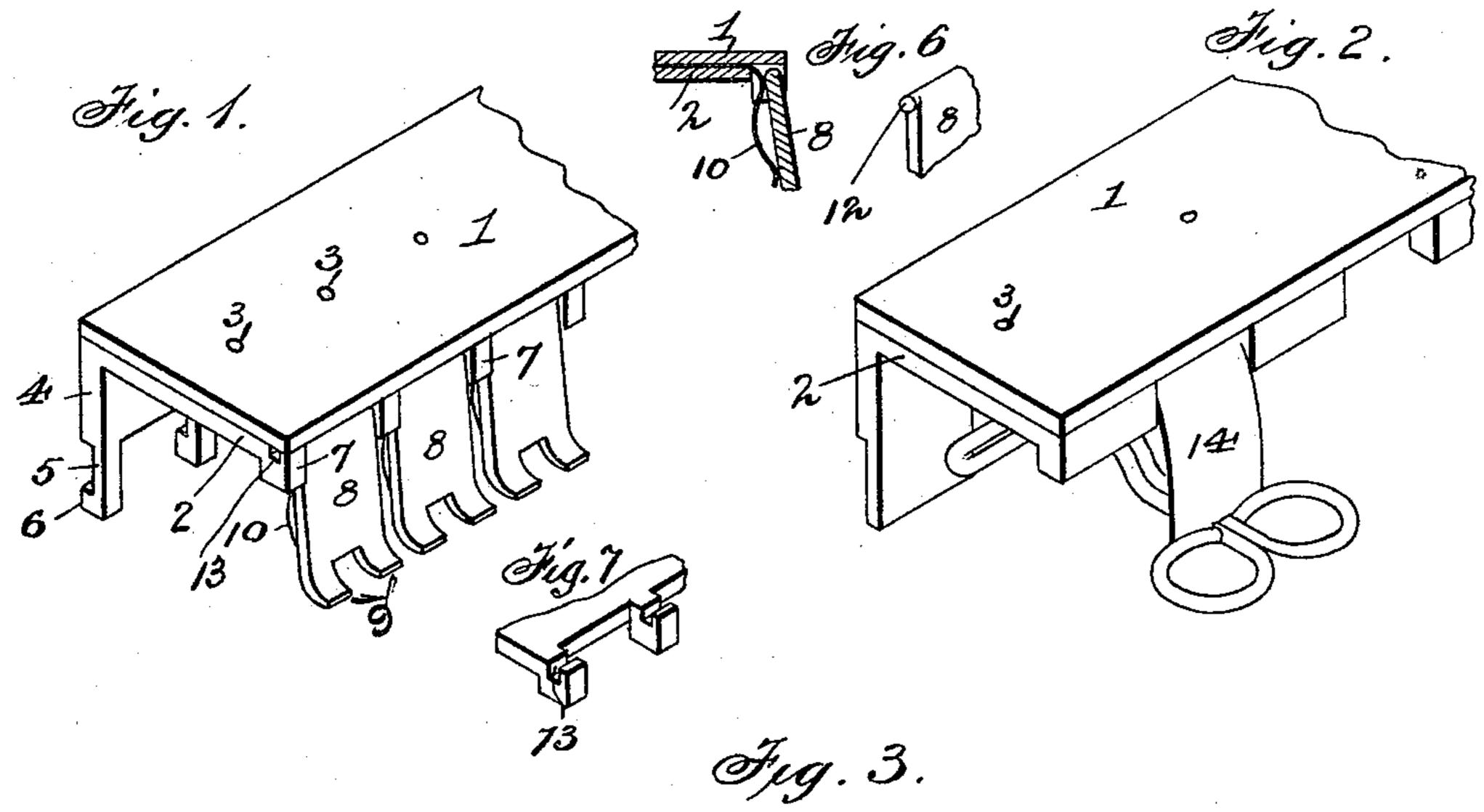
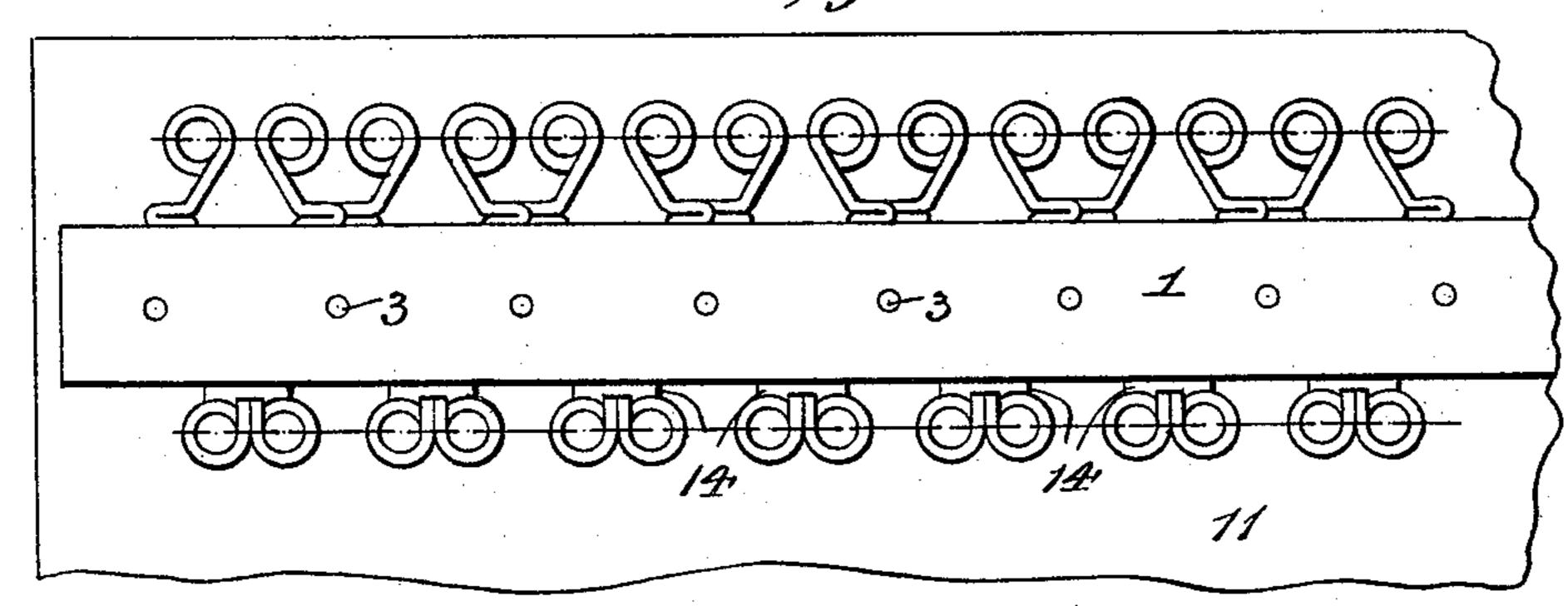
W. M. CORTHELL.

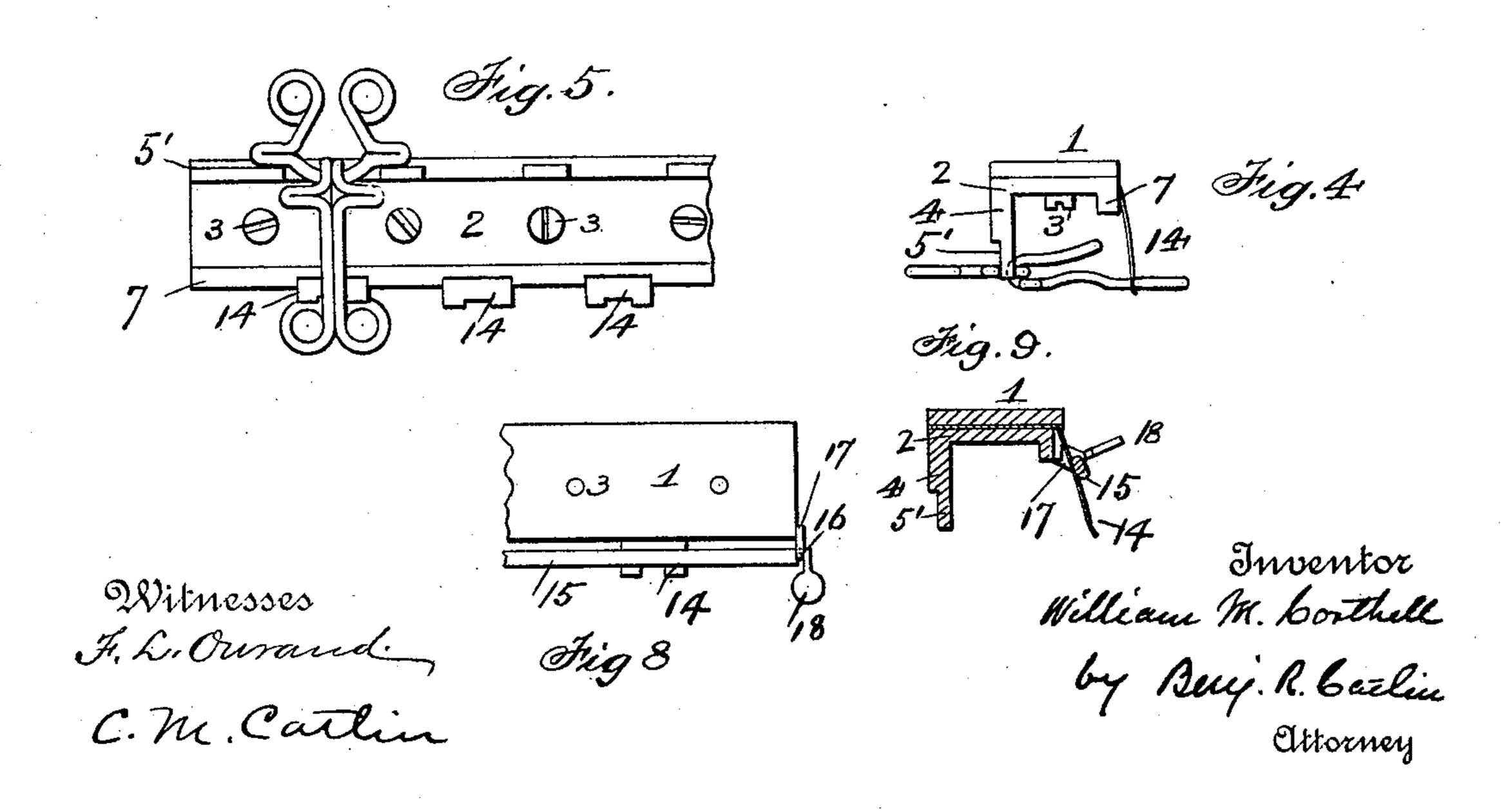
HOOK AND EYE HOLDER FOR SEWING MACHINES.

No. 582,994.

Patented May 18, 1897.







(No Model.)

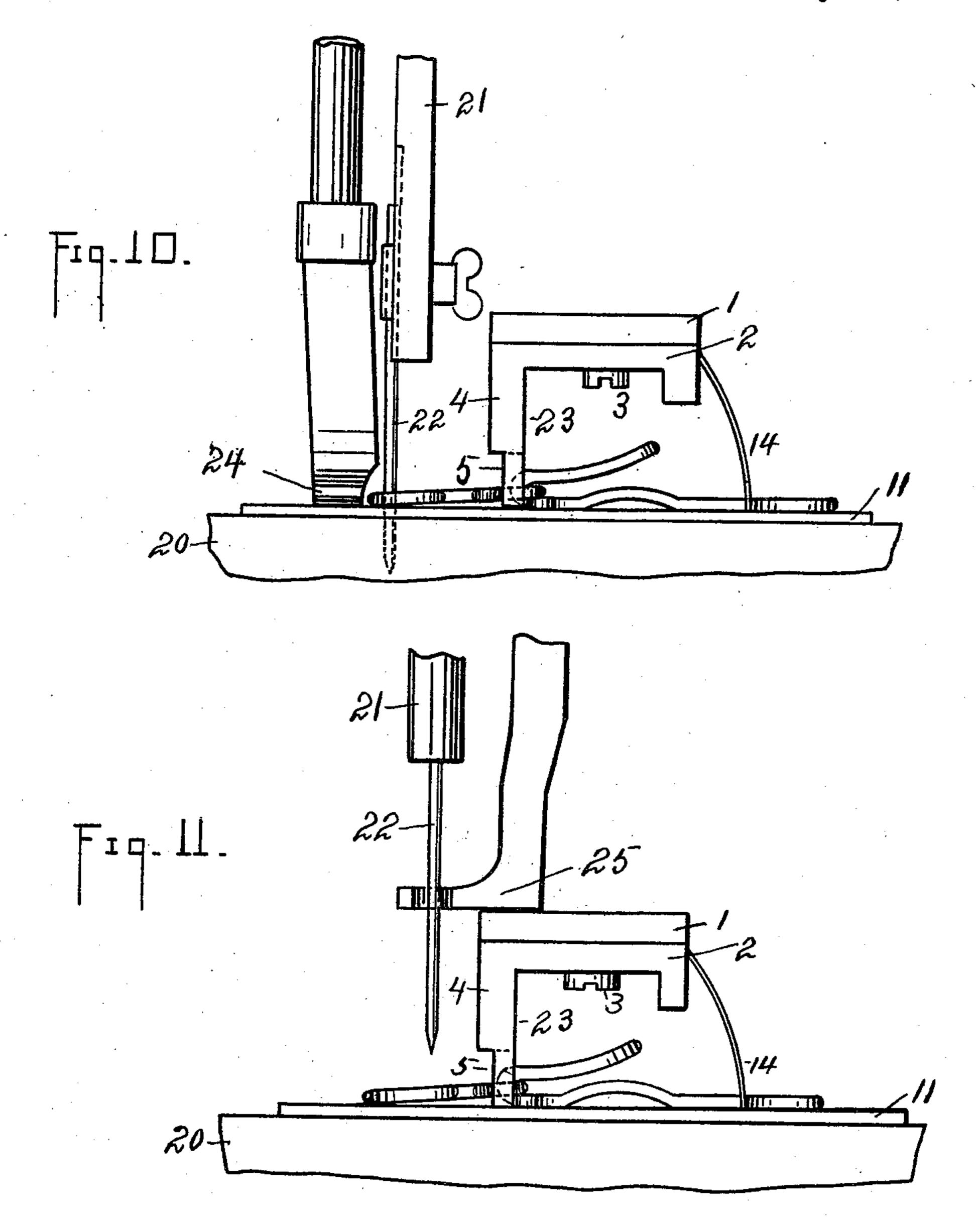
2 Sheets—Sheet 2.

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HOOK AND EYE HOLDER FOR SEWING MACHINES.

No. 582,994.

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Witnesses C.M. Cathin F. W.Blackstone Inventor W. M. Corthell, Buy: R. Cathie Ottorney

United States Patent Office.

WILLIAM M. CORTHELL, OF AUSTIN, ILLINOIS.

HOOK-AND-EYE HOLDER FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 582,994, dated May 18, 1897.

Application filed November 5, 1896. Serial No. 611,131. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM M. CORTHELL, a resident of Austin, in the county of Cook and State of Illinois, have invented certain 5 new and useful Improvements in Holders for Hooks and Eyes; 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 pertains to 10 make and use the same.

The invention relates to devices for holding hooks and eyes in suitable position to be sewed upon cards or the like by a machine, and its object is to provide an efficient and cheap de-15 vice for the purpose.

The invention consists in the construction hereinafter described and particularly point-

ed out.

In the accompanying drawings, Figure 1 is 20 a partial isometric view of a preferred form. Fig. 2 is a similar view of a modification, showing a hook and eye in place. Fig. 3 is a plan of a card and holder with hooks and eyes therein. Fig. 4 is an end view of the holder with 25 a hook and eye in place. Fig. 5 is a bottom plan of a holder with a hook and an eye therein. Fig. 6 includes a partial section and a partial isometric view of a detail and comprising a leaf. Fig. 7 is an isometric view of bear-30 ings for the leaf-journals. Fig. 8 is a partial plan of a device for moving springs. Fig. 9 is a transverse section of the same. Fig. 10 is a partial section of a sewing-machine, showing a card thereon and the improved device 35 for sewing hooks and eyes to the card on an enlarged scale. Fig. 11 is a similar view indicating a modified construction and arrangement of the presser-foot.

Numerals 1 and 2 denote plates secured to-40 gether by screws 3 or the like. The plate 2 is provided with a flange 4, having legs, projections, or studs 5 with feet 6, between which projections eyes may be supported, as indi-

cated in Fig. 6.

7 denotes a narrower flange parallel to flange 4, but on the opposite edge of plate 2, in which narrower flange is pivotally held a twopronged leaf 8. The prongs or fingers 9 may be curved slightly outward and are adapted 50 to hold between them a hook to be sewed and opposite to an eye supported between two of the feet 6, before named, the hook being en-

gaged with the eye, all substantially as shown in the drawings.

10 denotes a spring, one end of which is se- 55 cured to the plates 1 and 2, or to one of them, and which is preferably clamped between them by means of screws 3. The free end of the spring bears on the leaf 8 and tends to push it outwardly or away from the eye-sup- 60 ports, thus insuring that the hooks and eyes shall be held taut, but permitting their easy removal when sewed upon a card 11. The leaf in the present instance is provided with journals 12, that have bearings in the plate 2. 65 These bearings are conveniently formed as open slots 13 and covered by plate 1. The use of plate 1, however, is not essential, though it is preferred as a convenient means, in connection with plate 2, for holding the springs 70 and also for covering the journal-bearings, as above described.

In Figs. 4, 5, 8, and 9 is shown a modification, in which springs 14 are substituted for the pivoted leaves 8 and springs 10. The eye-75 supporting legs 5' are not provided with feet 6, as in the preferred form. The spring 14 or the two-pronged leaf 8 and its spring 10 are situated opposite the space between two legs 5, so that when an eye is inserted between 80 said legs it will be in position to receive a hook whose shank is held between the prongs of the hook-holding leaf or spring, all as illustrated. The springs draw the hooks into the eyes and hold the latter against their support-85

ing-legs.

In operation the hooks and eyes are held in contact with a card or the like and sewed thereon by a machine.

The invention is primarily designed for use 90 with a sewing-machine, though the latter is

not a part of the improvement.

My improvement would not be avoided by providing spring-supports for the eyes operating substantially as do the described spring-95 supports for the hooks and combining such spring eye-supports either with rigid or spring supports for the hooks.

In Figs. 8 and 9 is illustrated a device for simultaneously compressing the springs 14 100 to facilitate the placing of the hooks on the holder in engagement with the eyes or their removal after being sewed upon the card.

15 denotes a bar or rod having an approxi-

mately ovoid section except at its ends 16, which are made round and journaled in small brackets 17.

18 is a finger-piece for manipulating this bar either to compress all the springs or to relieve them.

The use of this device is not essential, and other particulars described herein may be varied or omitted provided there is no devaried parture from the substantial principles of mechanical construction and operation herein set forth.

In Figs. 10 and 11 the manner of using a sewing-machine in connection with the improved device is illustrated. 20 denotes the bed of the machine, 21 the needle-bar, and 22 a needle. The holder for hooks and eyes is denoted by 23. In Fig. 10 a presser-foot is denoted by 24. These parts are of customary form. It would be practicable, however, to use a modified presser-foot 25, adapted to bear on the top of the holder, as indicated in Fig. 11.

The hooks and eyes having been placed in the upturned holder, as indicated in Fig. 5, said holder is inverted upon a card and the latter placed under the presser-foot of the sewing-machine, (see Figs. 10 and 11,) and moved to bring the hooks and eyes under the needle in succession in suitable position for attaching them to the card.

By a suitable pressure, as by the hand, the holder can be moved to effect the above-described operation, but the particular means is not of the invention.

Having described my invention, what I claim is—

1. In a device for holding hooks and eyes in situation to be sewed to a card, the combination of an eye-support, a hook-support, 40 a holder for said supports, and a spring, the operative extremity of one of said supports having bodily movement about the point of its connection with said support-holder in a direction lengthwise of the hook and eye and 45 the spring acting to hold the hook and eye engaged, substantially as described.

2. A device for holding hooks and eyes in situation to be sewed by a machine, comprising a common holder, the eye-holding sup- 50 ports, and the supports for holding the hooks engaged with the eyes, the said hook-holding supports being spring-actuated and secured at their upper ends to the said holder, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

WILLIAM M. CORTHELL.

Witnesses:

GEORGE K. HAMBURGHER, FRED H. SMITH.