

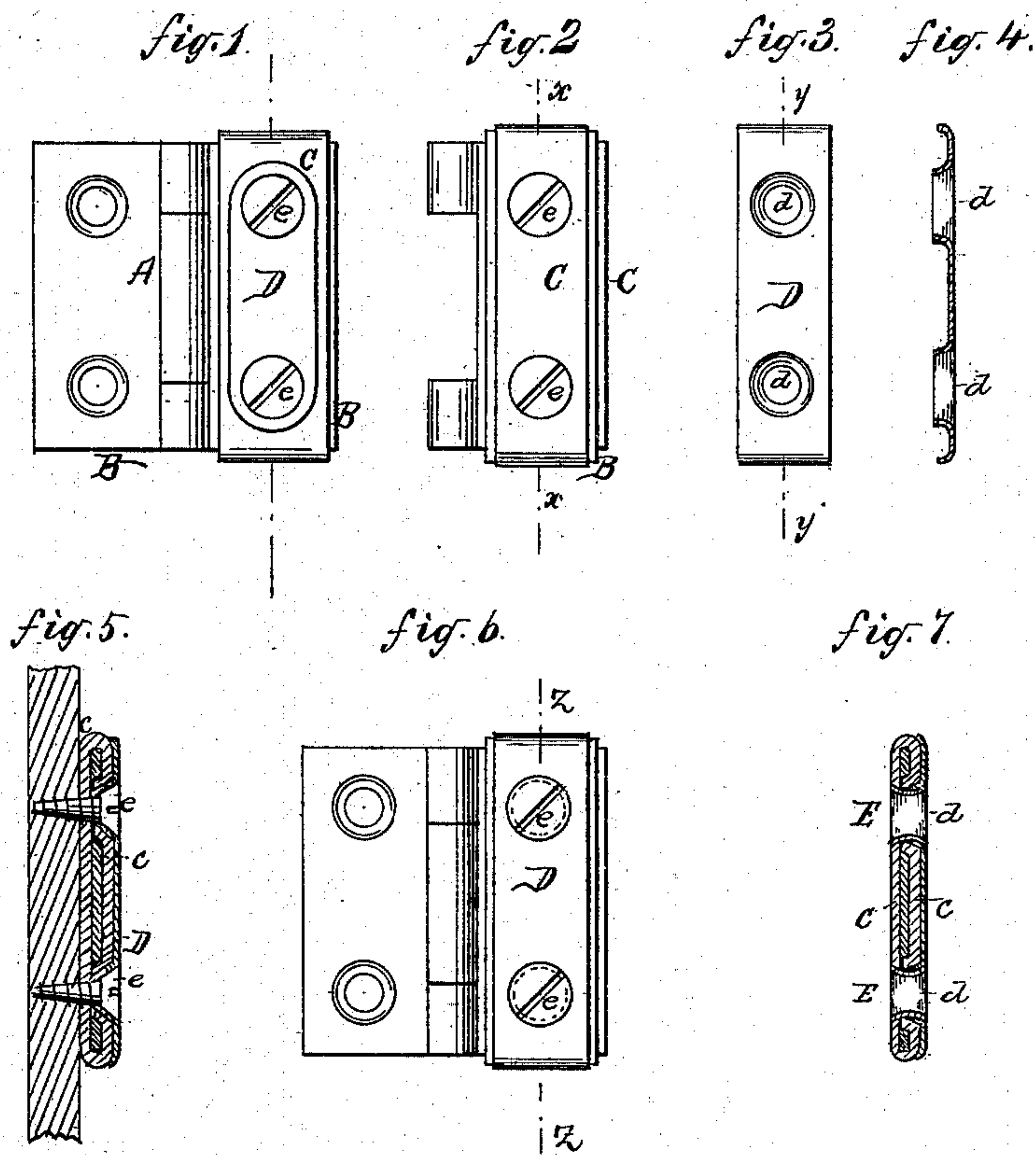
(No Model.)

W. B. CLEVES.

HINGE FOR SEWING MACHINES.

No. 272,121.

Patented Feb. 13, 1883.



Witnesses:

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UNITED STATES PATENT OFFICE.

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HINGE FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 272,121, dated February 13, 1883.

Application filed November 24, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM B. CLEVES, of the city of Brooklyn, county of Kings, State of New York, and a resident thereof, and a citizen of the United States, have invented a new and useful Improvement in Insulators for Hinges to Prevent Vibration of Sound, of which the following is a specification, reference being had to the accompanying drawings, in which—
Figure 1 is a face view of a hinge having two leaves, on one of which is placed my insulator and guard; as hereinafter described. Fig. 2 is a face view of one leaf, showing the insulator and screws with the guard removed. Fig. 3 is a face view, and Fig. 4 a sectional view, of a slightly-modified form of the metallic guard which I use to protect the insulating material from the abrasion and wear of the screw-heads employed in fastening the hinge to the body. Fig. 5 is a sectional view of Fig. 2, on line *x x*, when the guard shown in Fig. 4 is employed. Fig. 6 is a plan view, showing insulator, guard, hinge, and screws; and Fig. 7 is a sectional view of the same on line *z z*, showing the eyelets, thus making a portable insulated hinge.

In the use of hinges on the tables of sewing-machines for the purpose of attaching the head or plate of the machine to the table, or for other purposes, when it is desired to be rid of vibration, the metallic hinge by one leaf is riveted to the head of the machine, the other leaf coming in contact with and being fastened to the wooden surface of the table and screwed or riveted down thereto, and the noise generated by the contact of these two bodies is deadened by separating the metallic hinge from the wood. To relieve this noise made by the vibration of the machine when in motion, I separate the metal from the wood by the interposition of an insulating substance made of any vegetable or animal fiber, either of wood, flax, rubber, or other suitable substance. I place this insulator between the wood and the hinge-leaf, and then turn it over the ends of the leaf and place the guard on the turned-over ends of the insulator. The guard then receives the screw-heads, which, when screwed home, do not come in contact with the hinge-leaf at all, as shown in Figs. 5 and 7. As the screw-head sinks into the countersunk opening made in

the guard it presses the guard down into the insulating substance with so much force that said insulating substance is pressed into the screw-hole around the screw until it meets the lower or main portion of the insulator, thus preventing contact of the screw and hinge. The guard prevents the screw from cutting the insulating substance, and at the same time gives the screw a greater bearing capacity over the entire surface of the insulator. I employ a guard made of metal, and it may be of greater or less width or length than the surface of the insulator.

In Fig. 7 I show the guard, insulator, and hinge all pressed together and held in place by eyelets. When desired, hinges may be thus constructed and attached to the machine, or may be separately shipped any distance, and be ready for use by simply placing the screw directly in the eyelet-hole and driving it into the wood.

I have shown in the drawings one form of my insulator, in the shape of a band of rubber; but it is not necessary that it should be a band, as two strips entirely disconnected may be employed; and it is not necessary that the ends or sides of the leaf of the hinge should be covered or protected. The sole object of the invention is to fasten the leaf of the hinge to the wooden surface in such a manner that there is no contact between the screw and the leaf, thus avoiding all vibration when the machine is in motion, and also to obtain as large a bearing-surface for the screw on the insulating substance as possible.

In the drawings, A represents the hinge; B B, the two leaves.

C is the insulator, having its body resting between the leaf B and the table F and its ends resting on the top of the said leaf or flange.

D is the metallic guard placed over the ends of the insulator. In one view, Fig. 1, the guard is shown of a less breadth than the insulator. This guard has screw-holes *dd*, through which may be passed the screws *ee*. In Fig. 5 I have shown the use of the eyelet E. It will be readily seen that by the use of the guards the screw-heads (the screw being driven home) cannot cut the insulator; also, by the

use of a guard a cheaper, softer, and greater variety of substances can be used as an insulator than without a guard.

What I claim, and desire to secure by Letters Patent, is—

1. An insulator composed of the fabric C, guard D, and screw-holes *d d*, in combination with a hinge, A, substantially as described, and for the purpose specified.
2. A portable insulator composed of fabric

C, guard D, screw-holes *d d*, and eyelet E, whereby the hinge may be prepared for use and always portable ready for application, substantially as described, and for the purpose specified.

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Witnesses:

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