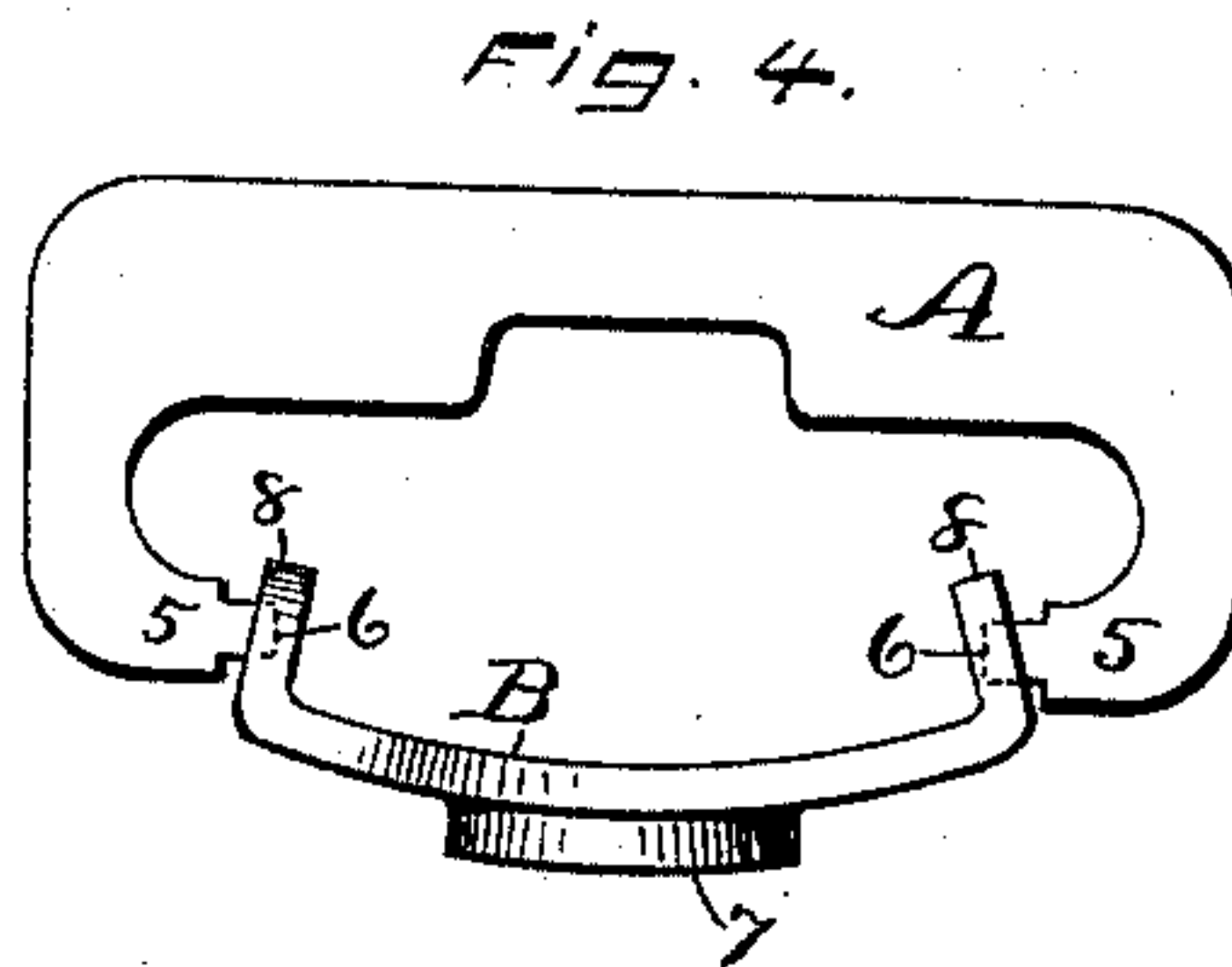
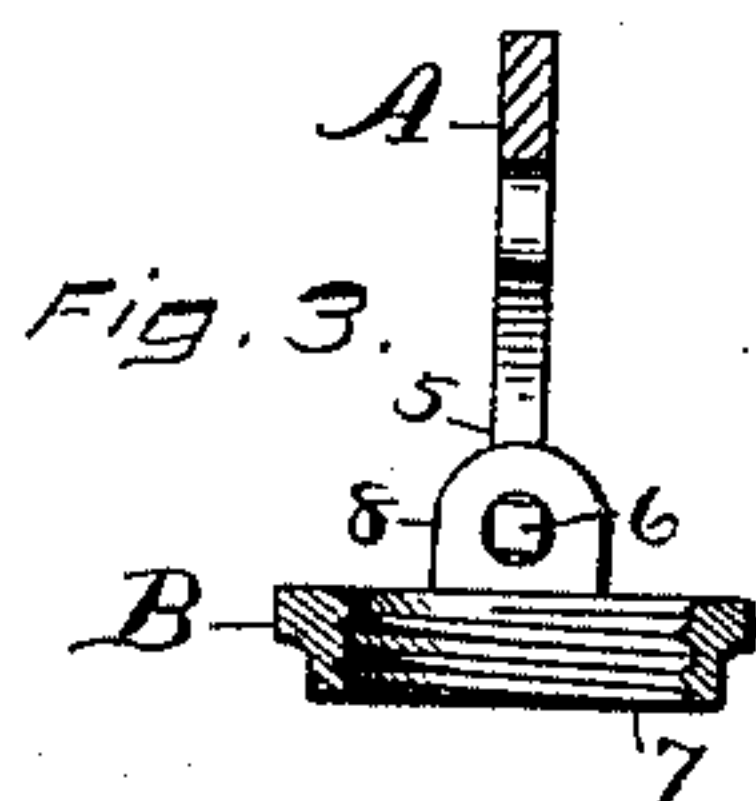
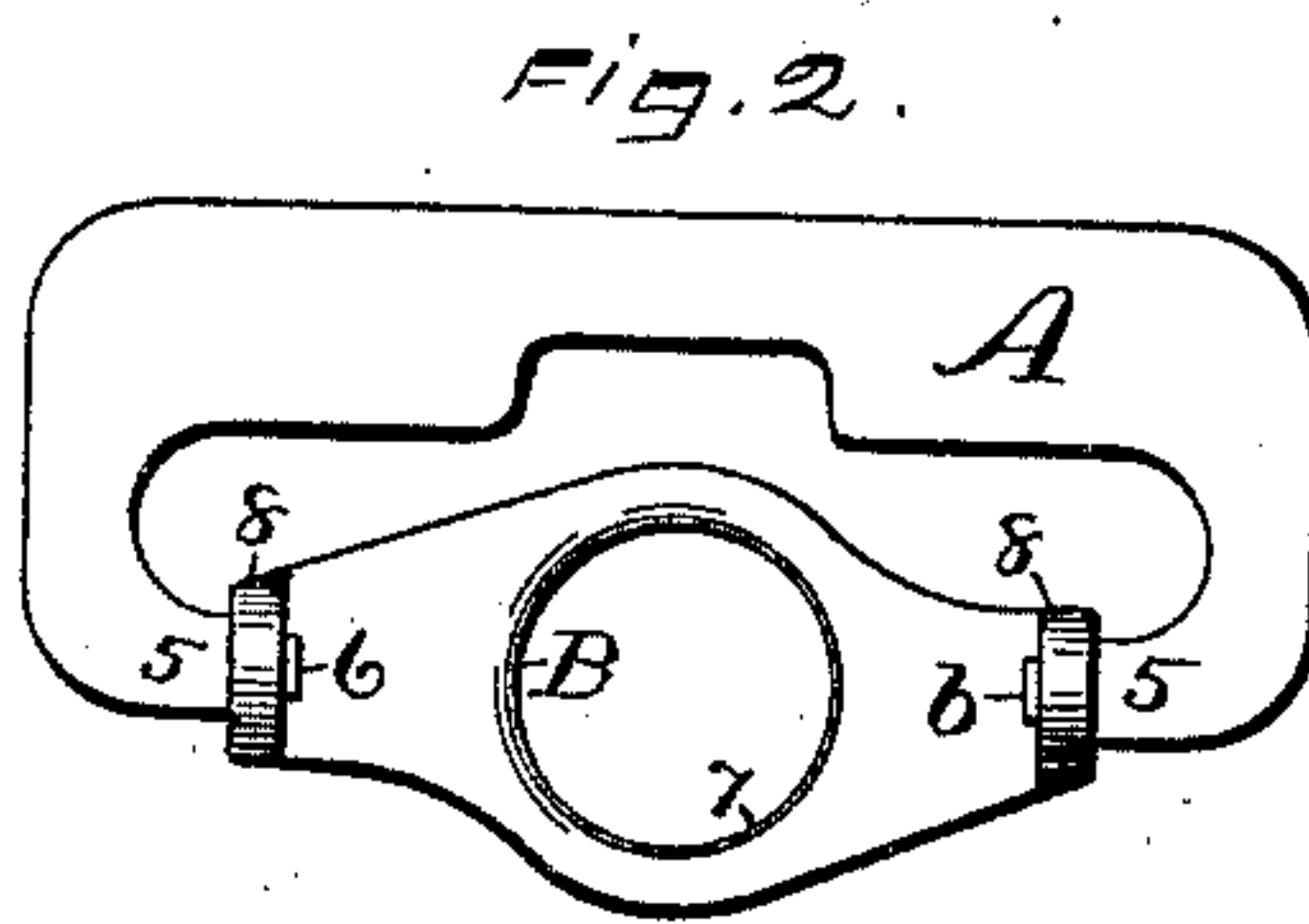
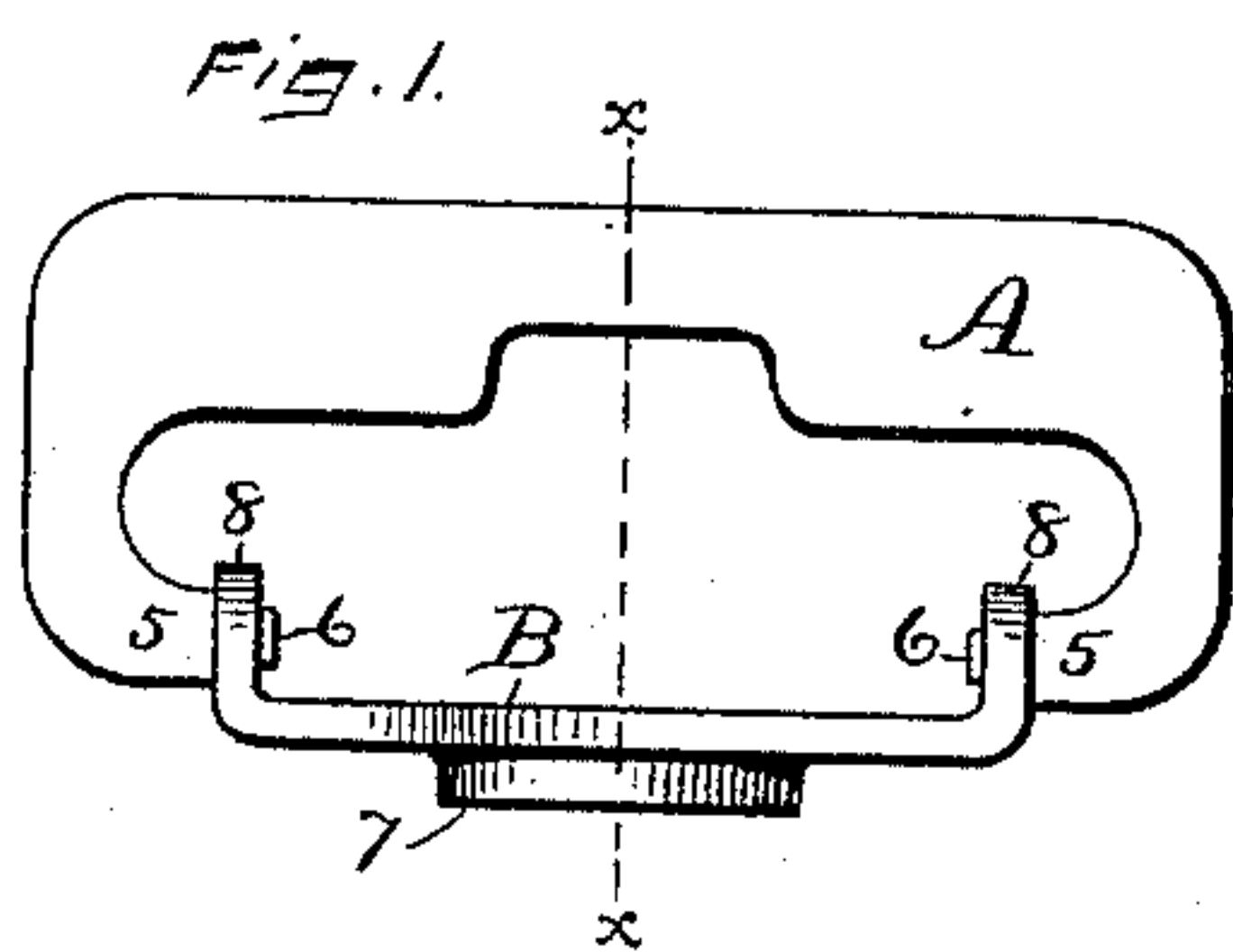


(No Model.)

A. M. LANE.
CLOCK KEY.

No. 462,011.

Patented Oct. 27, 1891.



WITNESSES.
John Edwards Jr.
Edison Tracy.

INVENTOR.
Almeron M. Lane.
By James Shepard.
Atty.

UNITED STATES PATENT OFFICE.

ALMERON M. LANE, OF MERIDEN, CONNECTICUT.

CLOCK-KEY.

SPECIFICATION forming part of Letters Patent No. 462,011, dated October 27, 1891.

Application filed March 16, 1891. Serial No. 385,226. (No model.)

To all whom it may concern:

Be it known that I, ALMERON M. LANE, a citizen of the United States, residing at Meriden, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Clock-Keys and the Manufacture Thereof, of which the following is a specification.

My invention relates to improvements in keys and the making of the same for clocks, watches, or other mechanisms having a winding apparatus, the key being of the class having a swinging bail or handle; and the objects of my improvement are simplicity and cheapness of construction, and particularly to create sufficient friction upon the bail to make it stay in place, although the key is made of soft metal that will set, in contradistinction to spring metal.

In the accompanying drawings, Figure 1 is a side elevation of my key with the bail extended upwardly. Fig. 2 is a plan view of the same with the bail turned down to one side. Fig. 3 is a transverse section on line *xx* of Fig. 1; and Fig. 4 is a side elevation illustrating the manner of assembling the parts.

The swinging bail A, which forms the handle, may be constructed in any ordinary manner, of either sheet or cast metal; but I prefer to cut the same from sheet metal by means of dies and punches, and in substantially the form shown. In either case the metal composing the bail is not spring metal. At the inner edge of the bail there are two inwardly-turned arms 5 5, having on their confronting ends projections or trunnions 6 6, that serve as the pivots upon which the bail or handle swings. The body portion B of the key I form of sheet metal, preferably with a central hub 7, turned downwardly and provided with a threaded hole, as shown, to adapt it to be screwed upon the winding post or arbor of a clock or other winding mechanism. If desired, however, a squared or angular socket, to fit a correspondingly-shaped winding post or arbor, may be substituted for the threaded socket or hub 7. The body extends in each direction from the hub or socket, and terminates in ears 8 8, the same being perforated to receive the projections or trunnions 6 of the swinging bail.

In keys of this class it is a great inconven-

ience to have the bail swing too freely, because if one lets go of it during the winding operation it is liable to turn down, and must be again turned outwardly before the winding operation can proceed. I desire, therefore, to make the bail swing freely enough so that it may be turned down to one side by the application of force, as shown in Fig. 2, and at the same time to have it turn with sufficient friction to cause it to stay in the position shown in Figs. 1 and 3. I accomplish this result by making the body B of the key of sheet metal soft enough to set, so that I may curve it slightly at first, as shown in Fig. 4. I then enter the projections 6 in the holes of the ears 8, substantially as shown in Fig. 4. This can be done in many ways by bending or twisting the parts—as, for instance, by bending the arms 5 5. When the body of the key is thus loosely arranged upon the swinging bail or handle, it is only necessary to place the body portion upon a suitable bed or support and strike the same with a die or punch to straighten said body portion, changing it from the form shown in Fig. 4 to that shown in Fig. 1. The curve should be such as to have this straightening operation increase the length of the body portion sufficiently to crowd the ears 8 8 firmly against the shoulders at the junction of the arms 5 and trunnions 6, and perhaps with sufficient force to spring said trunnions slightly apart. The body of the key being set straight and the parts slightly yielding, this pressure will be maintained and cause the handle to always remain in whatever position it may be placed, at the same time leaving it free to be turned to one side by force.

Ordinarily keys of this class have had a rigid body part, and they have been secured together by bending the bail only. In such a construction it is practically impossible to bend the bail so as to cause sufficient friction to make it stay at any desired point of its swinging movement.

Ordinary watch pendants and bows have been made with the bows of spring metal, the same being sprung open to put them in place, when the spring of the metal would press in the ends of the bow with friction enough to hold the same in place. In my key, and in ordinary keys of this class, the metal is so

soft as to have but very little spring. At the same time there is just enough spring in the metal to prevent the ends of the bail from being set tight by bending the bail alone.

5 I claim as my invention—

The herein-described key for the winding-arbors of clocks and analogous winding devices, consisting of the soft-metal swinging bail or handle and the soft-sheet-metal body

to which said handle is pivoted, with the ears 10 of said body portion snugly filling the space between the arms of said bail and pressing outwardly thereon, substantially as described, and for the purpose specified.

ALMERON M. LANE.

Witnesses:

GEORGE W. SPRAGUE,
JULIUS A. OLMSTED.