

(No Model.)

G. BRAMBEL.
PADLOCK.

No. 401,407.

Patented Apr. 16, 1889.

Fig. 4

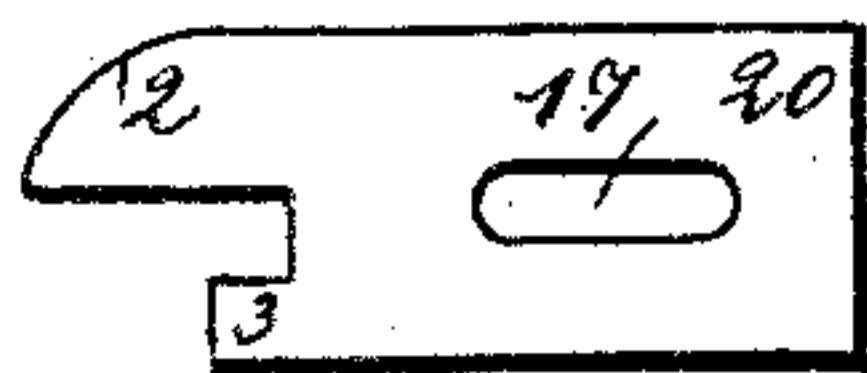


Fig. 1

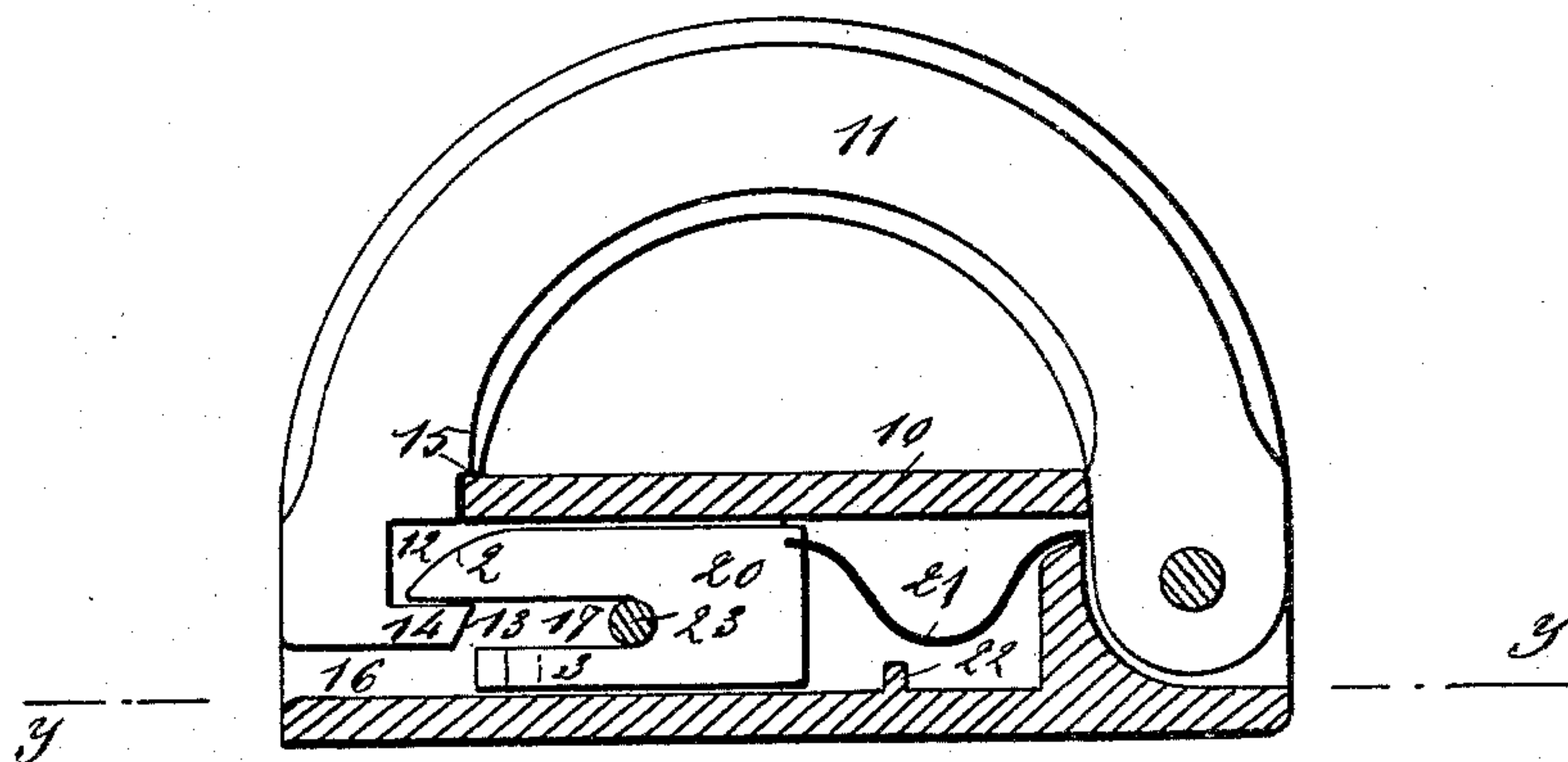


Fig. 2

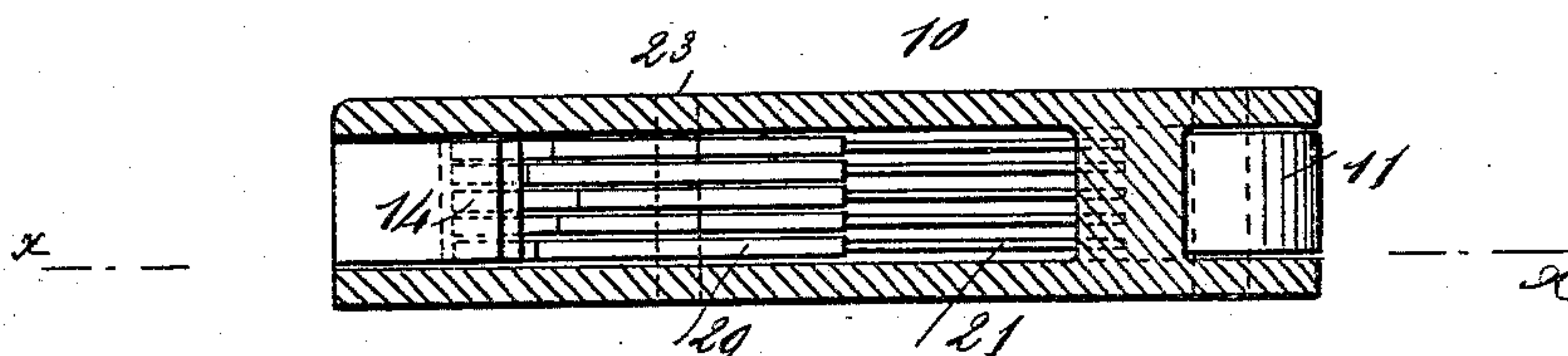
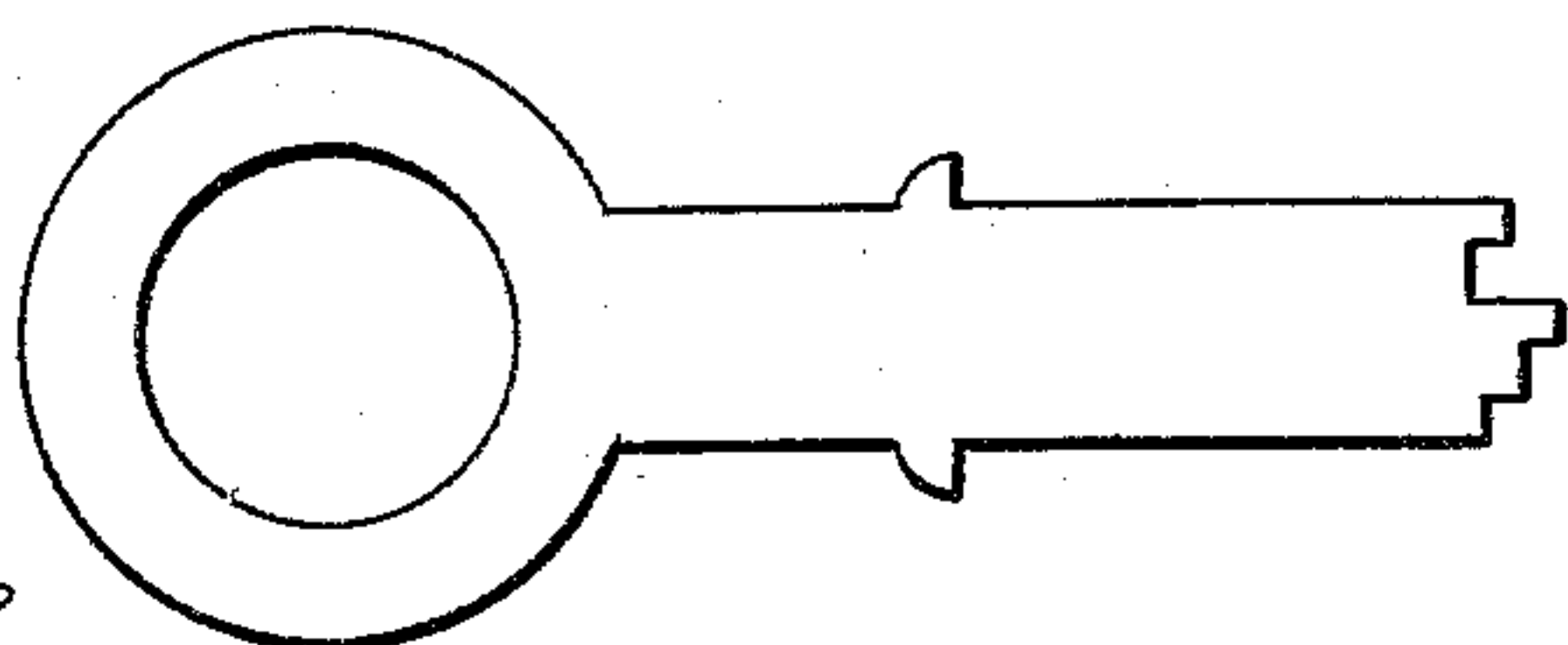


Fig. 3



WITNESSES:

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PADLOCK.

SPECIFICATION forming part of Letters Patent No. 401,407, dated April 16, 1889.

Application filed March 26, 1888. Serial No. 268,478. (No model.)

To all whom it may concern:

Be it known that I, GRANT BRAMBEL, of Lake Park, in the county of Becker and State of Minnesota, have invented a new and Improved Padlock, of which the following is a full, clear, and exact description.

The object of this invention is to provide a cheap, durable, and efficient padlock; and to this end the invention consists in the peculiar construction and arrangement of parts, as hereinafter fully described, and specifically pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a longitudinal sectional view of a lock constructed in accordance with the terms of my invention, the view being taken on line *xx* of Fig. 2. Fig. 2 is an inverted sectional plan view taken on line *yy* of Fig. 1. Fig. 3 is a side view of the key, and Fig. 4 is a view of a modified form of tumbler.

In the drawings above referred to, 10 is a lock-case, to which there is pivotally connected a bow or shackle, 11, formed with a recess, 12, and an inclined bearing-face, 13, upon the projection 14, that is below the recess 12. This shackle is also formed with a shoulder, 15, which bears against the upper plate of the case 10, limiting the downward movement of the shackle, and thereby insuring a space, 16, between the lower wall of the case and the shackle end, which space is utilized as a key-hole, as will be hereinafter explained.

Within the case 10, I mount any desired number of tumblers, 20, which said tumblers are formed with slots 17, the upper forward faces, 2, of the tumbler-sections above the slot being rearwardly inclined or curved. The sections 3, below the slots 13, are of different lengths, as will be seen from an inspection of Fig. 2. In connection with each tumbler there is arranged a spring, 21, and to the rear of the tumblers there is a stop, 22.

In placing the tumblers within the case the bow or shackle is thrown backward and the tumblers are inserted and forced inward against the tension of their springs, after which a retaining-pin, 22, is passed through

properly-located apertures formed in the case 10 and through the slots 17 of the tumblers. The pin having been so placed and the pressure brought to bear upon the tumblers released, their springs 21 will act to force them forward to the position in which the tumbler is shown in Fig. 1, and if at this time the bow or shackle be moved downward its inclined face 13 will bear against the rearwardly inclined or curved faces of the tumbler-sections 2, and the tumblers will be forced backward until the tongue or projection 14 has passed below the tumbler-sections 2, immediately after which the springs 21 will act to force the tumblers forward, so that their sections 2 will pass within the bow or shackle recess 12.

To unlock the lock, I provide a key such as the one shown in Fig. 3, the end of said key being stepped, so as to coact with the tumblers employed in the construction of the lock, as will be readily understood.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination of a lock-case having an open end and its upper wall cut away at said open end, a pivoted shackle having its recessed free end entering the lock-case through the cut-away portion, with its outer surface flush with end of the case and extending into the said case a distance less than the depth thereof, to leave a space between the lower wall of the case and the shackle for the insertion of a key, and a series of sliding and spring-actuated tumblers in said case and engaging the recess of the shackle, substantially as described.

2. The combination of the lock-case 10, having an open end and its upper wall cut away at said end, the shackle 11, pivoted to the case and provided with the recess 12 and shoulder 15, the tumblers 20, provided with the slots 17, the transverse pins 23, and the springs 21, substantially as herein shown and described.

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Witnesses:

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