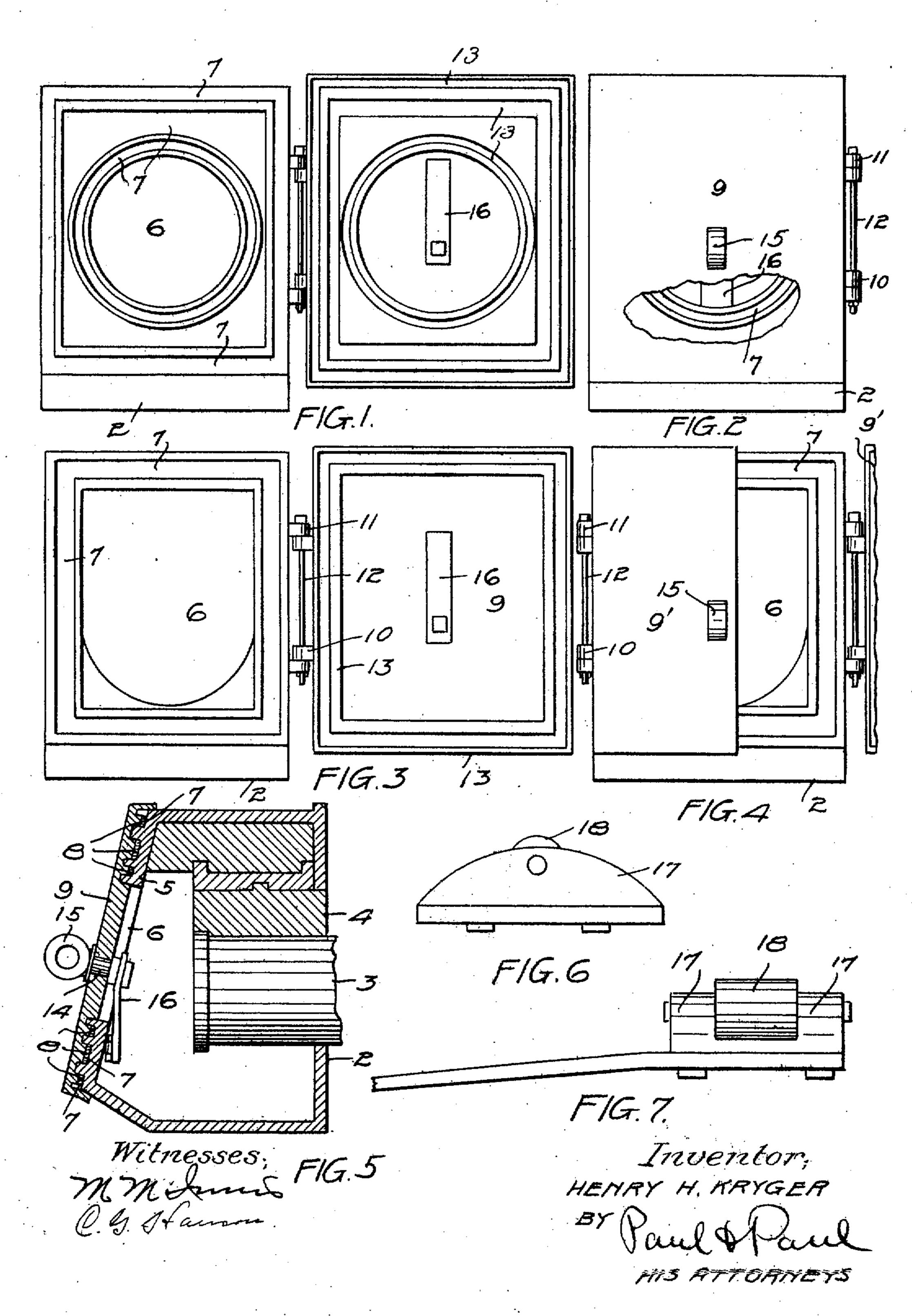
H. H. KRYGER. COVER FOR JOURNAL BOXES. APPLICATION FILED MAR. 20, 1906.



UNITED STATES PATENT OFFICE.

HENRY H. KRYGER, OF MINNEAPOLIS, MINNESOTA.

COVER FOR JOURNAL-BOXES.

No. 857,243.

Specification of Letters Patent.

Patented June 18, 1907.

Application filed March 20, 1906. Serial No. 306,950.

To all whom it may concern:

Be it known that I, HENRY H. KRYGER, of Minneapolis, county of Hennepin, State of Minnesota, have invented certain new and useful Improvements in Covers for Journal-Boxes, of which the following is a specification.

This invention relates to improvements in covers for journal-boxes, and the objects I 10 have in view are to provide a cover that will form a substantially air-tight closure for the journal-box, thereby excluding all dust and dirt, while at the same time permitting the cover to be quickly opened to permit access 15 to the interior of the box and as quickly closed, and securely fastened so as to prevent accidental displacement thereof.

The invention consists generally in the constructions and combinations hereinafter 20 described and particularly pointed out in the

claims. In the drawings Figure 1 is a front elevation of a journal-box and cover embodying my invention, the cover being shown open. 25 Fig. 2 is a similar view with the cover closed and a portion thereof being shown broken away. Fig. 3 is a view similar to Fig. 1 showing a slightly modified structure of the box. Fig. 4 is a front elevation showing the 3c box provided with a double cover, one part of the cover being shown open and the other closed. Fig. 5 is a vertical section through the journal-box and cover. Fig. 6 is an end elevation showing the spring and fastening 35 device. Fig. 7 is a side elevation of the

same. In all of the drawings 2 represents the journal-box, 3 the journal and 4 the bearing block. The front of the box is provided with 40 an inclined wall 5, having therein an opening 6, through which access may be had to the interior of the box for the purpose of removing or renewing the packing therein. The aperture 6 may be of circular form, as shown 45 in Fig. 1 and 2 of the drawing, or the upper part thereof may be of rectangular form, while the lower part is curved or circular as shown in Fig. 4 of the drawing.

In the structures shown in Figs. 1 and 5 50 the outer surface of the wall 5 is provided with a series of grooves 7 extending around the opening 6. These grooves may be of circular or rectangular form and each groove is provided with a suitable asbestos or other 55 packing 8.

hinged cover 9 or, if preferred, two such covers 9' (see Fig. 4) may be employed, each one covering substantially one half of the end of the journal-box. The cover 9 or 9' is pref- 60 erably provided with suitable lugs 10 and the journal box is provided with corresponding lugs 11. A suitable pintle 12 is provided to form the axis of the hinge for said cover.

The inner face of the cover is provided 65 with ribs 13 which correspond with the grooves in the face of the journal-box, so that when said cover is closed these ribs project into the grooves in the face of the journalbox, and bear against the packing strips 8 7° therein, thereby forming a tight joint between the face of the box and the face of the cover. For the purpose of pressing the face of the cover closely against the face of the journal-box, I provide a lock or latch having 75 the rotatable stud 14 mounted in the cover eccentrically to the opening in the face of the journal-box. This stud is provided outside of the cover with a ring or operating handle 15, and inside of the cover it has secured to it 80 a flat spring 16, to the end of which is secured a block 17 having a curved face with a roller 18 journaled therein. By turning the stud into position so that the spring extends upward the cover may be closed, and then by 85 turning the stud, the end of the spring will be carried under the lower portion of the face of the journal-box into the position shown in Fig. 5 of the drawings. The roller 18 will ride upon the inner surface of the front of the 9° box, putting the spring under tension, and drawing the cover closely against the face of the box. Where the double cover is employed a lock for each part of the cover may be used.

In each instance it will be noted that the face of the box is provided with an opening having a curved wall below its center; that a groove or grooves are provided in the face of the box surrounding this opening; that each 100 of the said grooves is provided with a suitable packing; that the inner face of the cover is provided with ribs adapted to fit the grooves in the face of the box, and that the lock or latch forces the cover against the face 105 of the box with a strong pressure due to the tension of the spring.

I claim as my invention:

1. The combination, with a journal-box, having an aperture 6 in its front, the wall of 110 the aperture below the center being of curved The front of the box is provided with a l form, of a hinged cover adapted to close said

aperture and a rotatable spring latch placed eccentrically in relation to said opening and adapted to engage the inner face of the front wall of the box and thereby to lock said cover

5 in its closed position.

2. The combination, with a journal-box, having an aperture 6 in its front, the wall of the aperture below the center being of curved form, and with grooves in the face of the journal-box surrounding said aperture, and suitable packing arranged in said grooves, of a hinged cover, adapted to close said aperture, and provided with ribs adapted to fit into said grooves, and a rotatable spring latch placed eccentrically in relation to said aperture, and adapted to engage the inner face of the front wall of the box and thereby lock said cover in its closed position.

3. The combination, with a journal-box, having the aperture 6 in its front, the wall of the aperture below the center being of curved form, there being a series of grooves surrounding said aperture and provided with suitable packing, of a hinged cover adapted to close said aperture and provided with ribs fitting said grooves, and a rotatable stud 14 journaled in said cover upon the inner side thereof eccentrically to said aperture 6, and a

spring 16, block 17 and roller 18 mounted 30 upon said stud.

4. The combination, with a journal-box having an aperture 6 in its front wall with a series of grooves surrounding said aperture and suitable packing arranged in said 35 grooves, of a hinged cover adapted to close said aperture and provided with a series of ribs fitting said grooves and a rotatable spring latch placed eccentrically in relation to said aperture and adapted to engage the 40 inner face of the said wall of the box and thereby to lock it.

5. The combination with a journal box having an aperture 6 in its front wall, with

a series of grooves surrounding said aperture and suitable packing arranged in said 45 grooves, of a cover hinged at its side to said journal box and adapted to close said aperture and provided with a series of ribs fitting said grooves and a rotatable spring latch placed eccentrically in relation to said aperture and adapted to engage the inner face of the wall of said box and to lock said cover in its closed position, substantially as described.

6. The combination, with a journal box having an aperture 6 in its front wall, with 55 a series of grooves surrounding said aperture and suitable packing arranged in said grooves, of a hinged cover adapted to close said aperture and provided with a series of ribs fitting said grooves a rotatable spring 60 16 and a roller 18, said spring being placed eccentrically in relation to said aperture and said roller being adapted to engage the inner face of the wall of the box and thereby to lock the cover in its closed position, substan-65 tially as described.

7. The combination, with a journal box having a circular aperture 6 in its front wall and with a circular groove surrounding said aperture and suitable packing arranged in 70 said groove, of a rectangular cover hinged to the wall of the journal box and adapted to close said aperture and provided with a circular rib fitting said groove and a rotatable spring latch placed eccentrically with relation to said aperture and adapted to engage the inner face of the wall of the box and thereby to lock the cover in its closed posi-

tion.

In witness whereof, I have hereunto set my 80 hand this 17th day of March, 1906.

HENRY H. KRYGER.

Witnesses:

A. G. HANSON, R. C. PAUL.