

997,831.

Patented July 11, 1911.

Fig. 1.

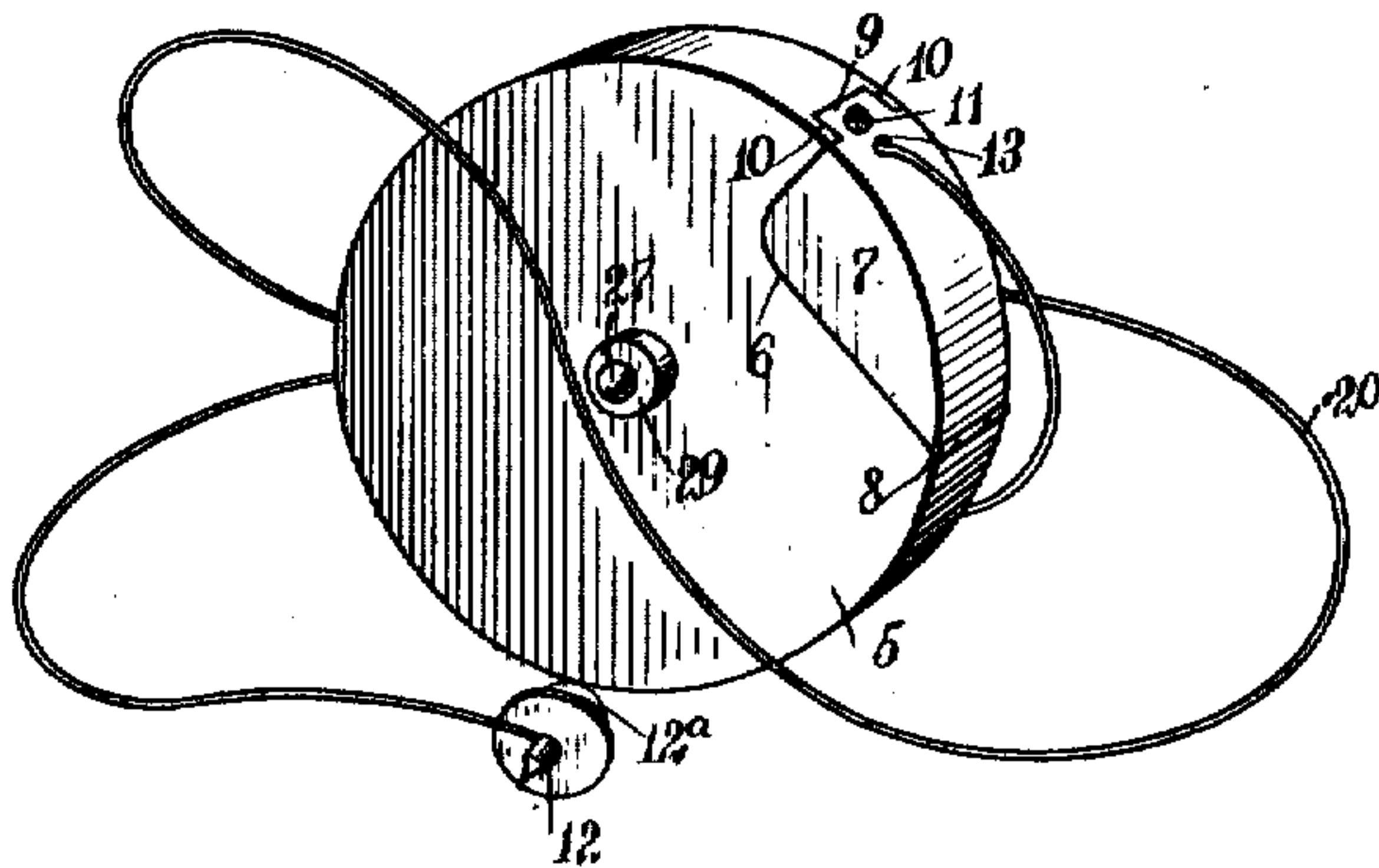


Fig. 2.

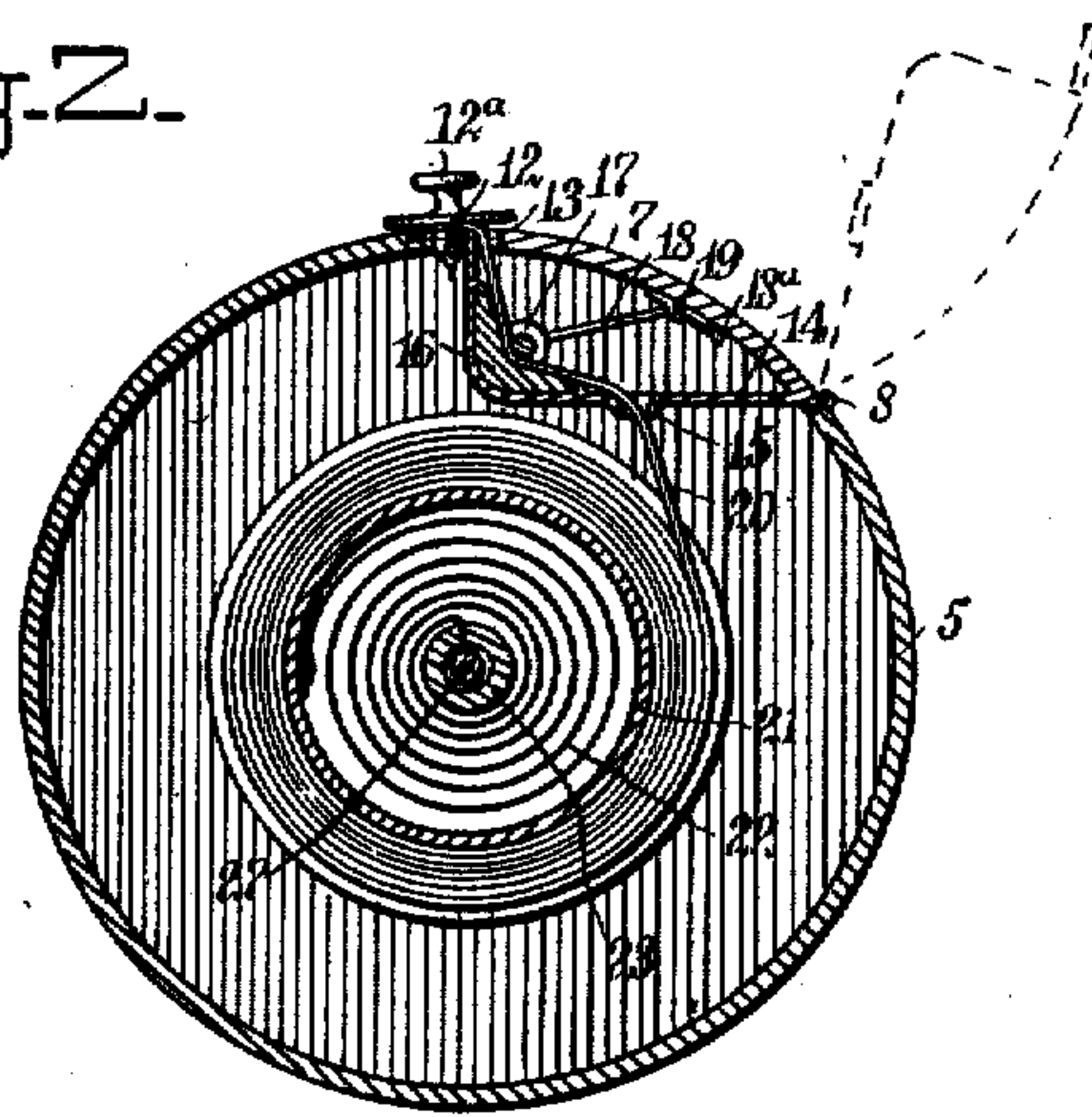


Fig. 3.

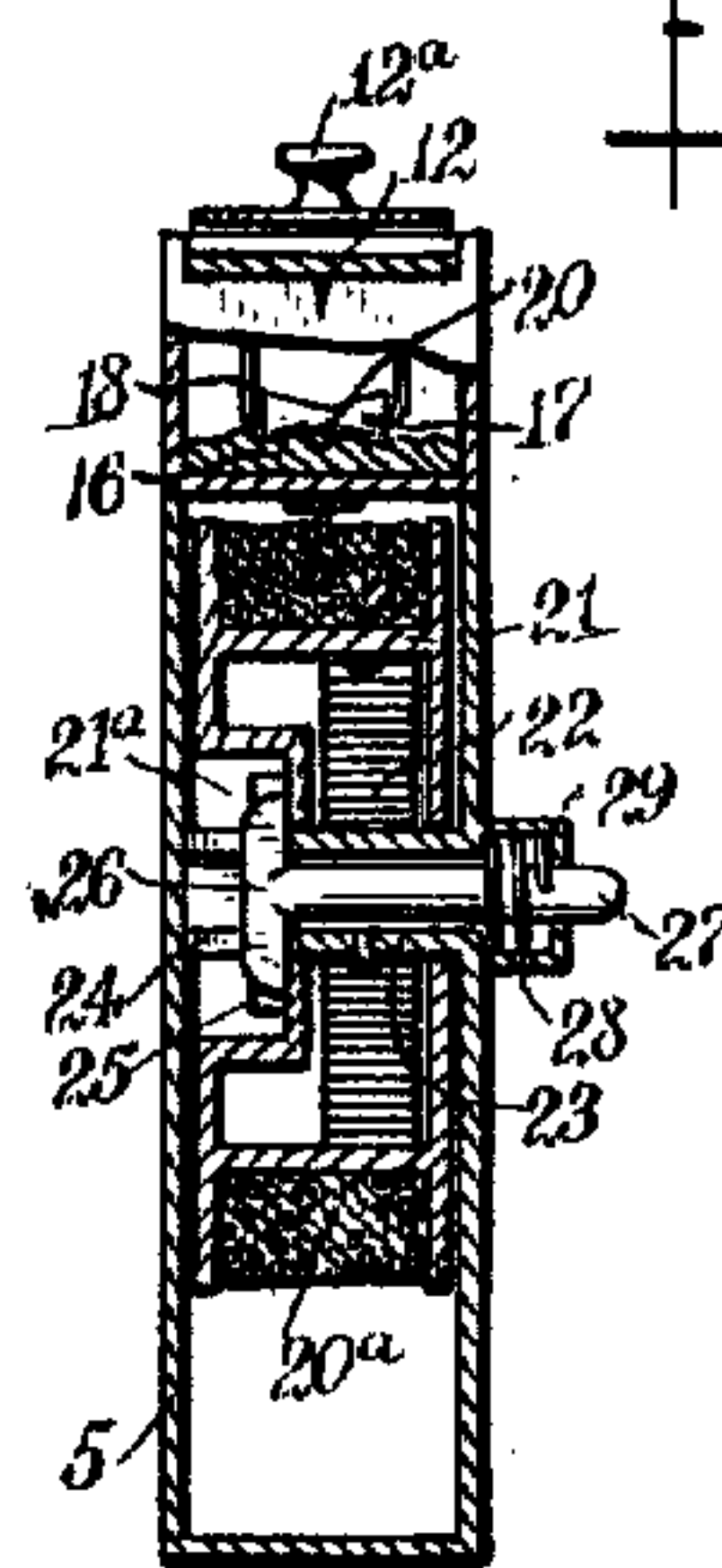
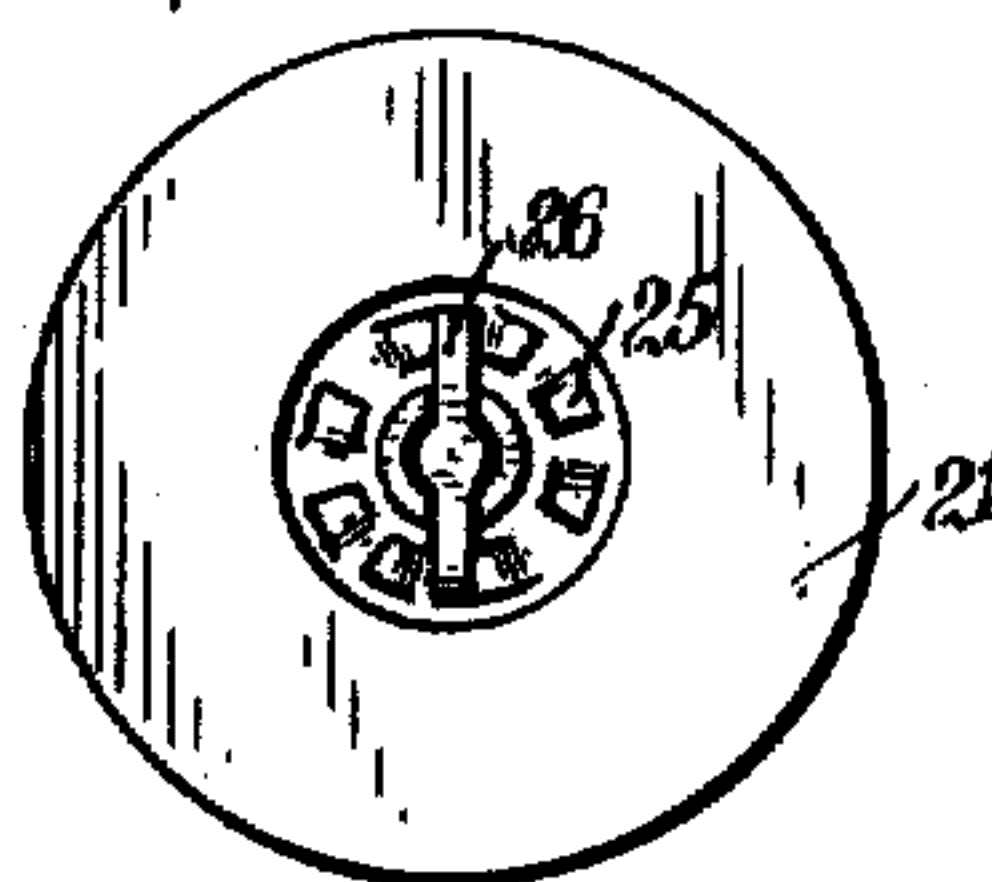


Fig. 4.



WITNESSES

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# UNITED STATES PATENT OFFICE.

HENRY K. KISO, OF NEW YORK, N. Y.

STRIKING-LINE.

997,831.

Specification of Letters Patent.

Patented July 11, 1911.

Application filed October 26, 1910. Serial No. 589,154.

*To all whom it may concern:*

Be it known that I, HENRY K. KISO, a subject of the King of Japan, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Striking-Line, of which the following is a full, clear, and exact description.

My invention relates to striking lines used by carpenters, bricklayers, and various other artisans, for the purpose of marking straight lines upon rough or irregular surfaces.

My invention comprehends a disk-like casing in which is revolubly mounted a drum and upon this drum the line is wound. The unwinding of the line turns the drum in one direction, the drum being retracted by a spring. The casing is provided with a sector-like opening and fitting into this opening is a hollow door through which the line is drawn, and disposed within the hollow door is the inking apparatus.

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

Figure 1 is a perspective showing my device ready for use, the line being partially unwound; Fig. 2 is a substantially central vertical section through the device, this section being in a plane parallel with the general plane of the casing; Fig. 3 is a cross section through the casing and parts contained within it; and Fig. 4 is a detail showing the drum and ratchet for holding the latter.

A casing 5 having generally the form of a hollow disk is provided with a sector-shaped slot 6. A hollow door 7 is connected with the casing 5 by aid of a hinge 8 and is of the form indicated in Fig. 1. The door 7 is provided with a tongue 9 integral with it, the casing being provided with parallel portions 10 between which is a slot for receiving the tongue 9. The tongue 9 is provided with a hole 11 through which a screw 12 may be inserted so as to hold the door 7 closed. This screw is provided with a thumb piece 12<sup>a</sup> whereby it may be more readily handled.

The door 7 is provided with an inner wall 14, the general outline of which approximates in form that of the slot 6. The wall 14 is provided with an eye 15. Mounted detachably within the door 7 and resting di-

rectly upon the wall 14 is a pad 16 of felt, sponge or other absorbent material capable of holding by capillarity a quantity of fluid ink. A roller 17 having generally the form of a double cone is revolubly mounted upon a loop 18 of spring wire. This loop is provided with portions 18<sup>a</sup> which engage the inner surface of the door 7. The loop 18 is mounted in bearings 19 secured upon the inner surface of the door 7. The loop 18 is so constructed and arranged that it constantly presses the roller 17 toward the pad 16.

At 20 is a line having generally the form of a cord. This line is wound upon a drum 21. Inside of this drum is a spiral spring 22, the inner end of this spring being secured to a sleeve 23 integral with the casing 5 and forming a bearing corresponding in approximate position with the central geometrical axis of the casing. The sleeve 23 is provided with two portions 24 separated by slots, and extending through these slots is a pawl 26. The drum 21 is further provided with a depression 21<sup>a</sup>, the bottom of which is struck up to form ratchet teeth 25 which engage the pawl 26. This pawl is provided with a stem 27 and encircling the latter is a spiral spring 28 for which a housing 29 is provided upon the casing 5. The screw 12 is connected with the outer or free end of the line, the inner end of the latter being secured to the drum 21 and the bulk of the line being wound upon the drum as shown at 20<sup>a</sup>. The line 20 is threaded between the roller 17 and the pad 16 and extends out through the hole 13.

The operation of my device is as follows: Suppose the parts are in their normal positions as indicated in Fig. 2, and that the operator wishes to use the striking line. He grasps the thumb piece 12<sup>a</sup> and by its aid turns the screw 12 which thus becomes disengaged from the door 7 and casing 5. The operator next pulls the screw away from the casing in a direction toward the left according to Figs. 1 and 2, thus drawing out a portion of the line 20. The line in traveling outward is pressed against the pad 16 by the roller 17 and is thus charged with ink. The screw 12 is next pressed into the surface to be marked and the portion of the line outside of the casing is rendered taut by the operator pulling the casing backward for this purpose.

The operator next grasps the center of the



exposed portion of the line, and drawing it away from the surface to be marked he releases it. The line strikes the surface, leaving an ink mark. The operator now presses  
 5 upon the stem 27 and by causing the disengagement of the pawl 26 from the ratchet teeth 25 allows the drum 21 to turn back into its normal position. This it does under control of the spring 22, thereby drawing the  
 10 slack line back into the casing. The screw is next inserted in the hole 11 so as to hold the door 7 rigid relatively to the casing. The screw thus serves the double purpose of  
 15 anchoring one end of the striking line when the line is to be used.

I do not limit myself to any particular shape for any part shown. Neither do I limit myself to any particular purpose for  
 20 which the striking line is used.

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

1. The combination of a casing provided  
 25 with an opening, a door connected with said casing and adapted to open and close said opening, a pad connected with said door and adapted to hold ink, a drum revolubly mounted within said casing, and a line partially wound upon said drum and engaging  
 30 said pad, said line extending outward from said door, and a member connected with said line for the double purpose of normally holding said door closed and of temporarily  
 35 anchoring the outer or free end of said line.

2. A casing provided with an opening, a door mounted upon said casing and adapted to swing so as to close said opening, said door being hollow, an ink pad carried within  
 40 said door, a drum revolubly mounted within said casing, a line partially wound upon said drum and extending through said door, said line engaging said pad within said casing, and a fastening member connected with said

line and provided with means for normally  
 holding said door closed. 45

3. The combination of a casing provided with an opening, a hollow door mounted upon said casing and adapted to close said  
 opening, an ink pad mounted within said  
 50 door, a roller mounted within said door and adapted to press upon said ink pad, a drum mounted within said casing, a line partially wound upon said drum and extending  
 55 through said hollow door, said line engaging said ink pad and also engaging said roller, and a fastening member connected with the end of said line.

4. The combination of a casing having generally a disk-like form and provided  
 60 with a slot, a door connected with said casing and having generally the same conformity as said slot so as to fill the latter, said door being hollow and provided with holes, an ink pad disposed within said door, a  
 65 drum revolubly mounted within said casing, a line carried by said drum and extending through said holes in said door, and means for forcing said line against said pad while  
 said door is closed. 70

5. A casing provided with an opening, a door mounted upon said casing and adapted to swing so as to close said opening, said door being hollow and provided with holes  
 extending through it, an ink pad carried  
 75 within said door, a drum revolubly mounted within said casing and accessible to the operator when said door is open, and a line partially wound upon said drum and extending  
 80 through said holes in said door, said line engaging said pad within said door.

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

HENRY K. KISO.

Witnesses:

WALTON HARRISON,  
 PHILIP D. ROLLHAUS.