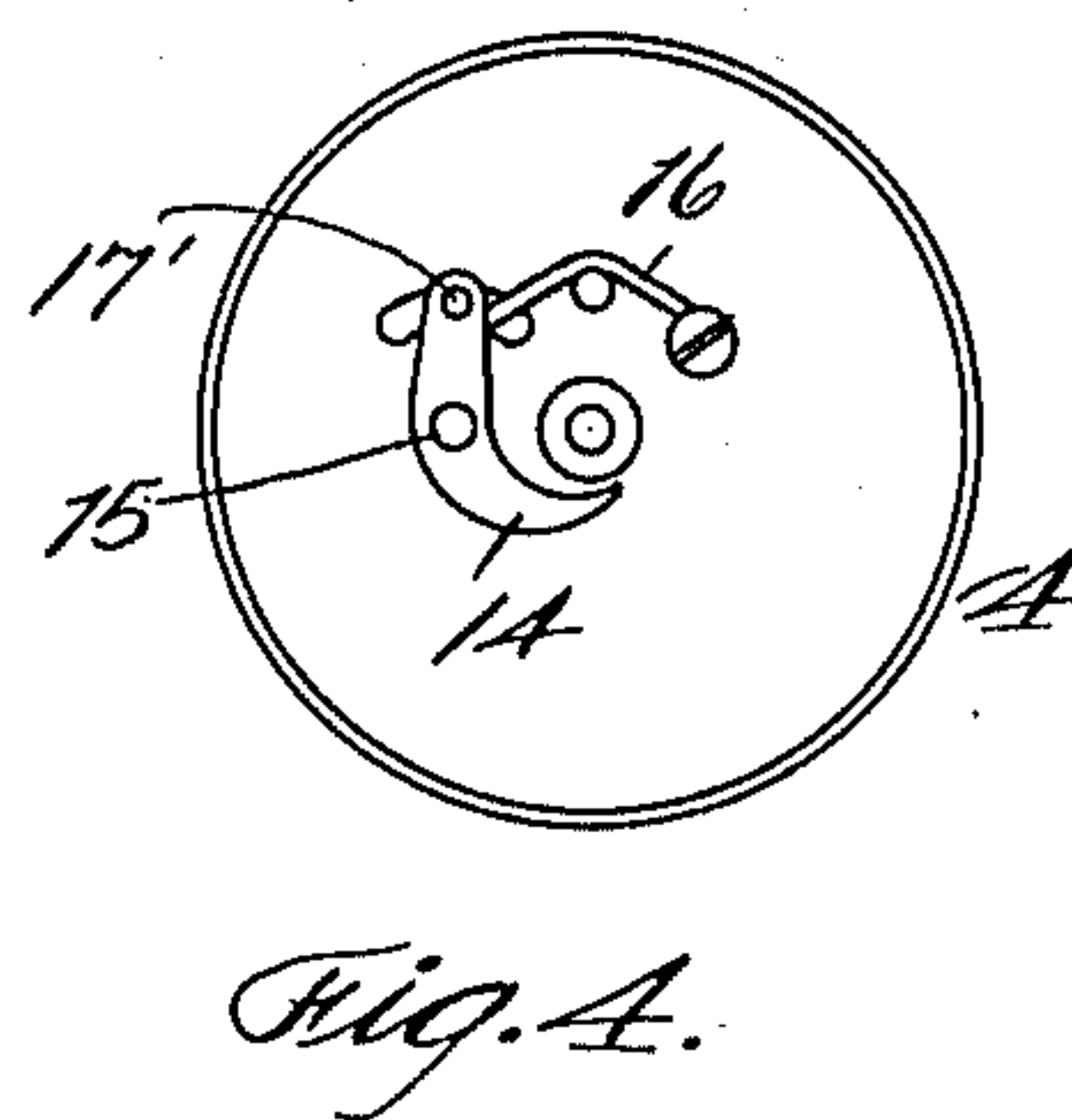
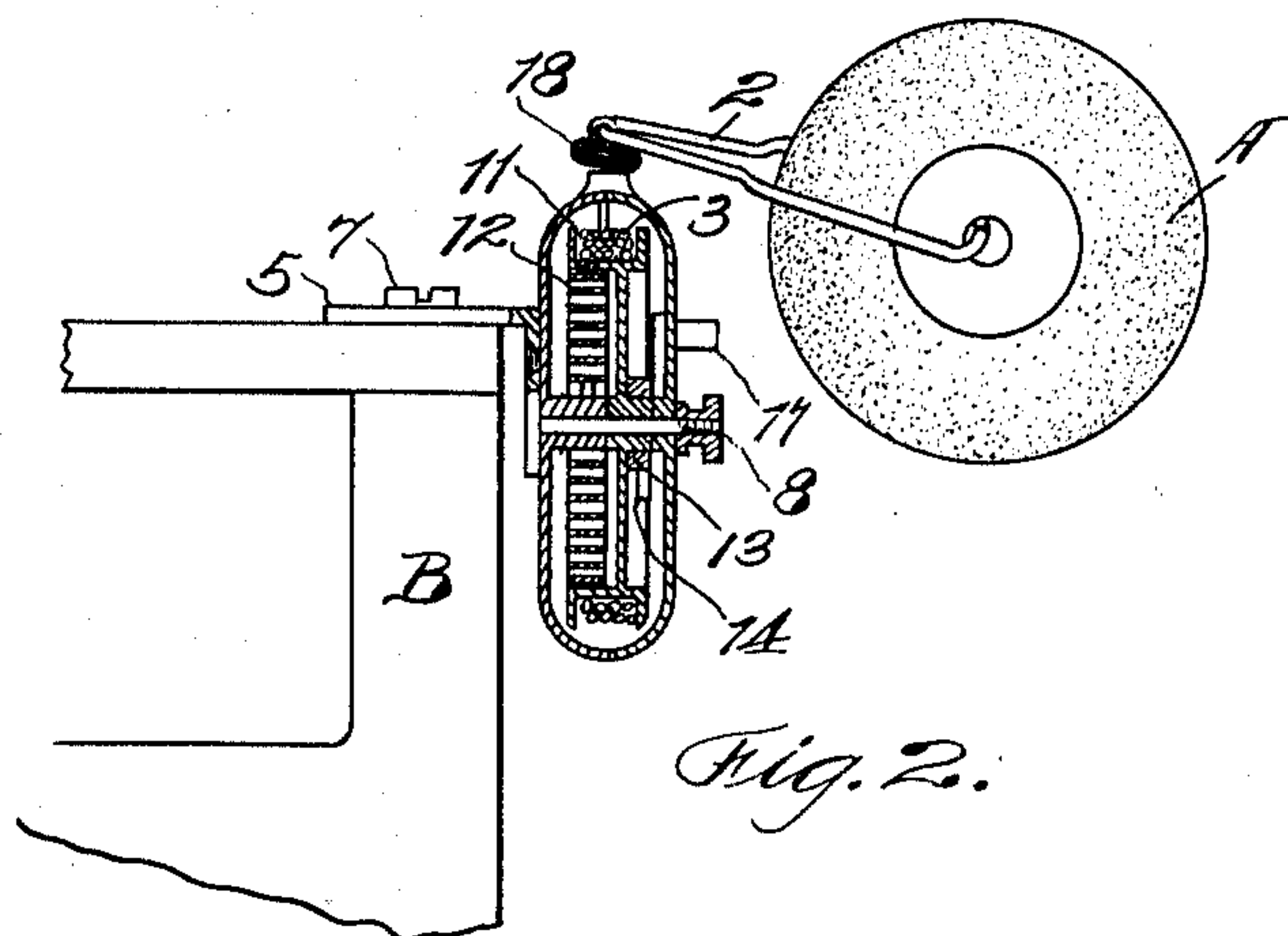
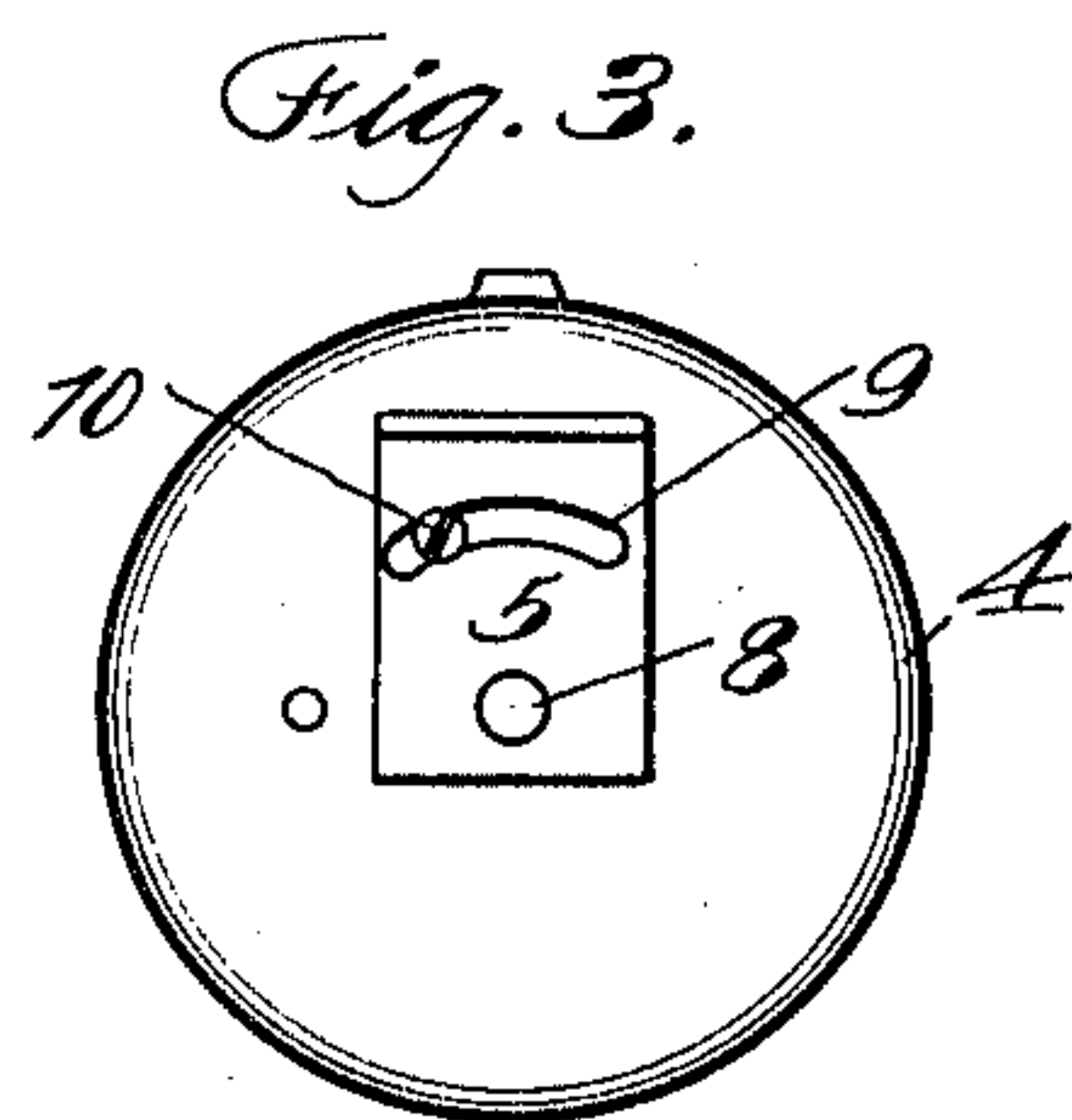
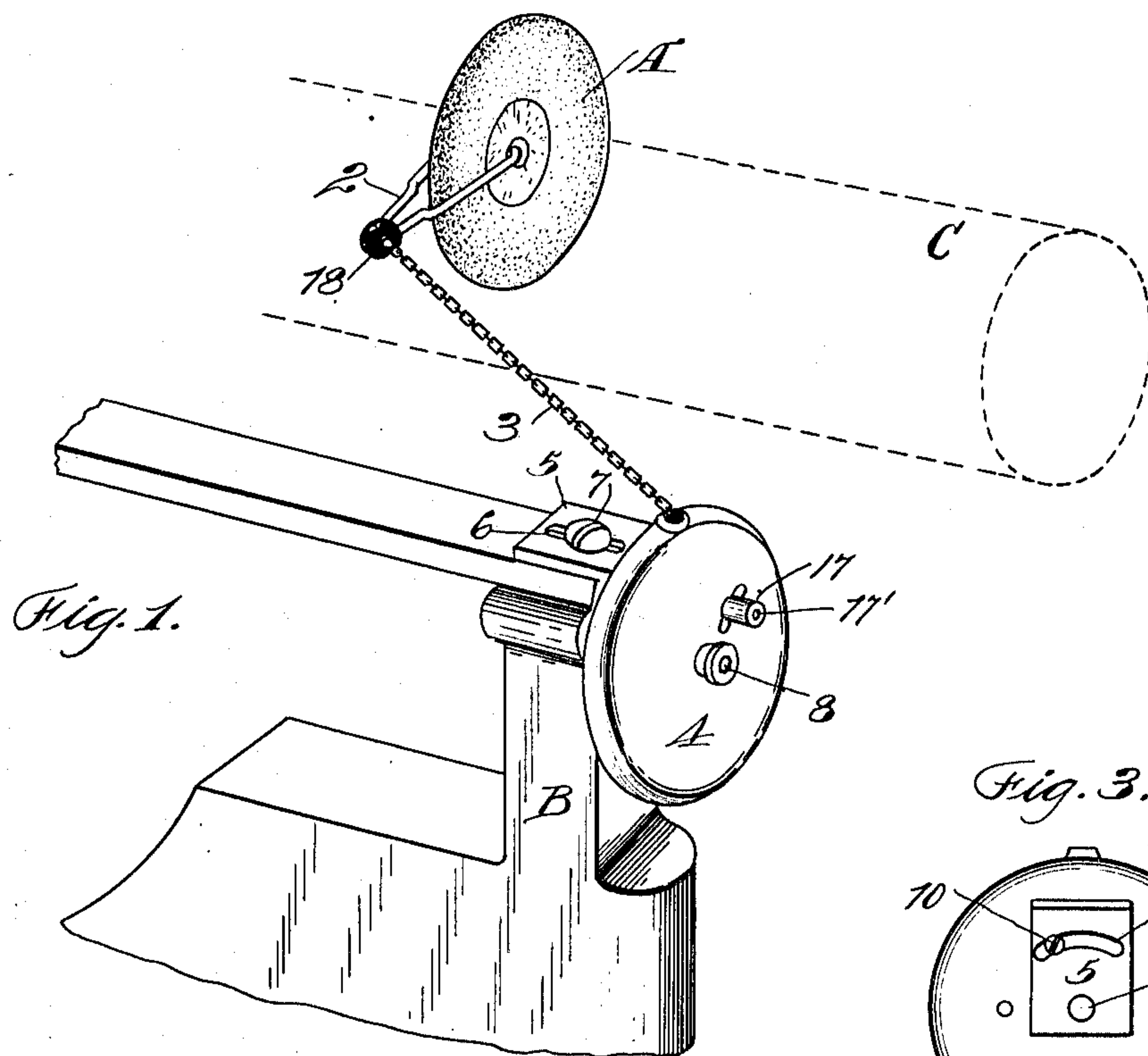


L. A. CARTER & W. J. HALDAN.  
 ERASER ATTACHMENT FOR TYPE WRITING MACHINES.  
 APPLICATION FILED MAY 31, 1910.

989,230.

Patented Apr. 11, 1911.



Witnesses;

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Inventors;  
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# UNITED STATES PATENT OFFICE.

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CALIFORNIA, ASSIGNORS OF ONE-THIRD TO GEORGE E. ALLEN, OF MILL  
VALLEY, CALIFORNIA.

## ERASER ATTACHMENT FOR TYPE-WRITING MACHINES.

989,230.

Specification of Letters Patent.

Patented Apr. 11, 1911.

Application filed May 31, 1910. Serial No. 564,055.

*To all whom it may concern:*

Be it known that we, LOUIS A. CARTER, of Oakland, Alameda county, California, and WILLIAM J. HALDAN, of Berkeley, Alameda county, California, both citizens of the United States, have invented new and useful Improvements in Eraser Attachments for Type-Writing Machines, of which the following is a specification.

10 This invention relates to attachments for typewriters and more particularly to means connected thereto for making erasures.

An object of our invention is to devise and provide a simple, inexpensive, convenient and efficient attachment to typewriters whereby the operator is permitted to make erasures without loss of time by so disposing the eraser that it is at all times within easy and quick access, and to provide a means whereby any portion of the platen desired may be operated upon; and means are combined to automatically retract the eraser to its position of rest.

25 The invention consists of the parts and the construction and combination of parts, as hereinafter more fully described and claimed, having reference to the accompanying drawings, in which—

30 Figure 1 is a perspective view illustrating the device. Fig. 2 is a detail section. Fig. 3 is a rear view of the reel casing. Fig. 4 is a view showing the pawl and its spring.

It is commonly the practice of stenographers and typewriter operators to have on a desk a loose eraser, and occasionally it is tied by a string to the machine. In either event, it is necessary to reach for and locate the eraser, and it is sometimes not to be found. It is desirable to at all times have the eraser in a given place, and also that it should be so mounted that it will automatically return to its normal, idle position. To accomplish this, we have shown the eraser A as connected by a resilient hook 2 to a cord, chain, or equivalent flexible member 3. The cord 3 passes into a casing 4 which is substantially watch-shaped, and is secured by means of an adjustable bracket 5 to the frame B of the typewriter. The bracket 5 is slotted at 6 in one arm, and is adjustably held by a screw 7 preferably adjacent to the front of the machine, so that

the eraser may easily be carried to the platen C.

To permit angular adjustment of the casing 4, it is mounted on bracket 5 by a pivot 8, and the bracket has a curved slot 9 in which is movable a clamp screw 10 in casing 4, which thus may be rocked angularly on its spindle 8 and locked by screw 10, to assume a position convenient to the operator.

For the purpose of maintaining the eraser A in its normal, idle position adjacent to the front of the machine and at the same time cause it to automatically return there after use, the cord or chain 3 is secured to a reel 11 turnable on spindle 8 in the casing 4, and which is normally under a winding tension of a suitable spring 12 connected at one end to the reel and at the other to the casing 4. When the eraser is pulled from its seat on the casing 4 and the cord unwound from the reel 11, the tension of spring 12 is proportionately increased and tends to pull back the eraser as soon as it is released. It is desirable that at the time the operator is using the eraser the tension will be removed from chain 3 so that the eraser may be used without restraint, and, therefore, we provide on one side of the reel 11 a ratchet wheel 13 engageable by a suitable pawl 14 pivoted at 15 on the casing 4. The pawl 14 is pressed against the ratchet 13 by a small spring 16, thus holding the reel against return by main spring 12, until the pawl is lifted by a little knob 17 projecting without the front of case 4. By this structure the operator at all times may be sure of locating the eraser in one place, may carry it to the desired character to be erased from the paper on the platen and when through may press the knob 17 and the eraser will be retracted to its seat on the casing. In some instances it is desirable to permit the eraser to return automatically without resorting to the release knob 17, in which case the knob is moved so that the pawl 14 is free of the ratchet 13 and is then screwed up its stem 17' against the wall of the casing 4, so that the pawl is inoperative. This permits the main spring 12 to constantly pull on the eraser when in use and instantly retract it when the operator is through erasing. A small, soft collar or ring 18 is interposed on



chain 3 between hook 2 and the casing 4, whereby the parts are protected from injury by violent impact as the spring returns the eraser, and it also deadens the noise. The 5 hook 2 is formed of resilient wire and has two separate arms which may be spread apart at their ends, so that the erasers may be easily and quickly renewed as they wear.

Having thus described our invention, what 10 we claim and desire to secure by Letters Patent is—

1. The combination with a typewriter and one of its screws, of a casing, a slotted bracket thereon adapted to be clamped by 15 the screw, means whereby the casing is angularly adjustable on the bracket, and an eraser flexibly connected to the casing.

2. The combination with a typewriter, of a winding drum, an eraser flexibly connected 20 thereto, a slotted bracket upon which the drum is adjustable, and means whereby the bracket is detachably secured to the frame of the typewriter.

3. An erasing attachment for typewriters 25 comprising an eraser, a casing adapted to be secured to the machine, an automatic reel in said casing, flexible connections between said reel and said eraser, and means for auto-

matically relieving the tension of the connections when the eraser is in operative position. 30

4. An erasing attachment for typewriters comprising an adjustable bracket secured to the machine, a casing on said bracket, a winding reel in the casing, an eraser, means 35 whereby said eraser is flexibly and detachably secured to said reel, and means for automatically relieving the tension of the connections when the eraser is in operative position. 40

5. An erasing attachment for typewriting machines comprising a casing; a bracket adapted to be secured to the machine and upon which the casing is angularly adjustable, an eraser, means within the casing for 45 automatically maintaining the eraser in juxtaposition to the casing, and connections between the eraser and said means.

In testimony whereof we have hereunto set our hands in the presence of two sub- 50 scribing witnesses.

LOUIS A. CARTER.  
WILLIAM J. HALDAN.

Witnesses:

L. A. ALLYN,  
B. F. MILLER.