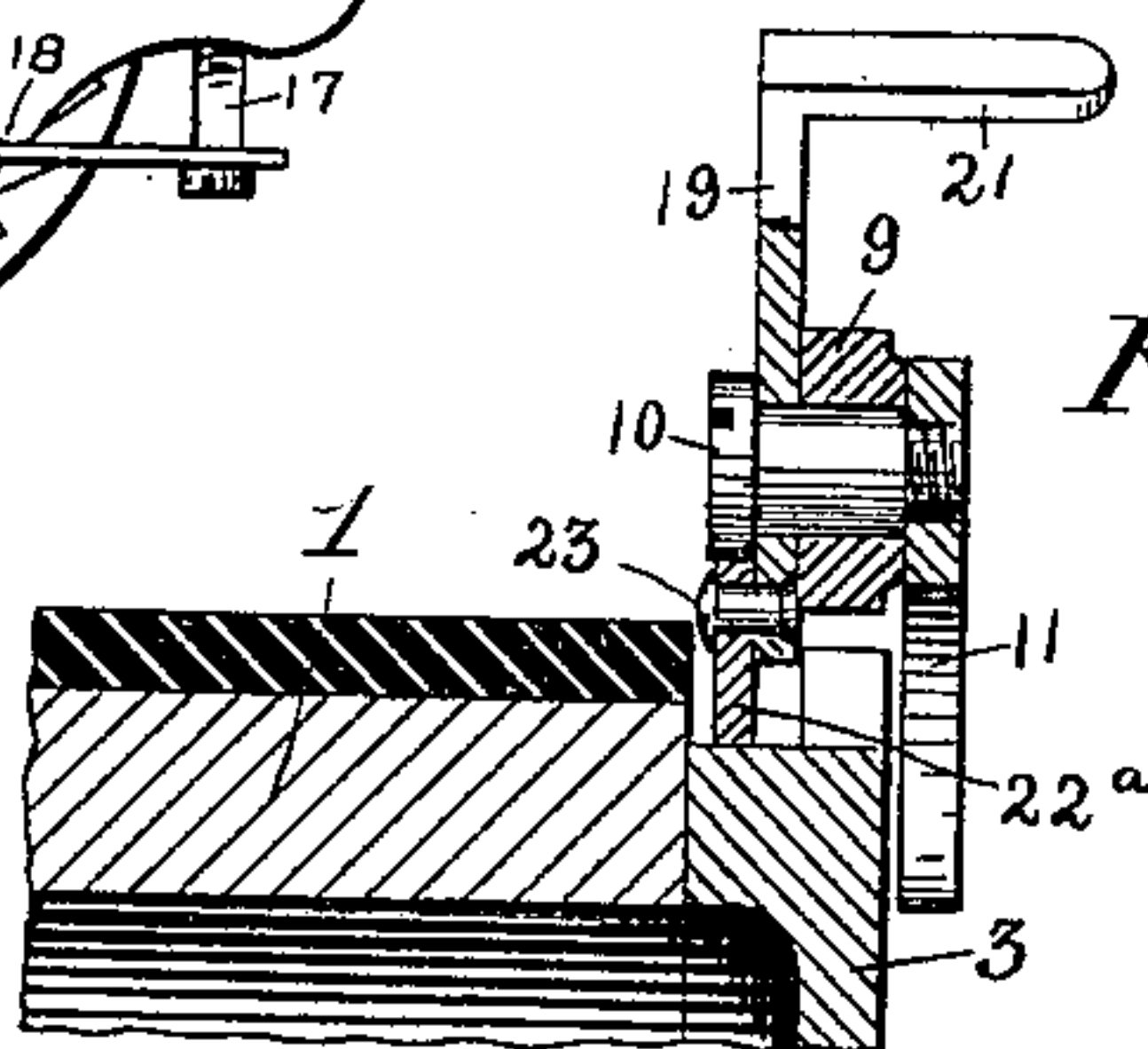
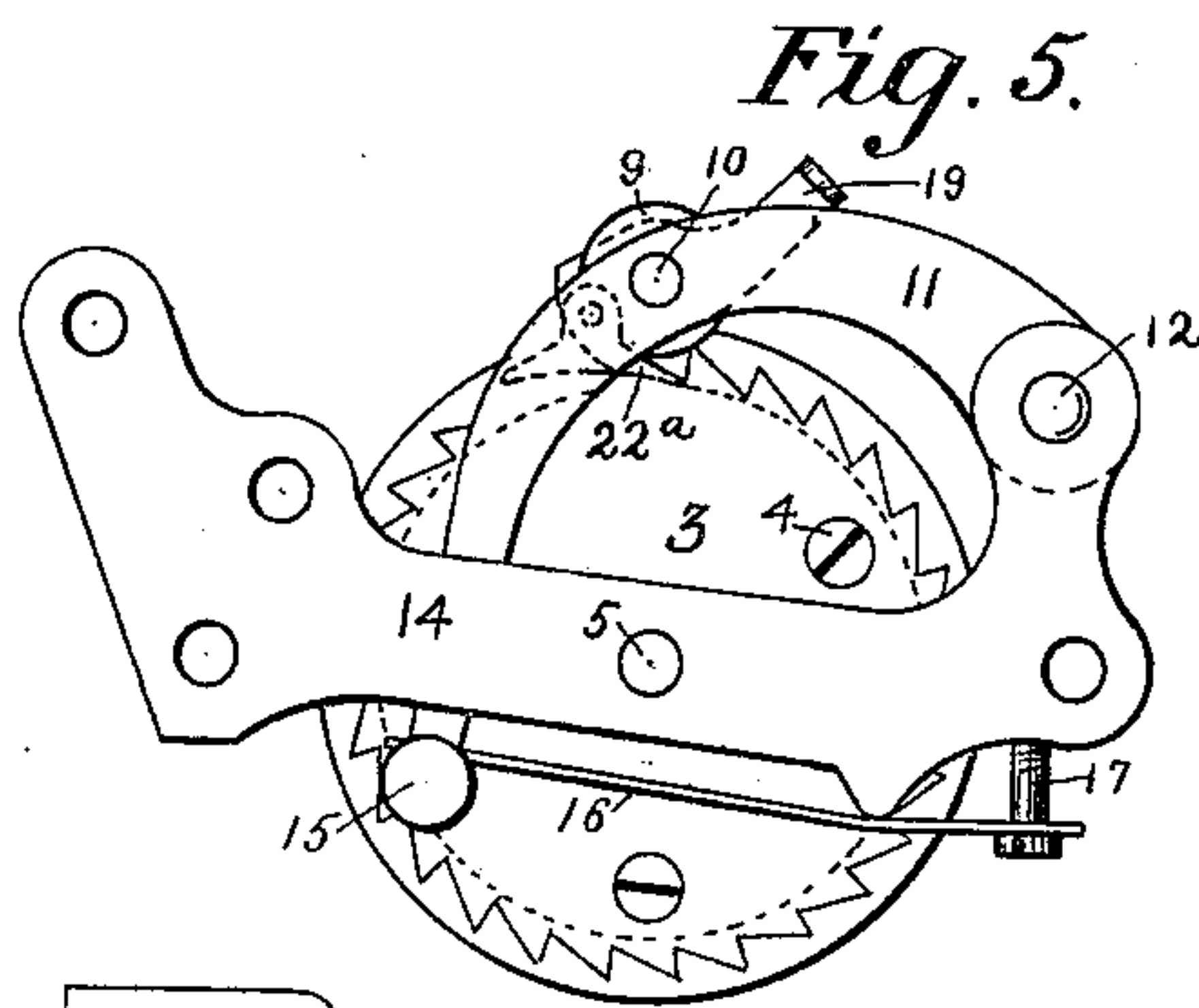
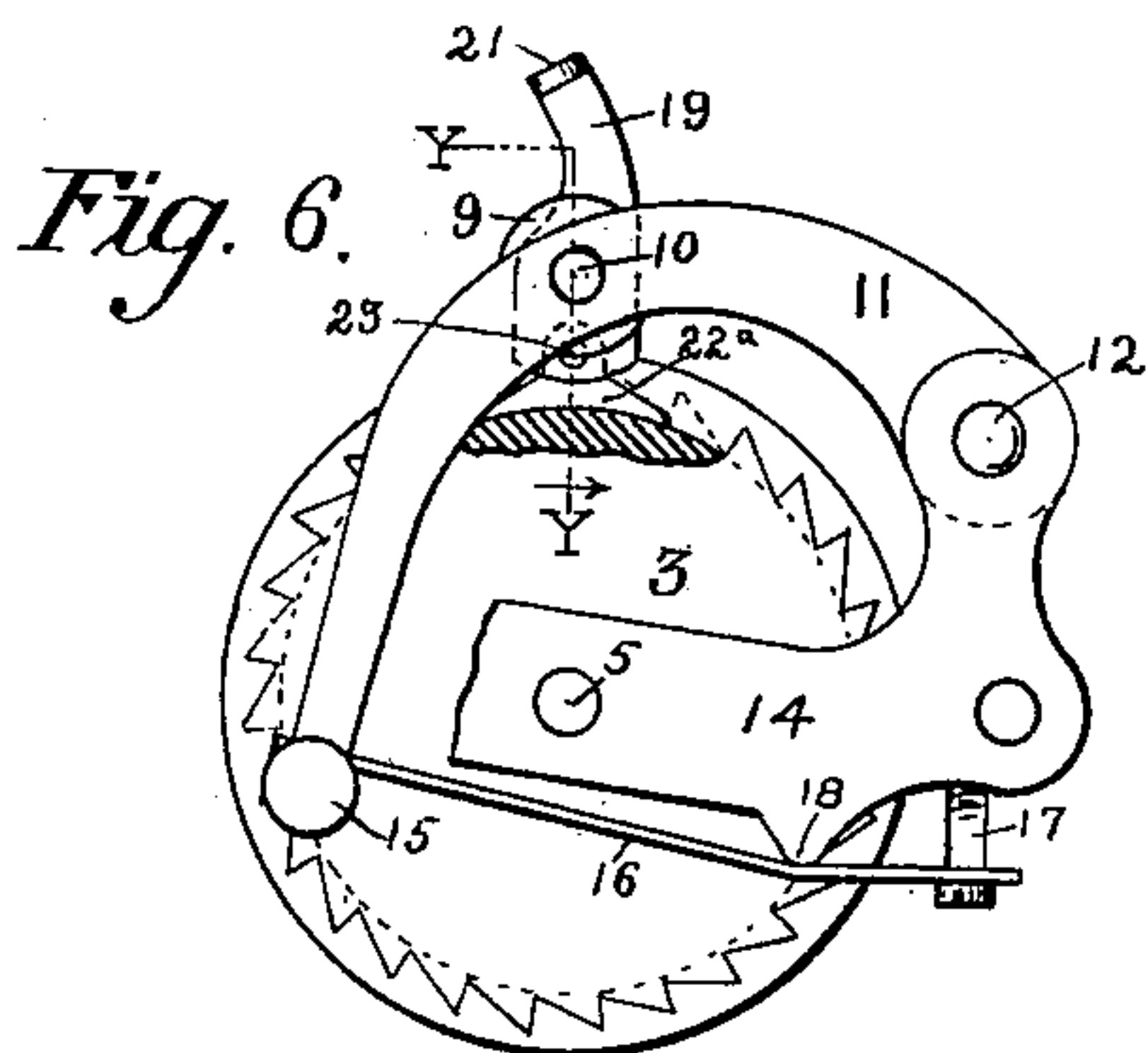
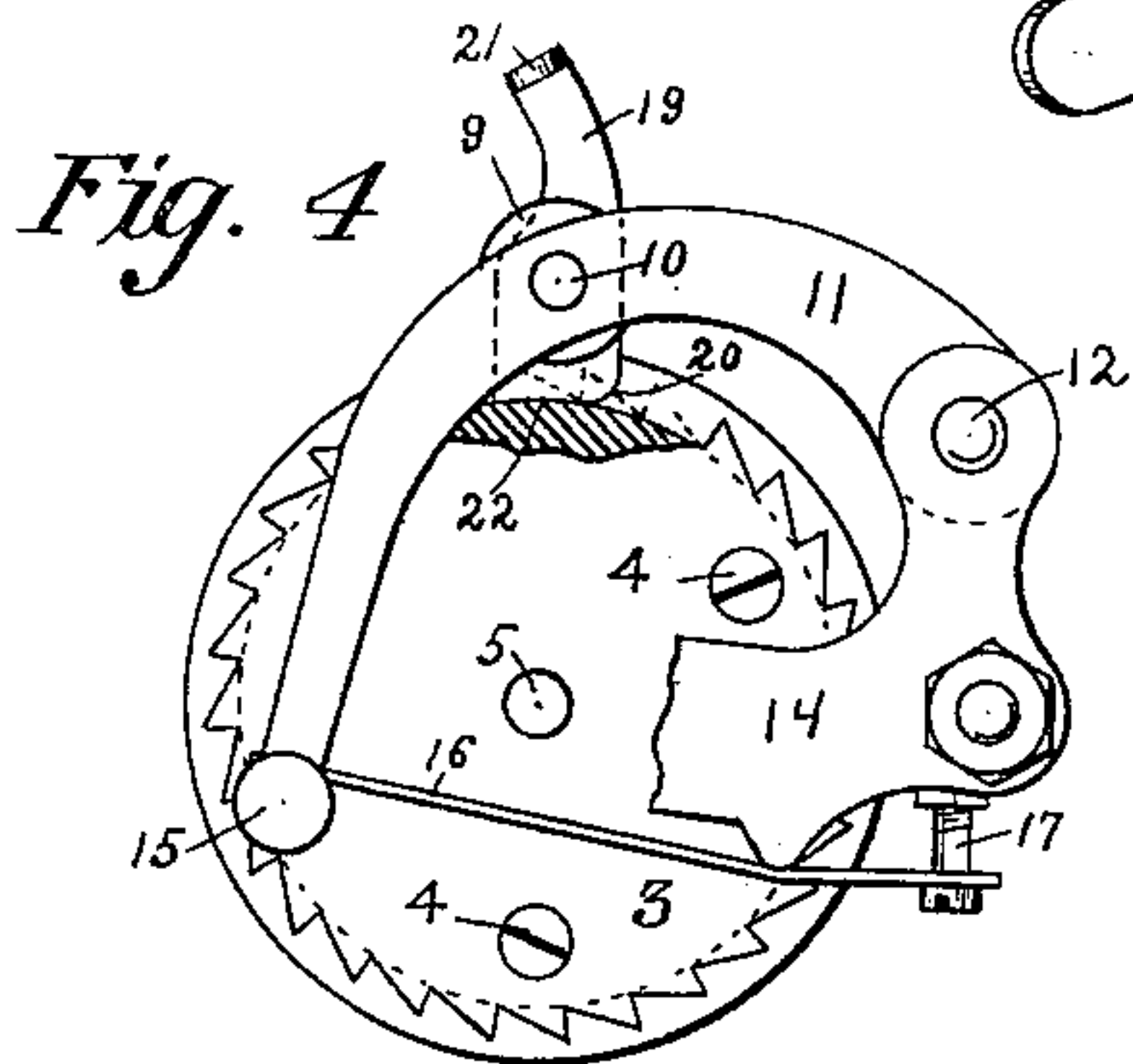
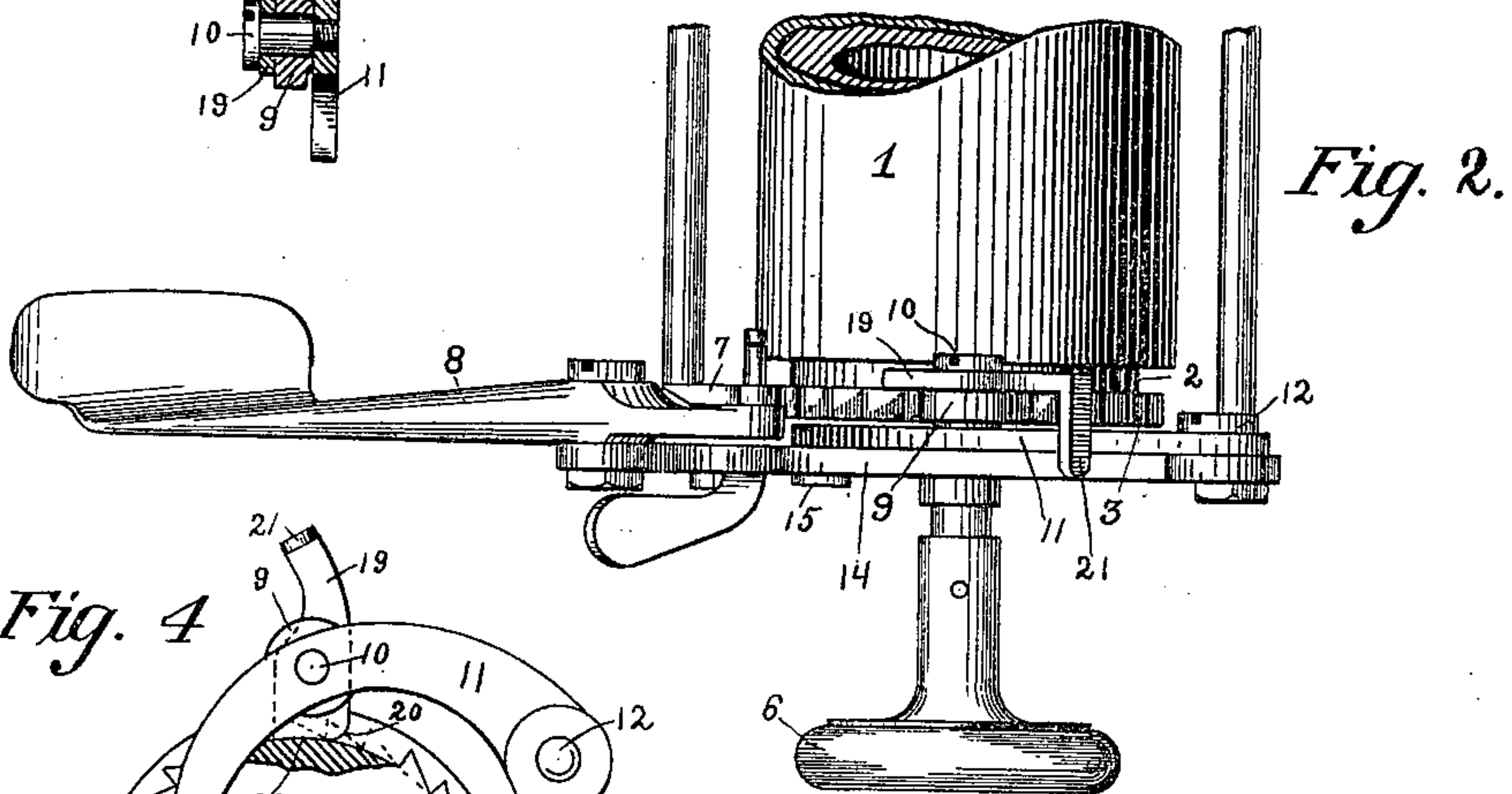
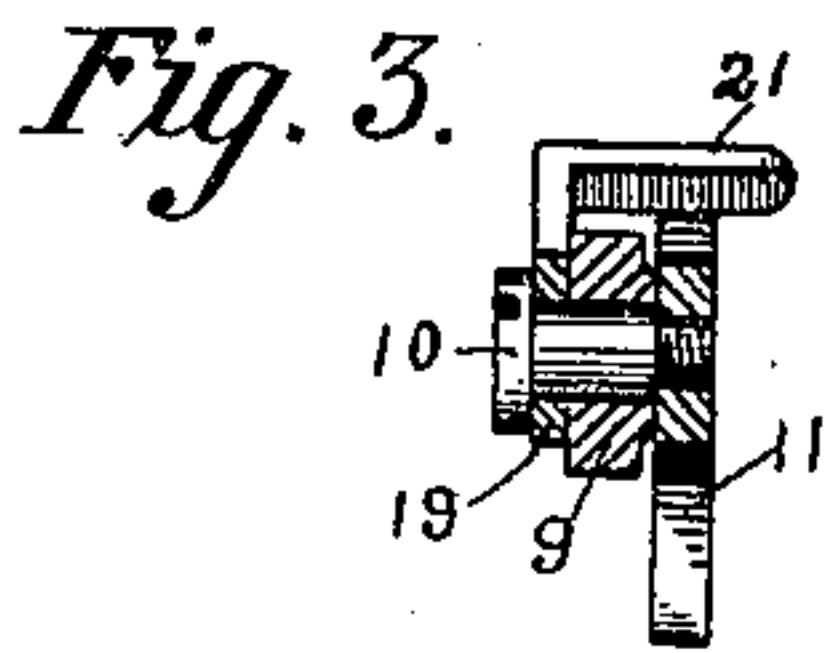
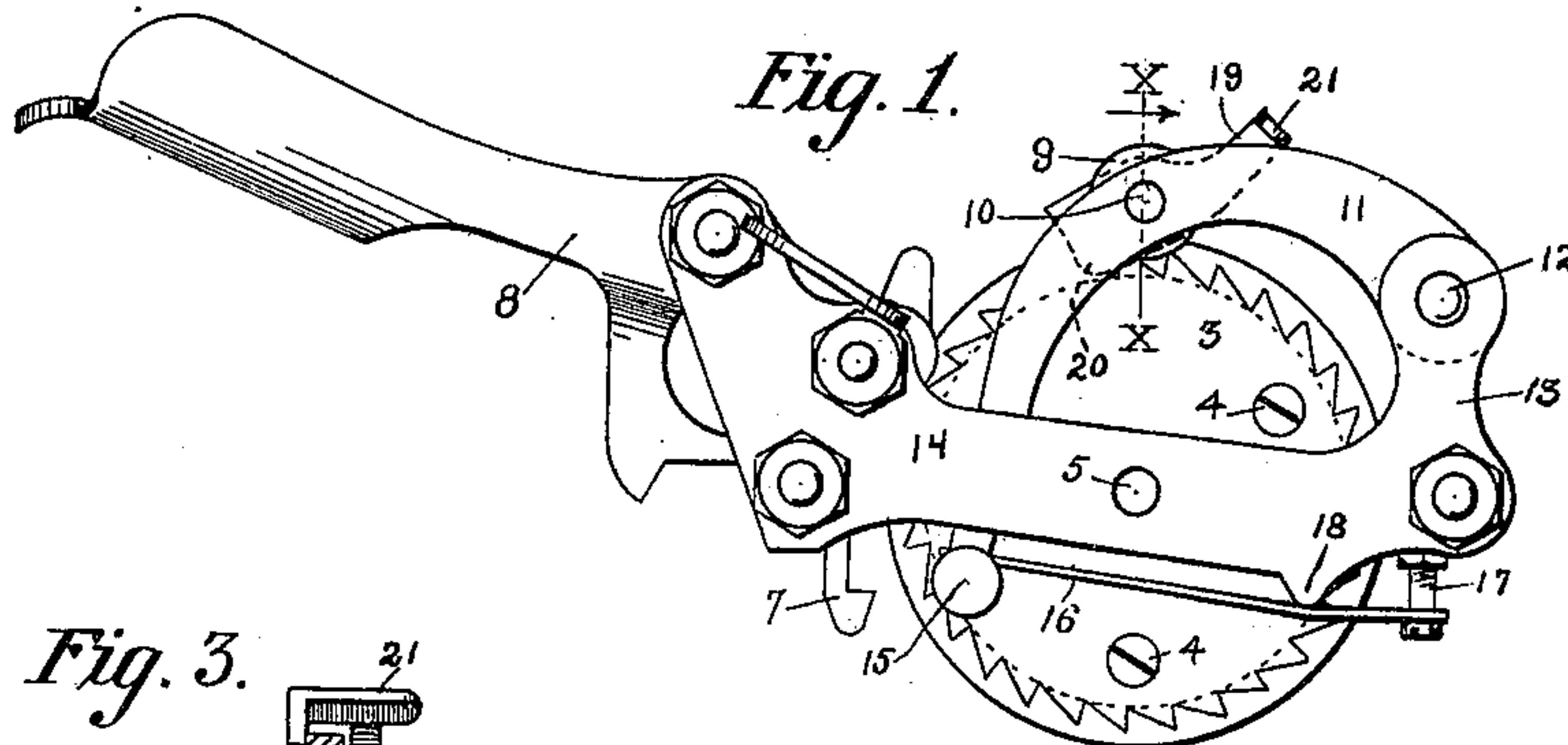


No. 627,678.

Patented June 27, 1899.

W. J. BARRON.
TYPE WRITING MACHINE.
(Application filed May 11, 1898.)

(No Model.)



WITNESSES:

K. V. Donovan,
Ethel Wells.

INVENTOR,

Walter J. Barron
by
Jacob Felbel
HIS ATTORNEY

UNITED STATES PATENT OFFICE.

WALTER J. BARRON, OF NEW YORK, N. Y., ASSIGNOR TO THE DENSMORE TYPEWRITER COMPANY, OF SYRACUSE, NEW YORK.

TYPE-WRITING MACHINE.

SPECIFICATION forming part of Letters Patent No. 627,678, dated June 27, 1899.

Application filed May 11, 1898. Serial No. 680,327. (No model.)

To all whom it may concern:

Be it known that I, WALTER J. BARRON, a citizen of the United States, and a resident of the borough of Brooklyn, county of Kings, and city and State of New York, have invented certain new and useful Improvements in Type-Writing Machines, of which the following is a specification.

My invention has for its main object to provide means whereby the cylindrical platen of a type-writing machine may be turned independently of its line-spacing mechanism in either direction through any desired distance or any length of arc for the purpose of facilitating the writing on ruled paper and printed sheets having blank spaces to be filled in with the type-writer; and it is a further object of my invention to provide simple and effective means for disengaging the platen ratchet-wheel detent and simultaneously applying a friction or pressure upon the platen to prevent the same from rotating too freely and to hold it firmly at any position to which it may be adjusted or turned, so that the writing may be done with the detent out of engagement without liability of the platen turning accidentally.

To these main ends my invention consists primarily in combining with the detent which normally engages the platen ratchet-wheel a means for disengaging the said detent from the said wheel and for applying a friction or pressure upon the platen; and my invention consists, further, in certain other features of construction and combinations of devices, all of which will be hereinafter more fully described, and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a side elevation of the right-hand end of the platen-carriage of a "Densmore" type-writing machine. Fig. 2 is a partial plan view of the same. Fig. 3 is a vertical section taken at the line *xx* of Fig. 1. Fig. 4 is a side elevation, partly in section, showing the detent lifted from the ratchet-wheel and the friction brake or shoe applied to the platen. Fig. 5 is a view similar to Fig. 1, but showing my invention carried out in still another form.

Fig. 6 is a view similar to Fig. 4, but showing the device illustrated in Fig. 5; and Fig. 7 is a vertical section taken at the line *yy* of Fig. 6.

In the several views the same part will be found designated by the same numeral of reference.

Referring more particularly to Figs. 1, 2, 3, and 4, the numeral 1 designates the usual cylindrical platen, which is provided at its right-hand end with a metallic head or circular plate 2, having an integrally-formed ratchet-wheel 3, and secured to the platen by screws 4.

5 designates the platen shaft or axle, which is provided with a knob or hand-wheel 6. The platen is adapted to be rotated step by step distances equal to the tooth-spaces of the ratchet-wheel by means of a line-spacing pawl 7, pivoted as usual upon the line-spacing lever 8, and for the purpose of holding said platen from rotating too freely as well as for holding it firmly when the line-spacing pawl is out of action and the writing is being done a detent or holdfast 9 is employed. In the preferred form this detent consists of a small wheel or roller, as shown, although a beveled dog or tooth, such as commonly used heretofore, may be employed instead of this preferred form of detent. The detent-roll is pivotally mounted at 10 upon a curved arm 11, which is pivoted at 12 in an upward extension 13 on the right-hand side or end bar 14 of the platen frame or carriage, and the lower free end of the arm or lever 11 is formed or provided with a lateral pin 15, upon which rests the free end of a leaf or bar spring 16, whose opposite end is attached to a pin 17, projecting downwardly from the platen-carrier. The said spring 16 preferably bears between its ends upon a lug or projection 18, extending downwardly from the end bar 14. The downward tension or pressure of the free end of said spring upon the pin 15 of the arm 11 operates to hold the detent normally down upon the teeth of the ratchet-wheel and the pressure of said detent upon the wheel is such as to hold the platen with sufficient firmness to prevent its accidental rotation, particularly while the writing is being done. For the purpose of raising said detent from engagement

with said ratchet-wheel a lever 19 is mounted upon the pivot 10 of the detent-wheel and with its lower end over or in line with the smooth periphery of the head or plate 2, with
 5 which the lowermost curved or cam-like end or portion 20 of said lever coöperates. The upper handle portion of the lever is preferably provided with a laterally-extended finger-piece 21, which normally rests against the
 10 upper edge of the spring-pressed arm or lever 11.

When it may be desired to raise the detent or throw it out of operative engagement with the ratchet-wheel, the finger-piece 21 of the
 15 lever 19 is pulled forward, thereby causing the lower or cam-like end of the lever to move rearwardly and ride upon the surface of the head or plate 2. Owing to the inclined position of the lever and the fact that the distance from the end 20 to the pivot of the lever is greater than the distance from the surface of the head 2 to the said pivot measured on the vertical line *xx*, it follows that when
 20 the portion 20 of the lever is moved rearwardly it acts to cam, wedge, or force up the pivot 10, roll 9, and arm 11, carrying the same against the tension of the spring 16, which is flexed about the projection 18, and thereby has put into it a greater amount of tension. When
 25 the upper end of the lever has been pulled forward to the position shown at Fig. 4, the detent has been lifted clear of the teeth of the ratchet-wheel and the lower curved end 22 of the lever has come to a bearing upon
 30 the surface of the head 2, as shown in said figure, and the increased tension put into the spring 16 by the action of the said lever operates to hold the said lever down firmly on the platen, (of which the head 2 is a part,) so
 35 as to lock the lever in its new position and to put enough friction or pressure upon the platen to prevent it from rotating accidentally when the writing is done. With the parts in the position shown at Fig. 4 the platen
 40 may be rotated in either direction, either by direct application of the hand to the platen itself or by force applied to the hand-wheel 6, and thus any ruled line or blank space upon the sheet may be quickly brought to the printing-point and the writing be proceeded with.
 45 When the line has been finished or when the blank space has been filled in, the platen may be turned to the next ruled line or blank space and the writing again resumed. When it is no
 50 longer necessary to turn the platen irregular distances, as for ruled lines, which are at distances apart unequal to the distance of the teeth of the ratchet-wheel, the lever may be turned back to its first position, (shown at Fig. 1,) during which the detent is automatically restored to its normal position in engagement with the ratchet-wheel, and the friction shoe or brake 22, afforded by the lower end of the lever, is thrown out of operative relation to
 55 the platen. Thereafter when the platen is turned either by the line-spacing pawl or by

the hand-wheel 6 it will move through regular distances determined by the distances apart of the teeth or the notches or spaces between the teeth.

Referring now to Figs. 5, 6, and 7, the brake-shoe or friction-producing device 22^a, instead of being formed integral with the lower end of the lever, is made of a separate piece and pivoted thereto at 23. In other respects the construction is practically the same as that shown in the first four views and the parts operate in substantially the same manner. When the upper end of the lever is pulled forward, the shoe 22^a slides backwardly over the surface of the head 2, and owing to its shape and the position of its pivot 23 said shoe acts to force upwardly the detent and its spring-pressed carrying-arm 11 until the parts are brought to the position shown
 75 at Fig. 6, where the detent is shown as out of engagement with the ratchet-wheel and the shoe as bearing firmly down upon the platen under the increased tension of the spring 16.

It will thus be seen that by my invention
 80 I have provided a contrivance which when in operative position increases the friction on the platen by increasing the tension of the spring which holds the detent normally in engagement with the platen ratchet-wheel and
 85 also a device which by a simple rotative movement serves to effect a releasement of the platen from its detent and to simultaneously apply to the platen a friction or pressure device to properly hold the platen for all practical purposes while the detent is out of operative engagement therewith and in such manner that the platen may be turned irregular distances, either minute or large, according to the exigencies of the work in hand.

Various changes in detail construction and arrangement of parts may be made without departing from the spirit of my invention.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a type-writing machine, the combination with a platen and its ratchet-wheel, of a detent, and a friction or brake shoe operatively connected thereto and which when brought into use effects by its movement a
 110 disengagement of said detent.

2. In a type-writing machine, the combination with a platen and its ratchet-wheel, of a detent, and a lever attached to said detent and adapted when vibrated to remove said
 115 detent and having a friction or brake shoe to coact with the platen when the detent is removed.

3. In a type-writing machine, the combination with a platen, a platen-head having a plain
 120 circular portion and also a ratchet-wheel, of a detent, a spring for holding said detent normally in engagement with said ratchet-wheel, and a lever attached to said detent for removing said detent and increasing the tension of
 125 said spring and carrying a part which presses upon the plain circular portion of the platen—

head under the tension of said spring when the said detent has been removed from the ratchet-wheel.

4. In a type-writing machine, the combination with a platen and its ratchet-wheel, of a pivoted spring-pressed arm carrying a detent, and a lever pivoted to said arm, the lever being arranged to disengage the detent and to simultaneously apply increased friction to the platen.

5. In a type-writing machine, the combination with a platen and its ratchet-wheel, of a spring-pressed arm, a roller-detent, and a lever pivoted on said arm and operating in substantially the manner described.

6. In a type-writing machine, the combination of a platen, a ratchet-wheel, a platen-head, a spring-pressed arm, a detent mounted upon said arm to engage said ratchet-wheel, and a lever mounted on said arm and adapted

to disengage said detent and having a shoe or curved portion adapted to act on said head.

7. In a type-writing machine, the combination of a platen, a ratchet-wheel, a platen-head, a spring-pressed arm, a detent mounted on said arm, a lever also mounted on said arm, and a shoe pivoted to said lever.

8. In a type-writing machine, the combination of a platen, a ratchet-wheel, a platen-head, a spring-pressed arm, a roller-detent pivotally mounted on said arm, a lever mounted on the pivot of said roller-detent, and a shoe pivoted to said lever.

Signed at the borough of Manhattan, in the city, county, and State of New York, this 9th day of May, A. D. 1898.

WALTER J. BARRON.

Witnesses:

K. V. DONOVAN,
ETHEL WELLS.