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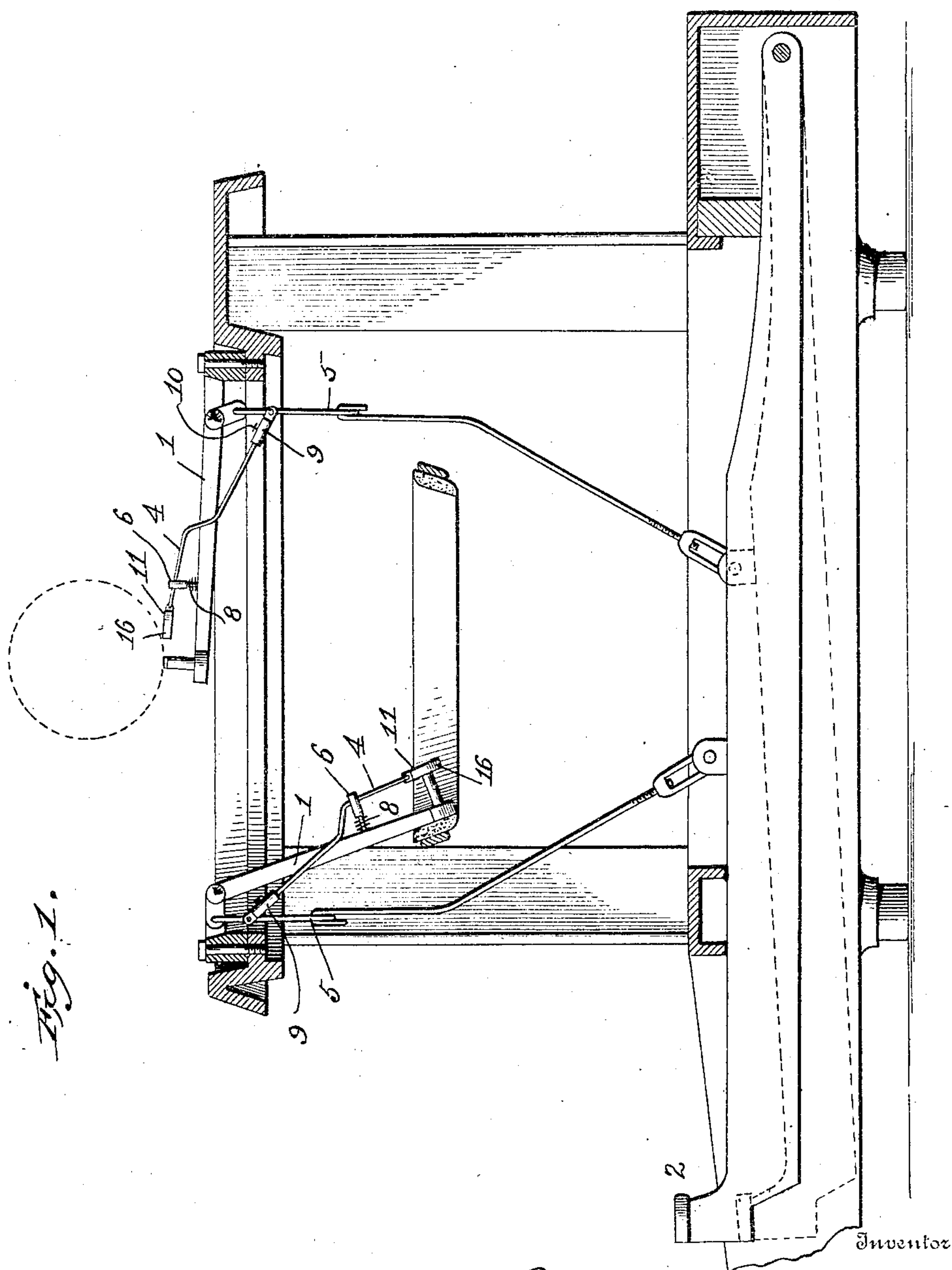
PATENTED AUG. 6, 1907.

R. W. WALKER.

TYPE WRITER.

APPLICATION FILED SEPT. 13, 1906.

4 SHEETS—SHEET 1



Witnesses

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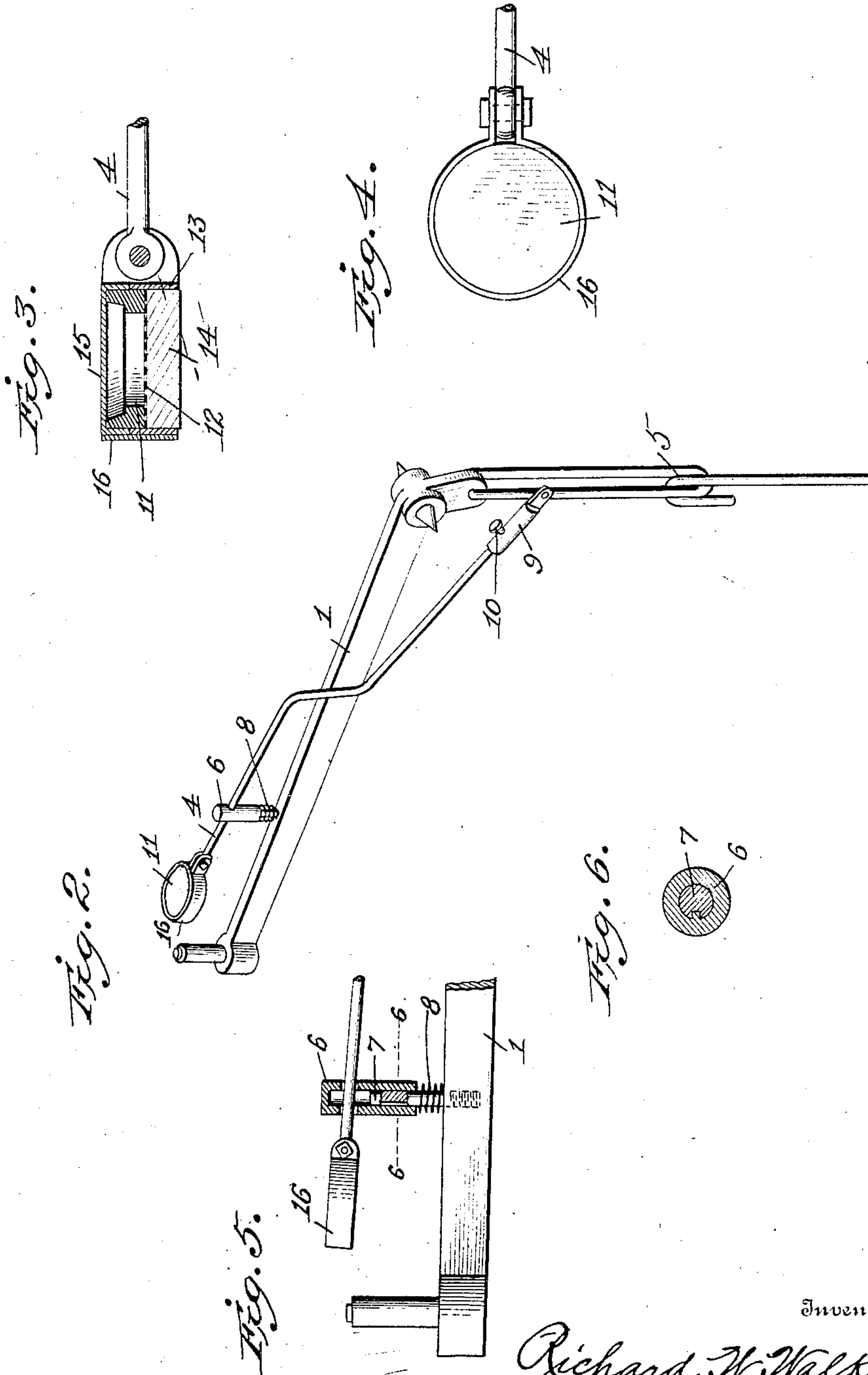
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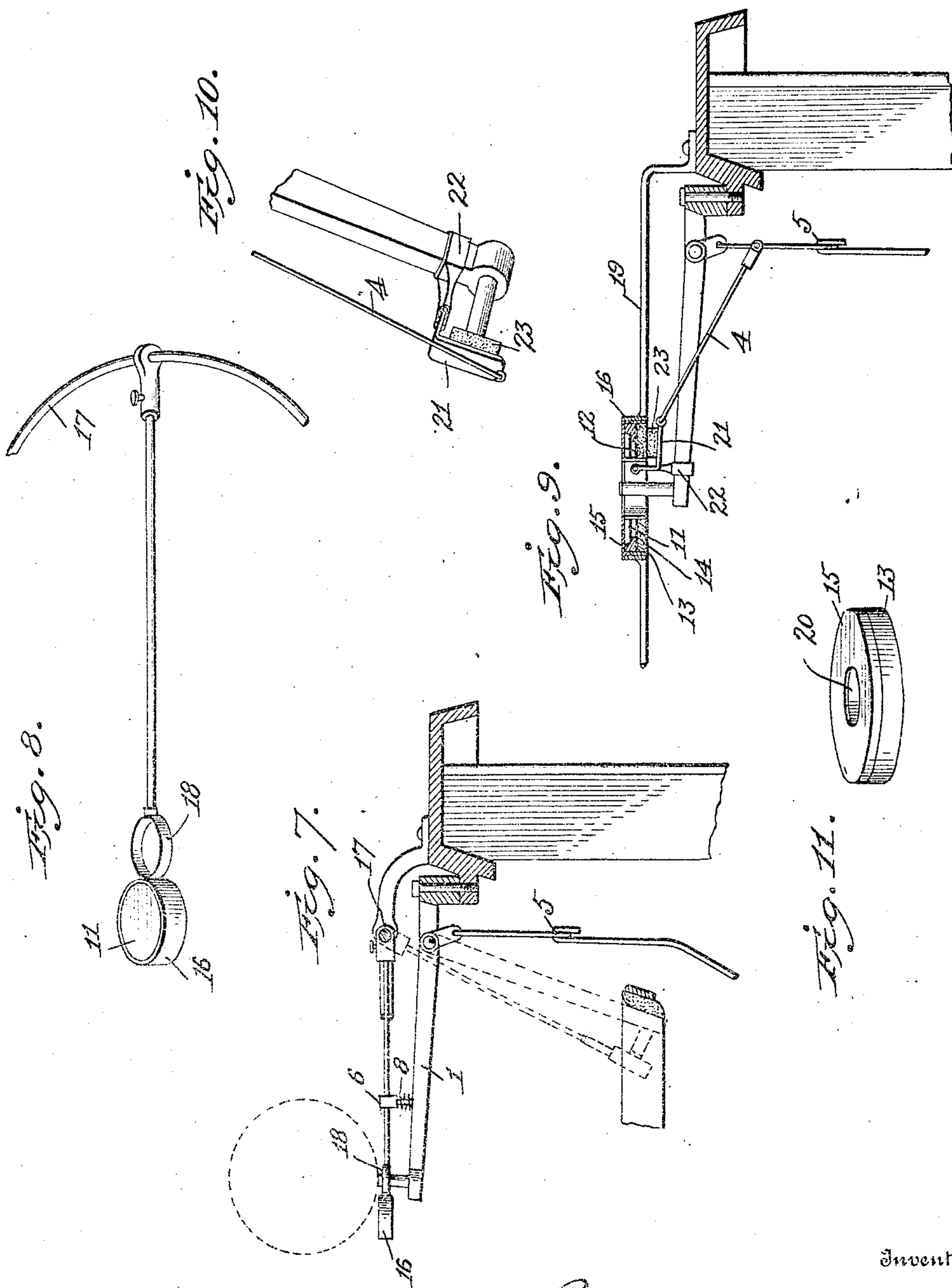
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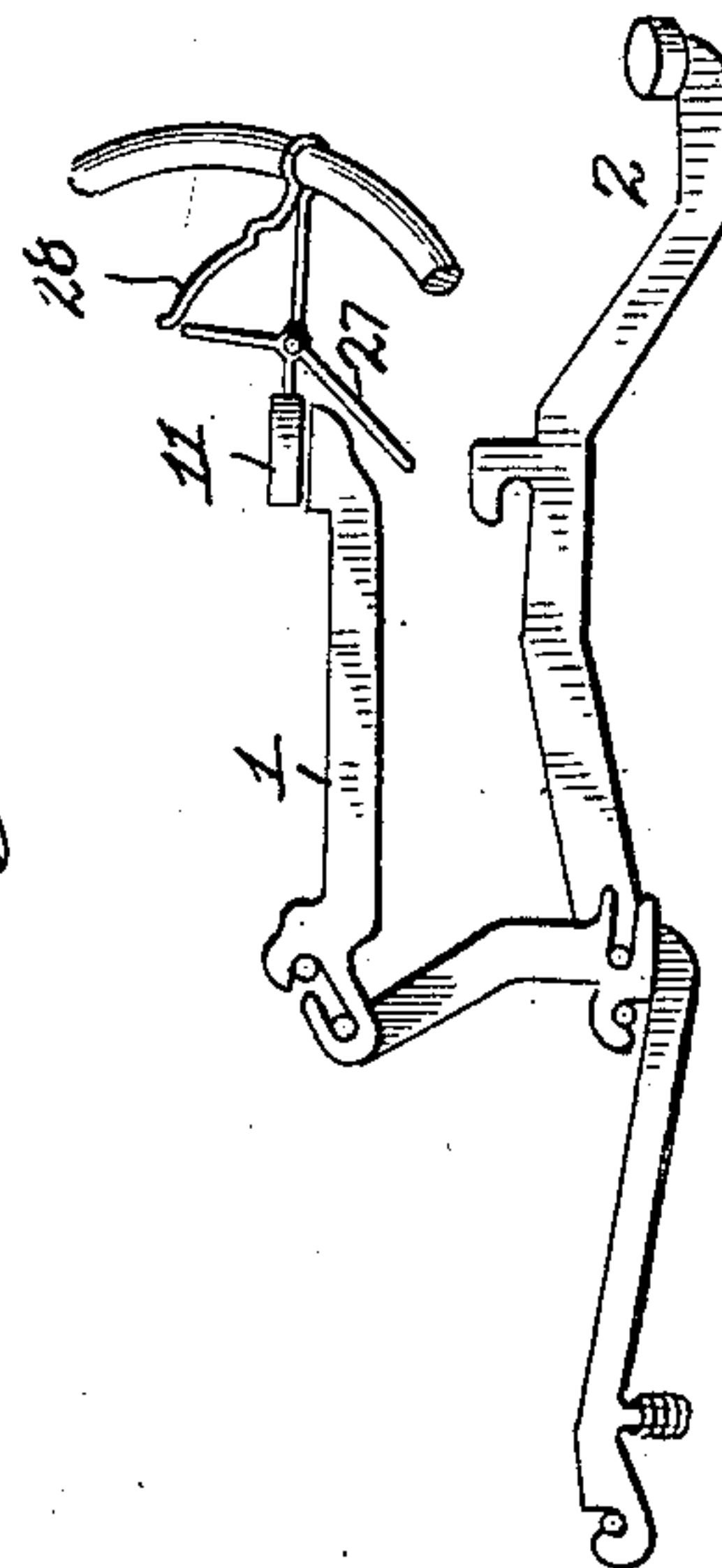
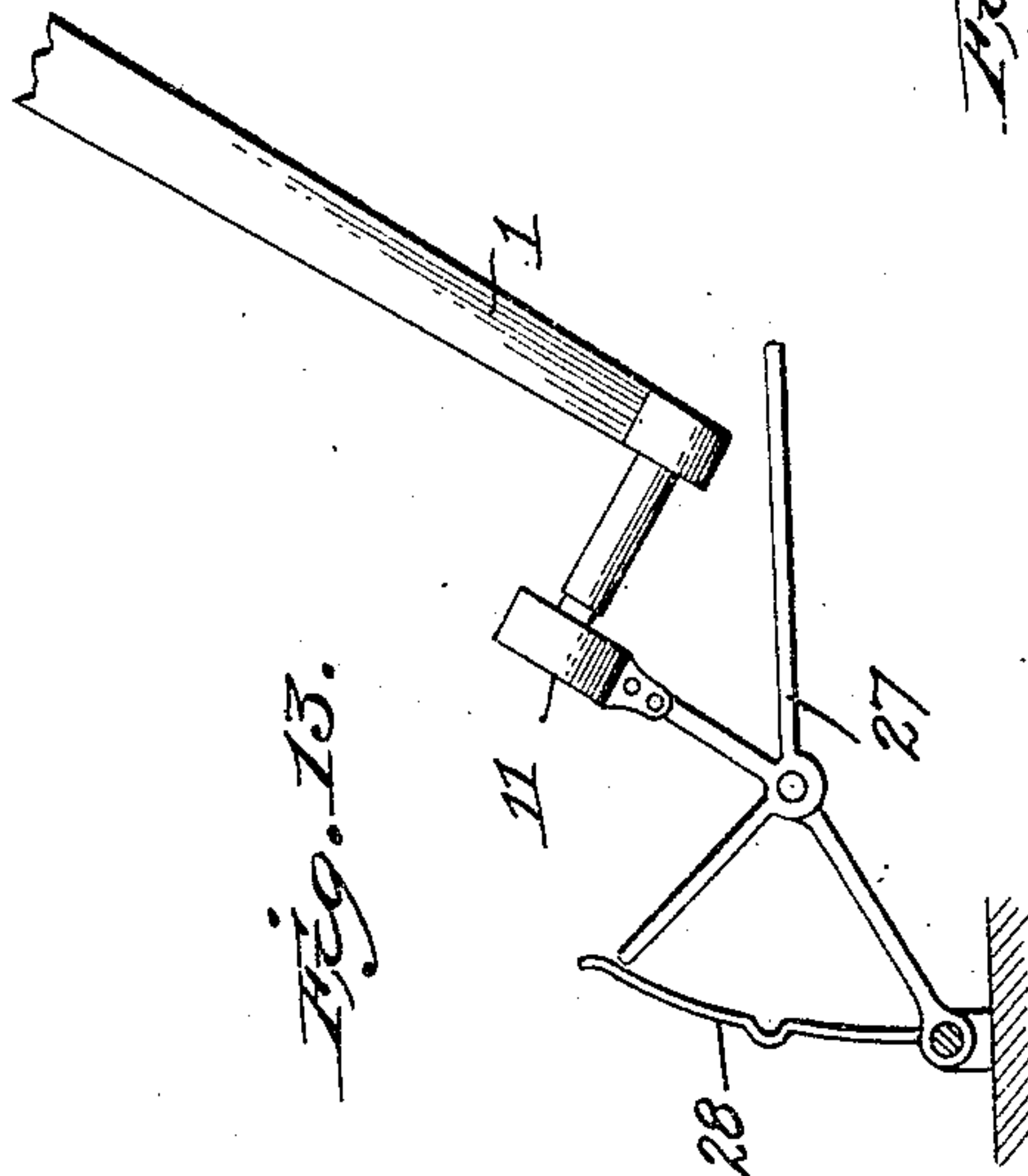
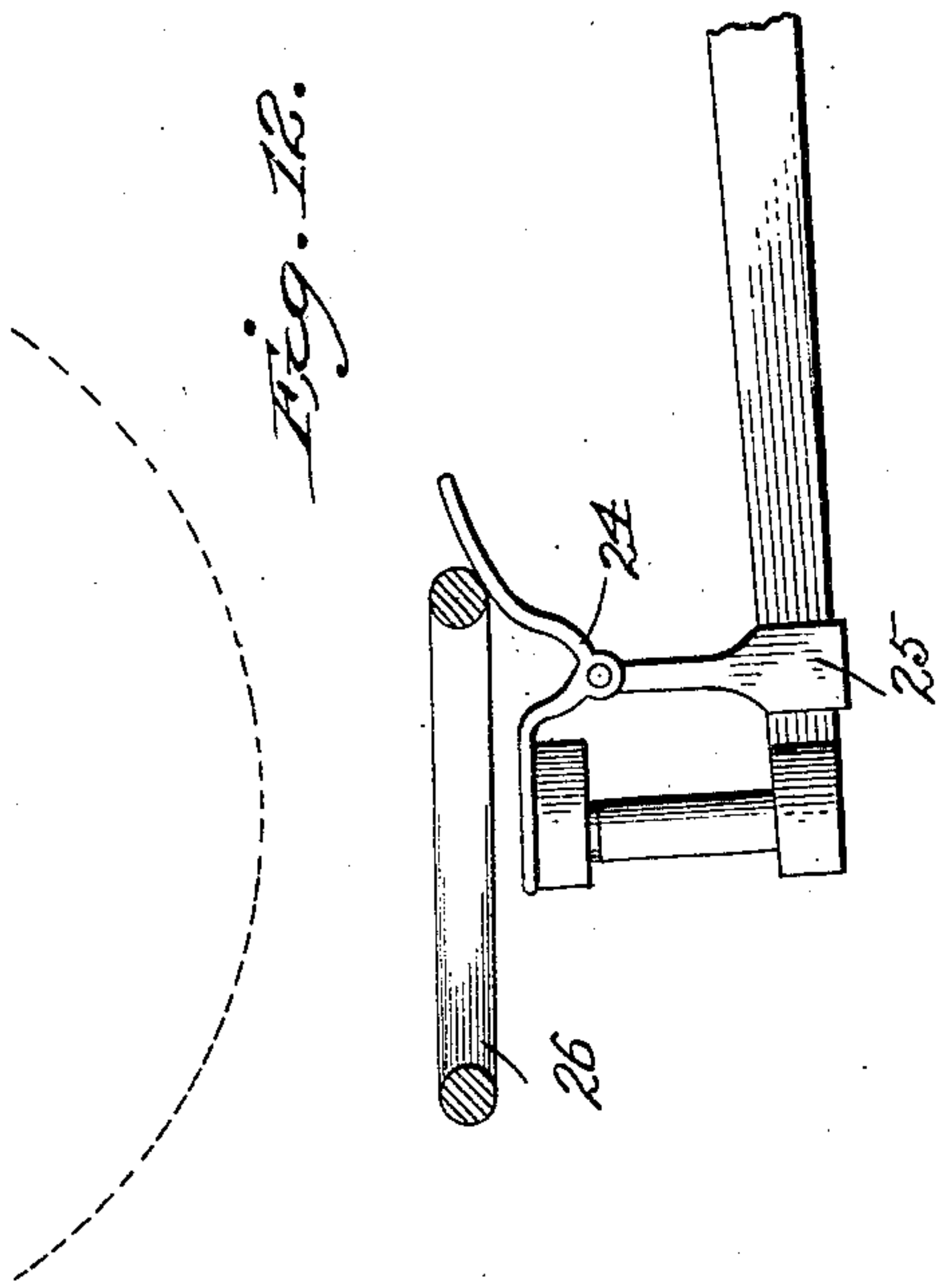
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UNITED STATES PATENT OFFICE.

RICHARD W. WALKER, OF TOPEKA, KANSAS, ASSIGNOR OF ONE-FOURTH TO JOHN L. HARRISON, OF TOPEKA, KANSAS.

TYPE-WRITER.

No. 862,774.

Specification of Letters Patent.

Patented Aug. 6, 1907.

Application filed September 13, 1906. Serial No. 334,429.

To all whom it may concern:

Be it known that I, RICHARD W. WALKER, a citizen of the United States of America, residing at Topeka, in the county of Shawnee and State of Kansas, have invented certain new and useful Improvements in Type-Writers, of which the following is such a full, clear, and exact description as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to the inking mechanism of typewriters, calculators, and machines of like character and consists in certain novel features hereinafter first fully described and then particularly pointed out in the claims.

In the annexed drawings, which fully illustrate my invention, Figure 1 is a sectional view of a portion of a typewriter showing the preferred form of the invention. Fig. 2 is a perspective view of a type bar and the inking devices fitted thereon; Fig. 3 is a detail sectional view of the ink box and inking pad; Fig. 4 is a plan view of the same; Fig. 5 is a detail elevation of the type bar and the ink box, showing the yielding guide in section; Fig. 6 is a horizontal section on the line 6-6 of Fig. 5; Figs. 7 and 8 are views showing a modified form of the invention; Figs. 9 and 10 show a further modification of the invention; Fig. 11 is a detail perspective view of the ink box employed in the form of the invention shown in Figs. 9 and 10; Fig. 12 is a detail view showing a slight further modification, and Figs. 13 and 14 are views of another form of the invention, Fig. 14 illustrating the arrangement applied to the movement of a front-printing typewriter.

In Fig. 1 of the drawings, I have shown a portion of the frame of a typewriter in which the type faces are moved upward against the under side of a platen which is mounted above and moves over the frame, the platen being indicated in dotted lines. The type bars, 1, in this form of machine are pivotally mounted on the upper portion of the frame of the machine and are connected with and operated by keys, 2, suitably mounted in the lower portion of the machine frame. In carrying out my invention, I provide an inking pad and ink box, 3, which is arranged to rest upon the type face when the type bar is in its normal position shown at the left in Fig. 1, and this inking pad and ink box is carried by a rod, 4, extending to and connected with the link, 5, joining the key and the type bar. The rod 4 is supported and guided by a sleeve, 6, keyed upon a pin, 7, which rises from the type bar; the sleeve being yieldingly supported by a spring, 8, coiled around the pin between the type bar and the lower end of the sleeve. The end of the rod is held in a socket, 9, which is pivoted to the link 5, and in order to maintain the required adjustment a set screw, 10, is provided to secure the end of the rod in the socket. The ink box, 11, is a hollow cylindrical receptacle having a perfor-

rated bottom, 12, and having its edge, 13, extended downward to receive and hold a pad, 14, of felt or similar material. A cover, 15, is fitted on the box and a clamping band or holder, 16, is passed around the same and secured to the end of the rod 4 as clearly shown in Figs. 3 and 4.

In the normal position of the parts, the ink box with the pad at the bottom of the same will depend in the position shown at the left in Fig. 1, the pad resting against the type face so as to apply ink directly to the same. When the key of the machine is depressed, the link 5 is drawn downward and the type bar and the pad-carrying rod caused to swing upward to the position shown at the right in Fig. 1, the difference in the points of attachment of the type bar and the pad-carrying rod to the link being such that the pad will be moved horizontally from contact with the type face before the same reaches the platen. When the pressure on the key is released, the type bar and the pad-carrying rod fall to their initial positions, the pad again moving over and into contact with the type face. The construction of the ink box is such that the ink passes readily and directly to the pad while the interposition of the screen or perforated bottom prevents flooding of the pad. The type face is thus supplied uniformly with a sufficient quantity of ink to produce a clear legible impression without blurring.

In the form of the invention illustrated in Figs. 7 and 8, the pad-carrying rod is not connected to the link between the type bar and the key but has its inner end pivoted to a ring, 17, secured upon the upper portion of the machine frame above the type bar and adjacent to the ink box, to the inner side of the same, a ring or loop, 18, is formed in the said rod. In this form of the invention, the ink pad will rest against the type face when the type bar is at rest but when the type bar is thrown upward the ink box and pad will be caused to move forward beyond the type face which will pass through the ring 18 to the platen, as will be readily understood on reference to Fig. 7. When the pressure on the key is released, the parts at once fall to their initial positions shown in dotted lines in Fig. 7.

In Figs. 9, 10 and 11 I have shown a further modification of the invention. In this form, the ink box is secured to an immovable ring or support, 19, in the upper portion of the frame of the machine and is constructed in an annular form, or with a large central opening, 20. The rod 4 is connected with the link 5, as shown in Fig. 9, in the same manner as in Fig. 1 and its inner end is pivoted or hinged to a plate or bracket 21 which is in turn pivoted or hinged to a support, 22, on the type bar. A pad, 23, is secured on this plate 21, and normally rests against the type face. When the type bar is swung upward to the platen the plate 21 will be subjected to a pull through a rod 4 and be

thereby swung around from contact with the type face to an inverted position in which it will be brought against the pad on the bottom of the ink box so as to absorb ink therefrom, the type face passing through the
 5 central opening 20 in the box to print against the platen, as clearly shown in Fig. 9. When the key is released, the parts will fall to the initial position shown in Fig. 10 with the pad 23 in contact with the type face.

In Fig. 12, is illustrated an arrangement by which
 10 the rod 4 may be dispensed with. In this form of the invention, the ink box and pad is secured upon one end of an angle lever, 24, which is fulcrumed at its bend upon a bracket, 25, secured on the type bar close to the type face. The outer arm of the lever 24 is so arranged
 15 as to be brought into contact with a ring, 26, suitably secured within the machine, as the type bar moves upward. This movement results in the outer arm of the lever being depressed so as to throw the ink box off the type face and over the ring, the type face passing through
 20 the ring to the platen. Upon the downward movement of the type bar the inner arm of the lever is in contact with the ring and will consequently be thrown inward to bring the inking pad into touch with the type face.

In Figs. 13 and 14, the ink box is secured upon the
 25 central arm of a three-armed lever, 27, which is supported within the frame of the machine in such position that the inking pad will be normally in contact with the type face. When the type bar is swung upward, the type face will push the ink box out of
 30 its own path and the lever will be held in the position thus given it by reason of its rear arm engaging a spring clip, 28, secured to the frame of the machine. The front or outer arm of the lever will thus be brought into and held in the path of the type bar so that when

the return movement occurs, the type bar will strike 35 the said outer arm of the lever and swing the lever to bring the inking pad again in contact with the type face.

In all forms of the invention, an ink box and inking pad will be provided for each type bar. The ink box 40 will move out of the path of the type face as the type bar moves upward to the printing position and will automatically return to contact with the type face after the letter has been printed. The construction is not complicated and the parts will operate easily and 45 readily.

Having thus described my invention, what I claim and desire to secure by Letters-Patent is:—

1. In a type writer or similar machine, the combination of a type bar, an operating link connected thereto, a yield- 50 ing guide on the type bar, a rod passing through said guide and having its outer end connected to the operating link, and an inking pad carried by the inner end of said rod and normally in contact with the type face of the type bar.

2. In a type writer or similar machine, the combination 55 of a type bar, a guide thereon, a vibratory rod passing through said guide and held against lateral movement thereby, an inking pad at the inner end of said rod normally in contact with the type face of the type bar, and means for operating the type bar. 60

3. In a device for the purpose specified, an ink box having a perforated bottom and extended sides, and an inking pad fitted between said extended sides.

4. In a device for the purpose specified, an ink box having a perforated bottom and extended sides, an inking pad 65 fitted between said extended sides, and a holder clamping the box and the said extended sides.

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

RICHARD W. WALKER.

Witnesses:

HARVEY O. MADDOX,

SNOWDEN D. FLORA.