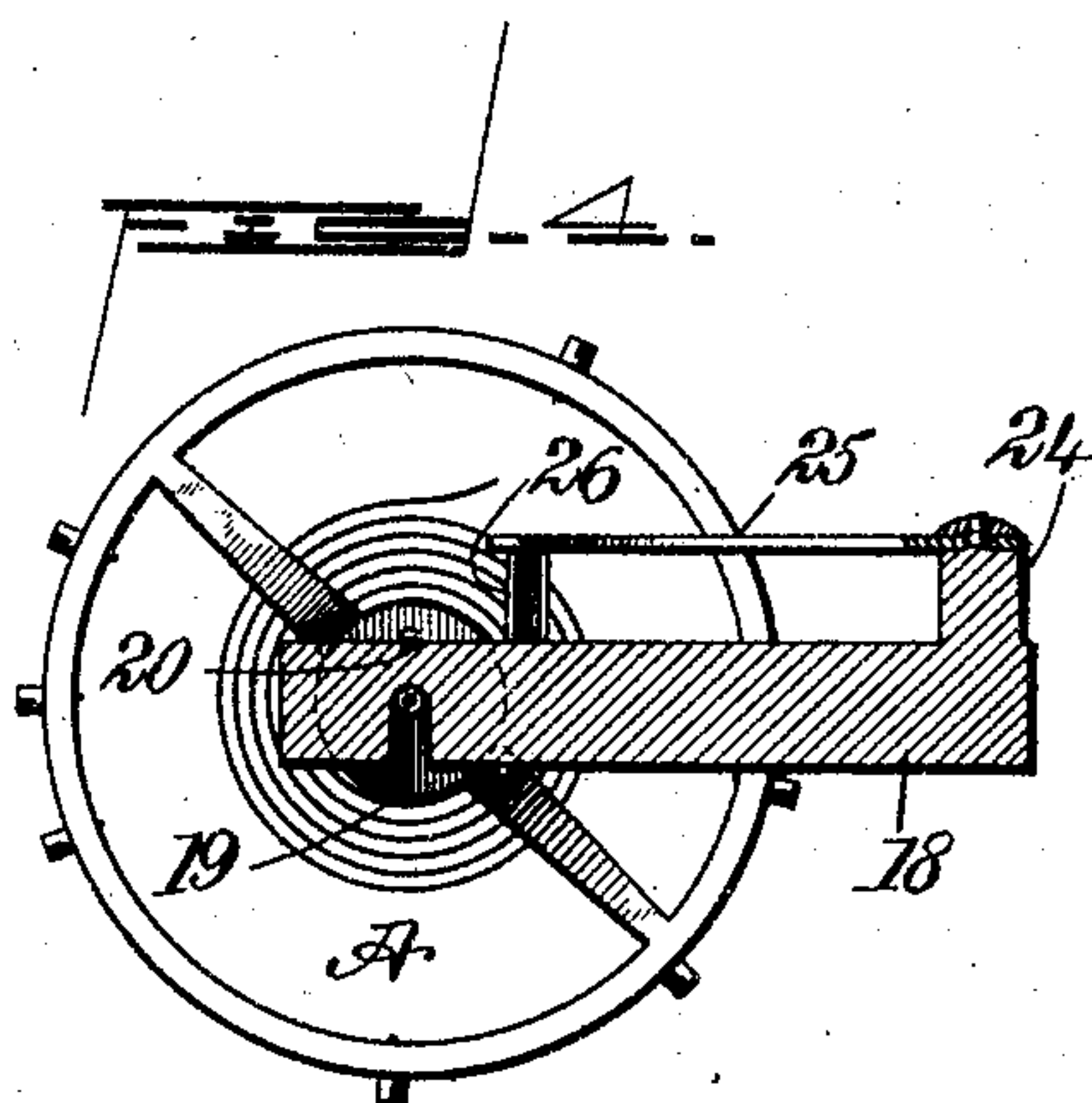
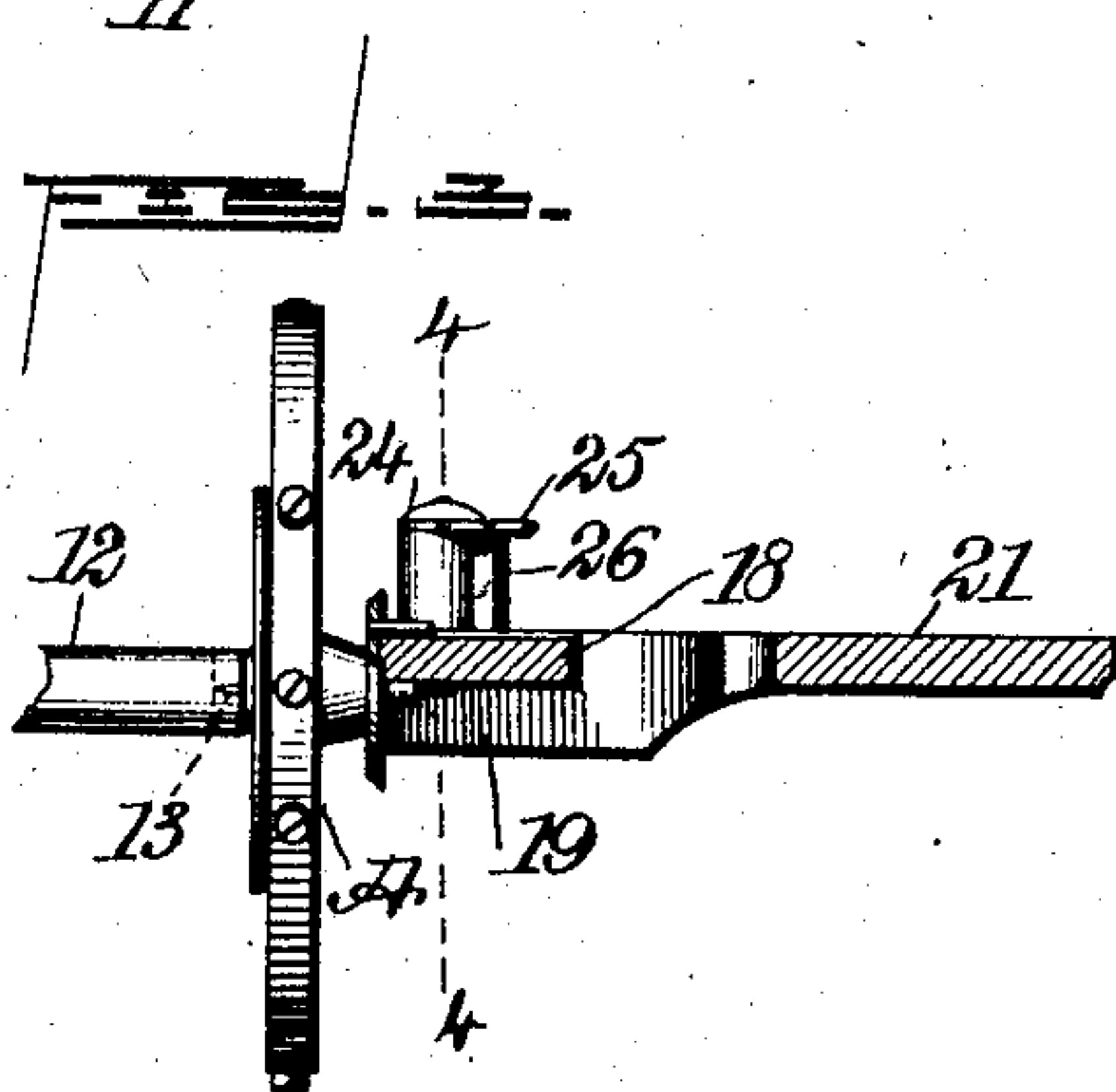
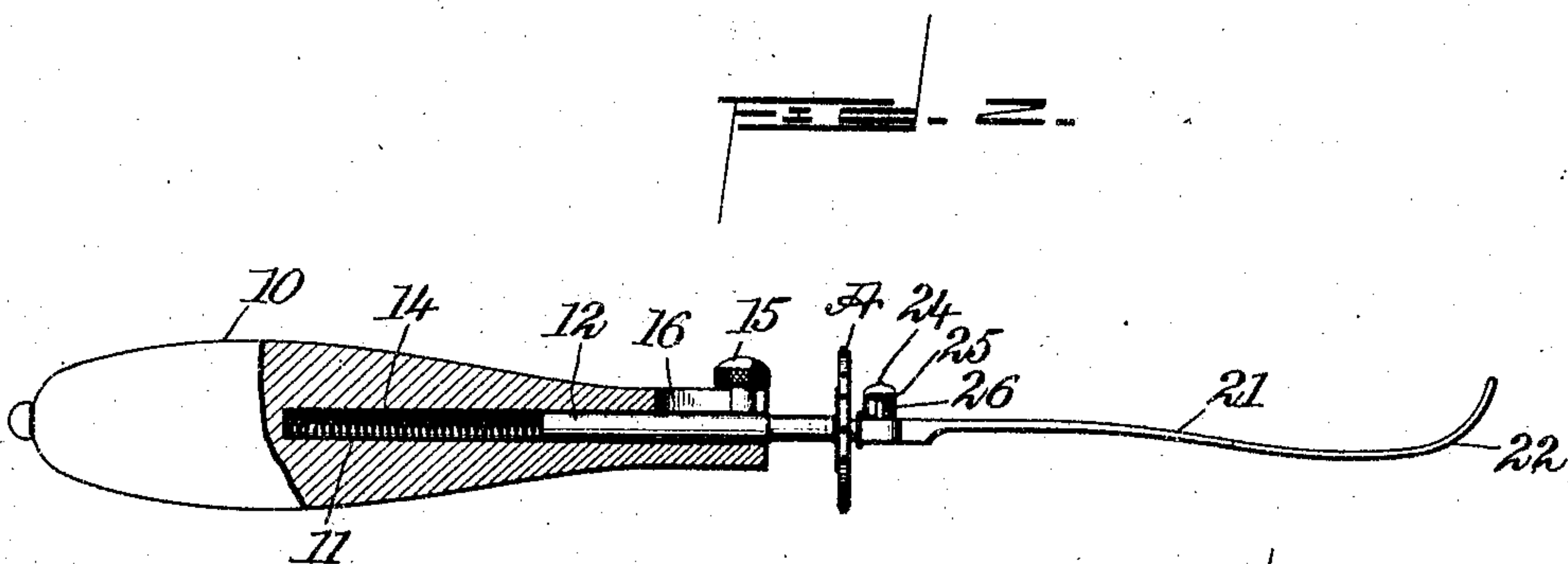
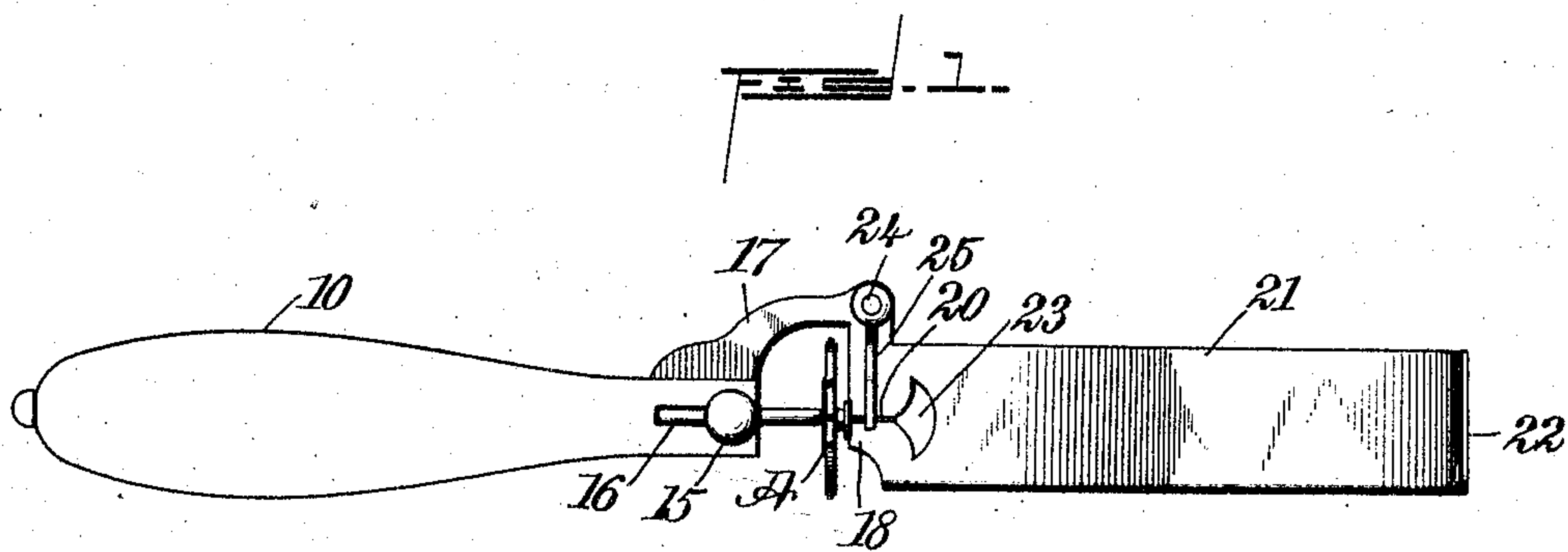


No. 780,828.

PATENTED JAN. 24, 1905.

J. McN. STEELE.
JEWEL SETTING TOOL.
APPLICATION FILED SEPT. 8, 1904.



WITNESSES:

L. Sanford Vander
S. H. Cobb

INVENTOR

John M. Steele

BY

Munn & S.

ATTORNEYS

UNITED STATES PATENT OFFICE.

JOHN McNAMEE STEELE, OF ATLANTA, GEORGIA.

JEWEL-SETTING TOOL.

SPECIFICATION forming part of Letters Patent No. 780,828, dated January 24, 1905.

Application filed September 8, 1904. Serial No. 223,703.

To all whom it may concern:

Be it known that I, JOHN McNAMEE STEELE, a citizen of the United States, and a resident of Atlanta, in the county of Fulton and State of Georgia, have invented a new and Improved Jewel-Setting Tool, of which the following is a full, clear, and exact description.

My invention relates to tools for setting jewels, and is particularly adapted for the setting of jewel-pins in the roller-tables of balance-wheels. Its principal objects are to provide a simple and efficient device for this purpose.

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 top plan view of one embodiment of my invention. Fig. 2 is a side elevation thereof, parts being broken away. Fig. 3 is an enlarged sectional detail showing a balance-wheel held by the tool in position for applying the jewel-pin, and Fig. 4 is a transverse section therethrough on the line 4 4 of Fig. 3.

10 designates a handle, conveniently of wood, from one end of which opens an extended recess or bore 11 to receive a spindle 12, having at its outer end a recess 13 of a suitable size to coact with the end of the staff of a balance-wheel. The spindle is pressed normally outward from the handle by a spiral spring 14, situated in the recess, said spindle being moved against the tension of the spring by a finger-piece 15, operating through a slot 16 in the side of the handle. From one side of the handle adjacent to the finger-piece of the spindle extends an arm 17, preferably of metal, which carries fixed upon it a jaw 18, with which the end of the spindle coöperates as a movable jaw. At one side of this fixed jaw is a recess 19, and at the opposite side is a slot 20, both the recess and slot extending longitudinally of the tool and to the edge of the jaw. From the fixed jaw, preferably in alinement with the handle, projects a blade 21, which is of comparatively thin metal and is shown as curved at 22. Situated at the end of the slot and extending transversely of the jaw and blade is shown an opening 23, and at

one side of the jaw is a stud 24, upon which is mounted to swing an arm 25, having at its outer extremity an extension or setting member 26, with its end contacting with the face of the jaw and movable along the slot.

In using my improved setting-tool the end of the staff of a balance-wheel A opposite the roller-table is set in the recess 13, the spindle being drawn to its extreme inward position by the finger-piece, and the other end of the staff is allowed to enter the recess 19, the face of the roller-table resting against the fixed jaw and the balance-wheel being clamped in place by the action of the spring upon the movable jaw or spindle. The opening in the roller-table, which is to receive the jewel-pin, is placed in alinement with the end of the slot 20. The tool being held in a horizontal position, the jewel is laid in the slot and pressed into the opening in the roller-table by moving the extension of the arm 25 against its outer end, this exerting a thrust in substantially right lines. A piece of gum-shellac may now be placed on the jewel-hole and the curved blade held over such a flame as an alcohol-lamp. This causes the shellac to flow, and when this has been allowed to cool and has set the operation is completed.

It will be seen that the work can be done without removing either the hair-spring or roller-table, that the balance-wheel and jewel-pin are held firmly in place while the shellac is flowing and setting, and that the correct positioning of the jewel-pin is assured. Moreover, the heat can be so applied that it will raise the temperature of the balance-wheel but slightly, and thus avoids any injury from this source.

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

1. A setting-tool comprising a fixed jaw having a slot extending to its edge and being adapted to receive a jewel-pin, a movable jaw, and a setting member movable along the slot.

2. A setting-tool comprising means for holding a wheel and being provided with a slot to receive a jewel-pin, and a setting-arm pivoted at one side of the holding means and being movable longitudinally of the slot.

3. A setting-tool comprising a fixed jaw

having a slot extending to its edge, a movable jaw, and a setting-arm pivoted at one side of the slot and movable longitudinally thereof.

4. A setting - tool comprising a fixed jaw
5 having a slot extending to its edge, a movable jaw, a spring acting upon said movable jaw, and a setting member movable along the slot.

5. A setting - tool comprising a fixed jaw
10 having a slot extending to its edge, a movable jaw, a setting member movable along the slot, and a blade projecting from the fixed jaw.

6. The combination with a handle having a recess, of a spindle operating in the recess and being provided with a depression, a jaw carried by the handle opposite the spindle and
15 having at one side a recess and at the other a slot, and an arm pivoted upon the jaw and movable over the slot.

7. The combination with a handle having a
20 recess, of a spindle operating in the recess and being provided with a depression, a jaw car-

ried by the handle opposite the spindle and having at one side a recess and at the other a slot, an arm pivoted upon the jaw and movable over the slot, and a blade extending from
25 the fixed jaw.

8. The combination with a handle having a recess, of a spindle operating in the recess and being provided with a depression, a spring situated in the recess and coacting with the spin-
30 dle, a jaw carried by the handle opposite the spindle and having at one side a recess and at the other a slot, and an arm pivoted upon the jaw and movable over the slot.

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

JOHN McNAMEE STEELE.

Witnesses:

J. A. HENDERSON,
W. A. HENDERSON.