

(No Model.)

J. MARTIN.
Watch-Barrel.

No. 227,374.

Patented May 11, 1880.

Fig 1.

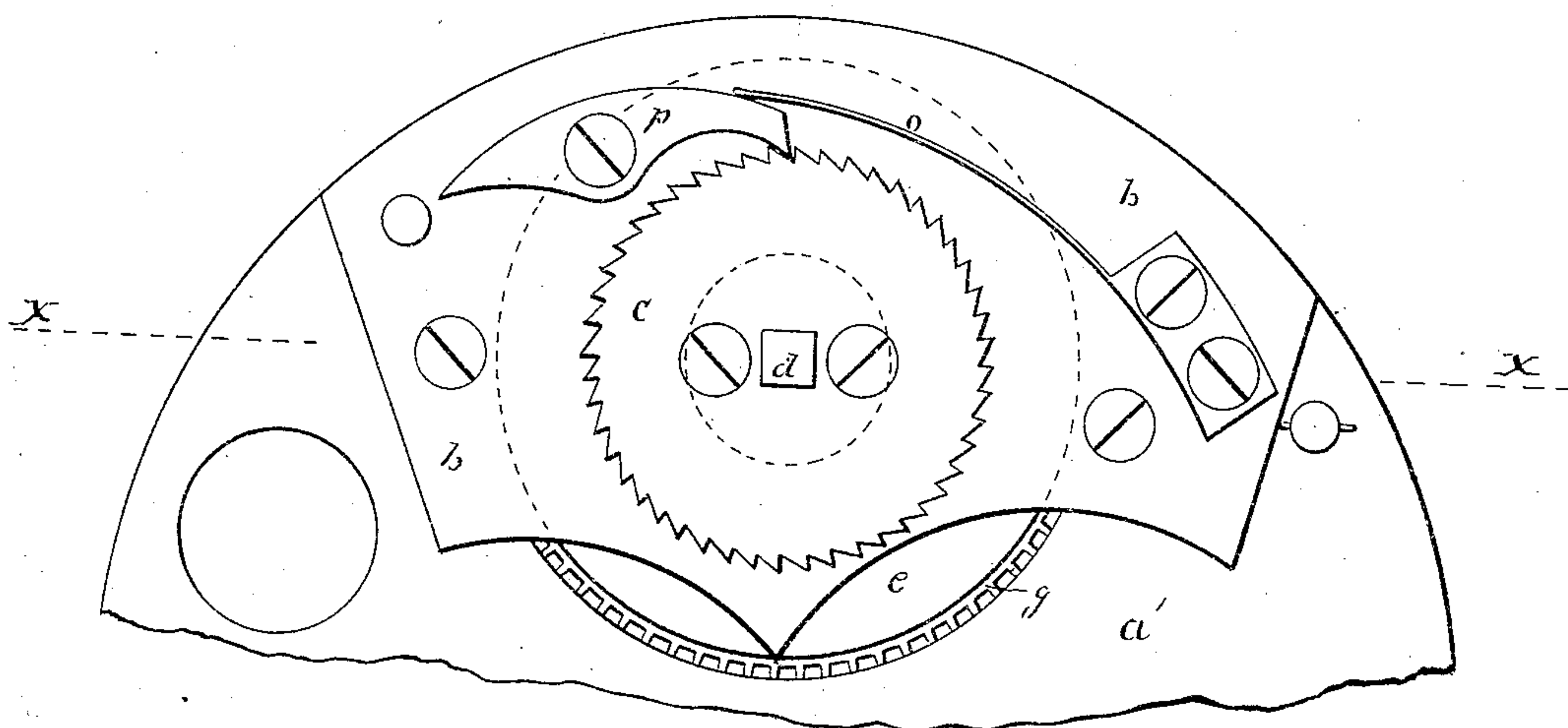
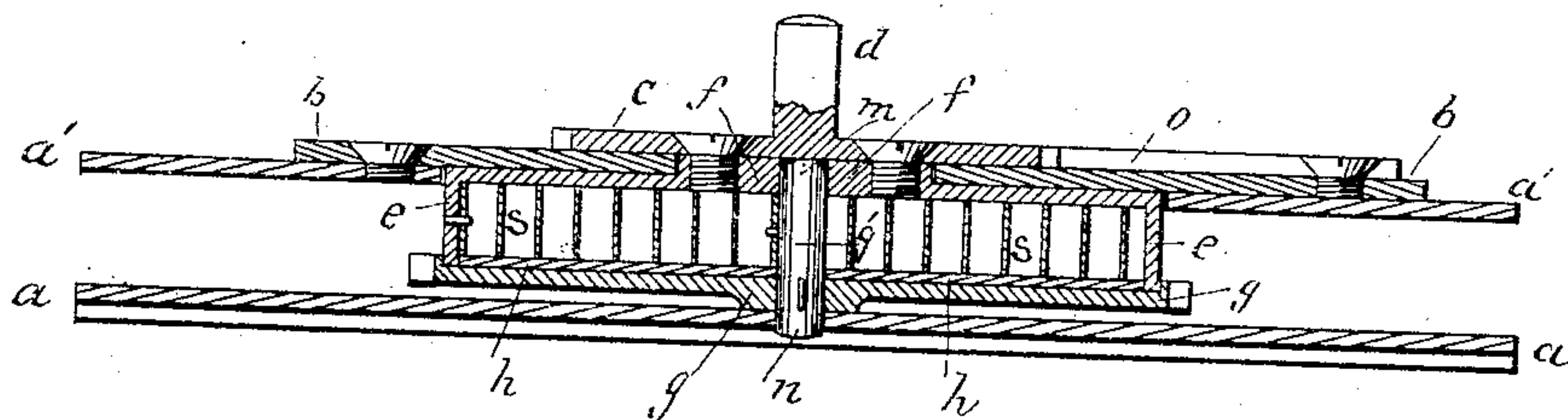


Fig 2.



Witnesses:

J. J. C. Newell,
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UNITED STATES PATENT OFFICE.

JOSIAH MARTIN, OF PALESTINE, TEXAS, ASSIGNOR OF ONE-HALF OF HIS
RIGHT TO NANCE & PALMER, OF SAME PLACE.

WATCH-BARREL.

SPECIFICATION forming part of Letters Patent No. 227,374, dated May 11, 1880.

Application filed March 16, 1880. (No model.)

To all whom it may concern:

Be it known that I, JOSIAH MARTIN, of Palestine, in the county of Anderson and State of Texas, have invented certain new and useful
5 Improvements in the Winding Mechanism of Watches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to
10 make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to the barrel and ratchet
15 of the winding mechanism of a watch; and it consists in the combination and arrangement of the parts, as herein described.

The barrel and ratchet are one piece, and both turn together in winding. One pivot
20 of the main wheel has a bearing on the inside of the barrel, and the covering-plate of the barrel has an opening large enough to admit the spindle of the main wheel, which spindle is attached to the main wheel, both turning
25 together.

This improvement removes all danger of injury to the train in case the mainspring breaks, for the reason that in the act of breaking the mainspring severs itself from all connection
30 with the train; also, as the ratchet and winding-post are one piece attached to the barrel, the pivot and center of the main wheel is completely covered and protected from rust and dust incidental to the use of a key, and, as
35 the spindle of the main wheel does not have to serve as a winding-post, the pivots can be so small as to greatly reduce the friction. Further, as the main wheel is fixed to its spindle and turns on its own pivots, it will remain
40 true in case the barrel becomes sprung; and, lastly, the construction is simple and easily made or repaired, and the mainspring can be removed or replaced without taking the movements out of the case.

45 Figure 1 is an external view of the barrel and winding mechanism of a watch embodying my invention, and Fig. 2 is a cross-section of the same, taken on the line X X.

a a' are the front and back plates of the case, and *b* the bridge screwed to the plate *a'*. 50
The ratchet *c*, which carries the winding-post *d*, is screwed to the barrel *e*, and the central stud, *f*, of the barrel, between the barrel and the ratchet, forms the axis, supported by the bridge *b*, on which the barrel and ratchet turn. 55

The main wheel *g* has the spindle *g'*, which extends through the covering-plate *h* of the barrel, and the mainspring *s* is secured at either end in the ordinary way to the spindle *g'* and the inside of the barrel. One pivot, *m*, 60
of the wheel has a bearing on the inside of the barrel, while the other pivot, *n*, turns in the front plate, *a*. The pawl *p* and spring *o* retain the ratchet.

In winding, the ratchet and barrel turn with 65
the winding-post, and the pivots of the main wheel are completely protected from dust and dirt.

Having thus described my invention, what I claim as new, and desire to secure by Letters 70
Patent, is—

1. The combination of the barrel *e*, main wheel *g*, having the spindle *g'* and pivots *m* and *n*, and spring *s*, all substantially as described, and for the purpose set forth. 75

2. The combination of the barrel *e*, having the central stud, *f*, ratchet *c*, and winding-post *d*, with the bridge *b* and detent for holding the ratchet, all substantially as described, and for the purpose set forth. 80

3. The combination of the barrel *e*, ratchet *c*, and winding-post *d*, supported by the bridge *b*, having detent for holding the ratchet, with the main wheel *g*, having the spindle *g'* and pivots *m* and *n*, the former bearing on the inside of the barrel, and spring *s*, all substantially as described, and for the purpose set forth. 85

In testimony that I claim the foregoing I have hereunto set my hand this 16th day of 90
February, 1880.

JOSIAH MARTIN.

Witnesses:

J. B. McKNIGHT,
GEO. F. GAGE.