

P. BONFILS.
Toy-Watch.

No. 162,020.

Patented April 13, 1875.

Fig 1.

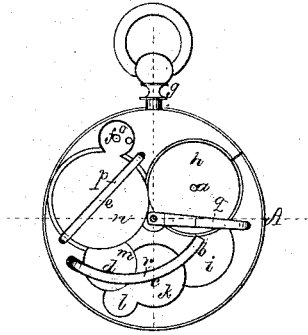


Fig 2.

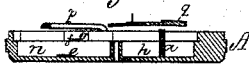


Fig 3.

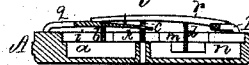


Fig 4.

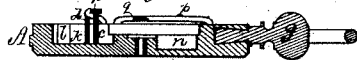
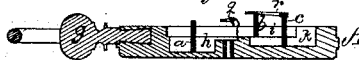


Fig 5.



Witnesses.

J. N. Piper

L. N. Bollett

Paul Bonfils.

by his attorney.

R. H. Day

UNITED STATES PATENT OFFICE.

PAUL BONFILS, OF NORTH ATTLEBOROUGH, MASSACHUSETTS, ASSIGNOR
TO CHARLES A. MARSH, OF SAME PLACE.

IMPROVEMENT IN TOY WATCHES.

Specification forming part of Letters Patent No. **162,020**, dated April 13, 1875; application filed
March 3, 1875.

To all whom it may concern:

Be it known that I, PAUL BONFILS, of North Attleborough, of the county of Bristol and State of Massachusetts, have invented a new and useful Improvement in Watches; and do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a front view. Figs. 2 and 3, 4 and 5 are transverse sections of a watch-works-carrying disk, made and pivoted and provided with a stem in accordance with my invention.

My improvement is specially designed for the manufacture of cheap or toy watches for children. Instead of supporting the watch-works in a costly frame, as usual in most watches, and having the stem fixed to the case itself, I support the wheel-work, the barrel, and the escapement by a chambered disk, A, cast in one piece, in a mold upon a series of wheel bearings or pivots, *a b c d e f*, and a stem, *g*, arranged as shown. The annular chambers *h i k l m n o*, as represented in said drawings, are to receive the works. To hold the wheels of the works in place on their pivots or in their bearings I make use of bars or

springs *p q r*, to extend across them, and to be bent down near one end, or both ends of each, as may be desirable, and inserted in the disk, all being as represented in the drawings. In completing the watch, there is to be a dial and hands over the said works-carrier, and a case to envelop the whole.

I claim—

1. As an improvement in the manufacture of toy watches, the combination of the pivots or bearings for the works with a chambered carrying-disk, A, cast or founded in one piece, in a mold, on said pivots or bearings, as described.

2. The stem *g* combined with a works-carrying disk, A, cast in a mold on such stem, and on the pivots and bearings, as set forth.

3. The combination of the bars or springs *p q r*, as described, with works-carrying disk A, cast in one piece, and provided with wheel pivots and bearings, arranged therein as specified.

PAUL BONFILS.

Witnesses:

R. H. EDDY,
J. R. SNOW.