(12) **United States Patent**
Wilson

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(54) **ALARM BELL, FOR TIME PIECES, ALARM CLOCK**

(76) Inventor: **Robert Wilson**

C. Robert Wilson of Williamsport State of Pennsylvania —

Letters Patent —

The schedule referred to in these Letters Patent and making part of the same, containing a description in the words of the said Robert Wilson himself of his improvement in the Alarm for watches or time pieces

Be it known that I Robert Wilson of Williamsport Lycoming County and State of Pennsylvania have made an improvement in the alarm for watches or time pieces which is described as following, This alarm consists of the bell, the fly wheel which strikes the clapper, the main spring & Barrel the main wheel & pinion; the watch wheel and pinion, — The Bell with the clapper is made in the common shape, of a small size and suspended by a bent wire from the platform or foundation, — The fly wheel which strikes the clapper — This consists of an axle or shaft made of iron or steel about six inches long about ⅛ of an inch in diameter and turns on pivots at the ends, at about one inch from one end is a pinion with about 7 leaves cut out of the said axle and at about two thirds of the length of the axle is placed on the same an oblong frame of metal about 12 inch long by one inch wide at a convenient distance to strike the clapper, — The main spring and barrel — The main spring is made of steel bent like a watch spring about 5 inches long, one coil of the spring is about half an inch longer than the other to project over the ends of the barrel. The barrel is about 1¼ inch diameter turning with the axle on pivots, The cord from the main spring wind on a fusee on the axle of this barrel. The main wheel & pinion — The main wheel is about 3 inches in diameter, filled with teeth on its periphery. When in motion it turns with the axle by means of a click & ratchet wheel when winding up the axle turns

but not the wheel, The teeth of the wheel mesh into the pinion on the fly. — A cylinder with the ratchet wheel are made fast to the axle of the main wheel, The cord from the drum winds and unwinds on the cylinder A stop for winding is placed on the outside of the post. — The watch wheel and pinion, The watch wheel is about 1¾ inch in diameter with teeth around its periphery — It works into a pinion turning with the axle when in motion, but the pinion turns on the axle when setting, A pin for letting off the fly is placed on the watch wheel at about ⅞ inches from the center A click is made fast to the pinion and a ratchet post on the axle on which the pinion works for setting the alarm to any particular hour The number of teeth in the wheel must be twelve times as great as those on the pinion, — A catch is placed on the post of the watch wheel by a screw, about ⅞ inch from the end which strikes on the arm from the fly. The other end catching to the pin on the watch wheel. and against which it strikes

A watch face is placed on the post and the axle of the watch wheel with a hand on it. passes through it for setting the time Operation, The watch is placed in a holder made for the purpose and to suit any size watch by means of screw holes, the time having been determined on at which the alarm is to be given a crank placed on the axle of the pinion of the watch wheel is brought in contact, with the minute hand of the watch which turns the pinion and gives motion to the watch wheel, the pin on the watch wheel rises on the long end and depresses the short end of the catch, this lets of the fly, which strikes the clapper of the bell and the spring being also disengaged from the drum by the fusee this gives motion to the main wheel by the cord wound on the cylinder which turns on the pinion on the axle of the fly. whereby the bell of the clapper is struck and the alarm given, — The invention here claimed and which I desire to secure by Letters Patent consists in the before described Alarm, for

watches or time pieces particularly the watch work, fly & main spring — For a further illustration of my invention I refer to the model and drawing of the same deposited in the Patent Office

In testimony whereof I have hereunto subscribed my name this 30th day of June 1832

Witnesses.

William P. Elliot
Chas. A. Keller

Robert Wilson