

F. PURDY.
TIME STAMP.

APPLICATION FILED MAY 29, 1903.

991,240.

Patented May 2, 1911.

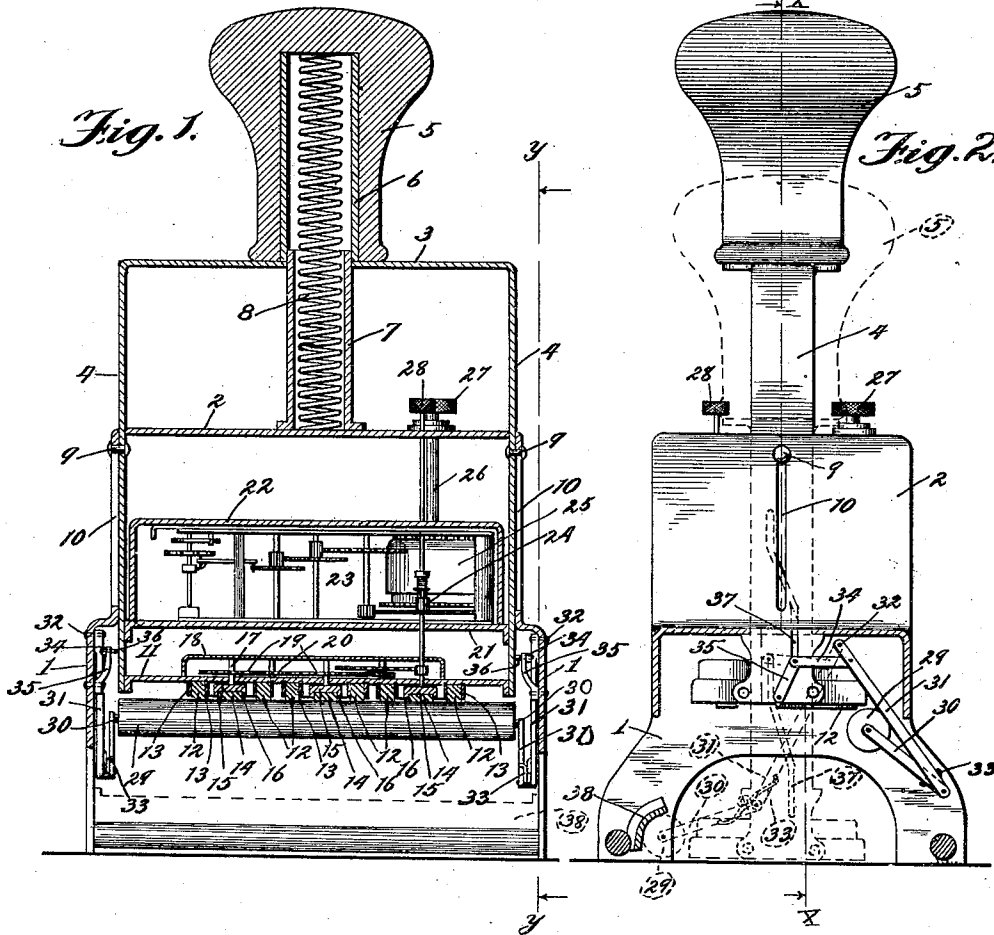
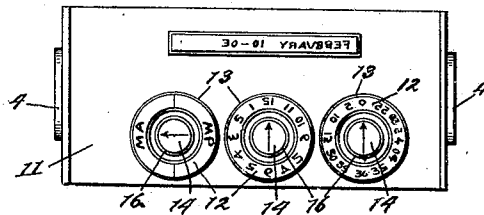


Fig. 3.



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UNITED STATES PATENT OFFICE.

FREDERICK PURDY, OF CHICAGO, ILLINOIS.

TIME-STAMP.

991,240.

Specification of Letters Patent.

Patented May 2, 1911.

Application filed May 29, 1903. Serial No. 159,310.

To all whom it may concern:

Be it known that I, FREDERICK PURDY, citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Time-Stamp, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawing, forming a part of this specification.

My invention relates to improvements in time stamps.

The object of the present invention is to produce a device of the character described, which will be simple in construction and efficient in use.

A further object of said invention is to provide improved means for inking the impression device.

In the accompanying drawings which show one form of my invention, Figure 1 is a sectional elevation taken on the line $x-x$ of Fig. 2; Fig. 2 is a sectional view on the line $y-y$ of Fig. 1; and, Fig. 3 is an inverted plan view of the impression device.

Referring to the drawings by reference characters, therein is shown a frame or support having suitable legs or standards 1, 1, and a top 2. Upon said stationary support or frame is slidably mounted a bifurcated frame 3 which has its forks 4 passing through apertures formed in the top 2 of the stationary support. The sliding or movable frame 3 has a handle 5 attached to the top thereof. Within said handle is arranged a tube 6, and into the lower end thereof extends the upper end of a tube 7, mounted upon the top of the stationary support or frame, and arranged to slide into the tube 6 when the handle is depressed. Within the tubes 6 and 7 is arranged a coiled spring 8 which has its upper end bearing against the handle, and its lower end bearing upon the top of the stationary support or frame. This spring normally retains the sliding frame at the upper limit of its movement.

The sliding frame, in addition to being guided in its movement by the telescoping tubes and the holes through which its forks pass, is also guided by pins or studs 9 secured to said forks and arranged to slide in vertical slots 10 formed in the upper portion of the legs or standards of the stationary frame. The portions of the legs or standards below the slots are preferably off-set, so that they

will stand out beyond the upper portion of said legs, and thereby provide a space between said legs and the forks of the sliding frame to receive mechanism for operating the inking device, which will be hereinafter described.

Between the lower ends of the forks of the movable frame is secured a plate 11, upon the lower face of which is secured the type for making the impression. A portion of the type carried by the plate 11 is preferably adapted to print dials. Three rubber rings 12 are here shown which have the type for printing the dials formed upon their lower faces. One ring has type to print a dial for indicating the forenoon and the afternoon; another has type for printing the hour of the day, and the remaining ring has type for printing a dial to indicate the minutes of the hour. These type rings 12 are preferably secured in position by being set between concentrically arranged rings 13, secured to the plate 11 and engaging the inner and outer peripheries of the type rings.

The form of the impression which I am now describing, has merely been designed for disclosing one form of my invention, and therefore, the type or other means for making the impression may be of other forms and adapted to print or impress other symbols than those described. Within each type ring is located a revoluble type 14, preferably adapted to print an arrow which points to the indicia printed or impressed by the type of the ring in which it is situated. This type is preferably mounted upon a disk 15 and has its edges embraced by a flange 16 formed upon said disk. The arbor 17 or shaft is suitably journaled in the plate 11, and a casing 18 mounted upon the top of the plate 11. Each arbor has a gear 19, and said gears mesh with one another through intermediate gears 20.

Above the plate 11 is a plate 21 secured at opposite ends to the forks of the bifurcated or movable frame, and upon said plate is arranged a casing 22, within which is situated a clock mechanism or other form of motor 23. The arbor 17 of one of the revoluble type is extended up into the casing 22, and is provided with a gear 24 which is driven from the driving train of the clock mechanism. The clock mechanism, as usual, is operated by a spring 25. The stem 26 for winding the clock spring preferably ex-

tends above the casing for the clock mechanism, and has its end provided with a knob 27 which projects through the top of the stationary frame 2, when the movable frame 5 is in its initial or elevated position. The situation of said knob places it in a convenient place for winding the spring. A knob 28 for setting the device is arranged in a similar position to the knob 27, and is 10 mounted preferably upon the end of a continuation of the arbor by which the revolvable type are connected with the clock mechanism. The setting and winding knobs 28 and 27, respectively, are movable with the 15 clock mechanism when the movable frame is reciprocated on its guides, and, therefore, suitable apertures are provided in the top 2 of the stationary frame to permit the passage of said knobs therethrough. The several time or dial printing elements of the 20 impression device are arranged to one side of the supporting plate to provide a space at the opposite side of said plate for mounting type or other means to print or impress 25 other indicia which may be desired, as for example, the day, month and year.

The face of the type is inked by a roller 29, which traverses the face of said type when the impression device is depressed to 30 engage the surface to be stamped. The roller is mounted to revolve upon a suitable axis, and said axis is supported at its ends upon the ends of rods 30. Each of these rods has the end opposite to that on which 35 the roller is supported, pivoted to the free end of an arm 31 which oscillates upon a pivot 32 which is connected with the off-set portion of one of the legs of the stationary frame. A spring 33 normally presses the 40 free end of the rod 30 inwardly toward the arm 31. The arm 31, near its pivot, is pivotally connected to a link 34, and said link is pivoted to a second link 35 pivoted to one of the legs of the stationary frame. 45 Preferably at the point of pivotal connection between the two links 34 and 35 is a pin 36 which passes into a slot 37 formed in the adjacent fork of the movable frame. This slot is formed so that its wall will 50 move the pin 36 back and forth in the movement of the movable frame, and is preferably straight near its opposite ends while its central portion is inclined. When the 55 movable frame is raised, each of the pins 36 are situated in the lower portion of their corresponding slots, and the arm 31 is held in such a position that the roller supported by the rods 30 carried by said arms, is normally at one side of the impression device. 60 In the first portion of the downward movement of the movable frame, by pressure upon the handle, the pins 36 will ride in said lower straight portions of the slots, and therefore, the arms 31 will stay in their initial 65 position, but the engagement of the im-

pression device with the roller will swing the rods 30 slightly outward from the arms 31 against the tension of the springs 33, and pass the roller over a portion of the face of the type of the impression device. The further downward movement of the movable 70 frame will cause the walls of the inclined portion of the slots to engage said pins and shift the same horizontally. This movement of the pins will draw the links 34 horizontally and this movement of said links will 75 pull the arms 31 to oscillate them upon their pivots and throw the pivots of the rods 30 farther inwardly which will pass the roller 29 farther over the face of the impression device. The continued downward 80 movement of the movable frame causes rods 30 to be swung farther away from their supporting arms by the engagement of the face of the impression device with the roller. 85 As the rods 30 are moved farther away from their supporting arm, the roller is necessarily passed farther across the face of the impression device, and the movement of said roller across the face of the impression device is further accomplished by 90 the oscillating of the arms 31.

When the pins 36 have reached the limit of the inclined portions of their corresponding 95 slots and pass into the upper vertical portions of said slots, the roller has been passed entirely across the face of the impression device and moved beyond the side thereof, so that the impression device may pass 100 below the roller without interference, and as the supports for said rollers are situated wholly at the sides of the movable frame which carries the impression device, said device may be depressed until it engages the 105 surface it is desired to stamp. The upper straight portions of the slots in the forks of the movable frame are provided to permit the continued movement of the impression device after the roller has passed across the face thereof, without causing movement of the 110 roller, and said roller, when it is passed from engagement with the impression device, is held against being raised under the tension of the springs which tend to swing the free 115 ends of the supporting rods inwardly to the arms which support said rods, by a plate or sheath 38 secured to the stationary frame under which the roller passes when it leaves the impression device. When the impression 120 device is again raised the walls of the slots in which the pins 36 slide, moves said pin to return the arms 31 to their initial position, and the springs 33 bring the roller to its proper place. The links 35 merely guide the pins 36 125 and links 34 and other means for guiding said pins may be employed if desired. The features of my invention are set forth in the claims, and the device herein shown and described has merely been designed for the purpose of clearly disclosing the invention, it 13

being only one embodiment of said invention.

It is manifest that many changes may be made in the details of construction, arrangement and combination of parts herein shown and described without in any way departing from the spirit of my invention.

The claims of this application are subsidiary to the generic claims contained in an application filed by me April 24, 1903, Serial No. 154,057.

Having described my invention what I claim as new and desire to secure by Letters Patent is.

1. In a time stamp, the combination with a supporting frame having positioning gage parts, of a rectilinearly reciprocating frame movable between said gage parts and having a bottom plate, impression dies mounted on one side of said plate, an operating train for said dies mounted upon the opposite side of said plate, an inclosing casing mounted on said movable frame, a spring-actuated clock mechanism mounted in said casing and mechanically connected with said operating

train, and a roller for inking said impression dies.

2. In a time stamp, the combination with a supporting frame having positioning gage parts, of a yoke carried by said supporting frame and movable relatively thereto, a handle for moving said yoke, a supporting plate mounted between the ends of said yoke, impression dies carried on one side of said plate, an operating train for said dies mounted on the opposite side of said plate, an inclosing casing mounted between the legs of said yoke, a spring-actuated clock mechanism mounted within said casing and mechanically connected with said operating train, and an inking roller for inking said impression dies.

In witness whereof, I have hereunto subscribed my name in the presence of two witnesses.

FREDERICK PURDY.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."