F. PURDY.

TIME STAMP.

APPLICATION FILED MAY 23, 1903.

952,577.

Patented Mar. 22, 1910.

Fig. 2.

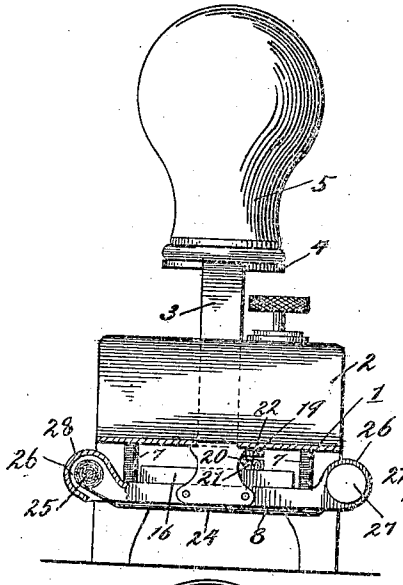


Fig. 1.

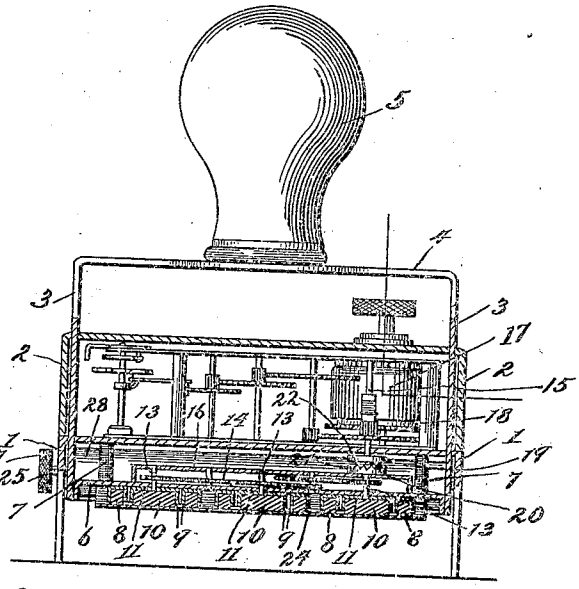


Fig. 3.

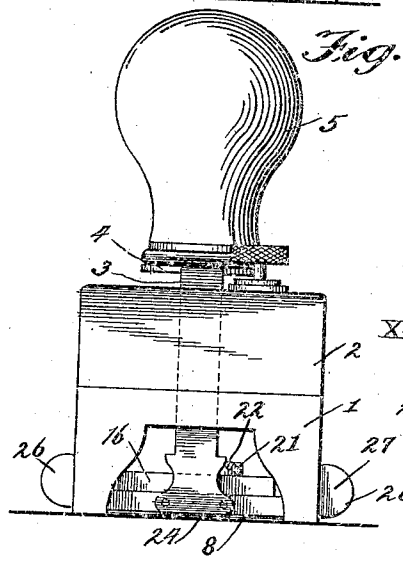
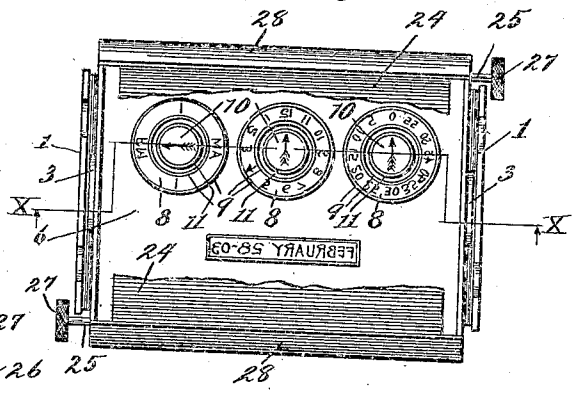


Fig. 4.



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UNITED STATES PATENT OFFICE.

FREDERICK PURDY, OF CHICAGO, ILLINOIS.

TIME-STAMP.

952,577. Specification of Letters Patent. Patented Mar. 22, 1910.

Application filed May 23, 1903. Serial No. 158,410.

To all whom it may concern:

Be it known that I, FREDERICK PURDY, a 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-Stamps, 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 stamping devices, one of its objects being to provide an impression device with improved inking means.

Another object of the same invention is to combine an impression device, having means for varying the character of the impression adapted to be made thereby with a motor for automatically operating said means, in such a manner that the impression device may be moved to make an impression while the motor for operating the means to vary the character of the impression may remain in a stationary position.

Other objects of this invention are to produce a device which is simple in construction, which may be cheaply manufactured, and which will be durable in use.

The invention in its preferred embodiment consists of certain details of construction, arrangement and combination of parts as hereinafter more particularly described and specifically pointed out in the claims.

One form of my invention designed for practical purposes is illustrated in the accompanying drawings, in which the several views are as follows:

Figure 1 is a sectional elevation taken on the line *x*—*x* of Fig. 4; Fig. 2 is an end view of my impression device, with one of the end pieces or legs and a portion of the casing for one of the rollers broken away so as to clearly illustrate certain features of my improved device; Fig. 3 is an end elevation of my invention, with the impression device in the position it assumes when an impression is being made; and Fig. 4 is an inverted plan view, with the ribbon broken away to show especially the face of the impression device.

Referring now to the drawings by reference characters, therein is shown a stationary frame or support, 1, upon which is mounted a suitable casing, 2. Through coincident apertures in said casing, 2, and the top of the stationary support, 1, pass strips or bars, 3, which are connected at their upper ends to a cross-piece, 4, to which is attached a handle, 5. These strips are arranged to slide vertically, and are guided in their movements by the casing, 2, and the stationary frame. To the lower ends of the strips or bars, 3, is connected a plate, 6, for supporting the type of the impression device. Said plate is vertically movable with said strips and is normally held at the upper limit of its movements by springs, 7, which are connected to said plate and the top of the stationary frame.

Upon the lower side of the plate, 4, are arranged a plurality of rings, 8, which have type formed upon their lower faces. The type of the several rings are, preferably, adapted to print dials which indicate the forenoon and afternoon, the hour and minute of the day. The rings containing the type are, preferably, held to the plate, 6, by rings or annular plates, 9, which embrace the inner and outer peripheries of the type rings, and which are fastened to the plate in any desirable manner. Within each of the type rings is arranged revoluble type, 10, which is, preferably, adapted to print an arrow or indicator to point to the different symbols upon the dials printed by the type rings. This revoluble type is, preferably, supported by a disk or plate, 11, which has a suitable flange at the edges of the revoluble type. Each of said plates is mounted upon an arbor, 13, and said arbors are suitably connected with one another by a train of gears, 14. A transmitting shaft, 15, which is suitably journaled in the stationary frame, operates said train of gears, and said gears are, preferably, inclosed by a casing, 16, arranged upon the rear of the supporting plate for the impression device. The transmitting shaft is geared to a clock mechanism, 17, arranged in the casing, 2, upon the stationary frame. Said mechanism is operated by a spring, 18, and has a winding stem for winding the same.

The transmitting shaft, 15, geared to the clock mechanism preferably has arranged upon one end thereof a disk, 19, which is provided with a pin, 20. The driving arbor of the impression device, which is herein illustrated as one of the arbors which support the revoluble type, has secured thereon, opposite the transmitting shaft, a disk, 21, which preferably has its upper surface provided with serrations or teeth, 22. The pin,

20, engages with said teeth and connects the driving arbor of the impression device with the transmitting shaft of the clock mechanism, and thereby the revoluble type of the impression device are caused to revolve by the movement of said clock mechanism.

In operating the device to make an impression, pressure is exerted upon the handle, which depresses the impression device until it contacts with the surface which it is desired to stamp. When the impression device is lowered, the pin upon the transmitting shaft is, of course, disconnected from the teeth of the disk on the driving arbor of the impression mechanism, and therefore the impression mechanism remains idle while an impression is being made, but the clock mechanism continues its operation. The loss of movement in the impression mechanism, however, is made up when said mechanism is again connected with the transmitting shaft by the engagement of the pin with the inclined walls of the teeth, which causes the revoluble type of the impression device to be moved until they are synchronized with the clock movement.

The impression device is inked by a ribbon, 24, which is carried by rollers, 25, suitably journaled in extensions, 26, of the plate, 6. Said ribbon is adapted to be wound from one to the other of said rollers, and thereby shifted across the face of the type of the impression device. Each of these rollers is, preferably, provided with a knurled wheel, 27, for turning the same to wind and unwind the ribbon, and a casing, 28, preferably surrounds each roller to protect the ribbon thereon from dust and dirt, etc., and from engagement with extraneous objects.

The type for printing the dials heretofore described are, preferably, disposed to one side of the plate, 4, to provide a space at one opposite side of said plate on which type may be mounted for printing any other matter which may be desired. The type may, of course, be of any form and adapted to print other symbols than those described, the particular form of type set forth, and the characters adapted to be printed thereby being described merely for the purpose of clearly disclosing the invention. Also other forms of motor mechanism may be employed than that set forth, and other means may be designed for detachably connecting the motor mechanism with the impression device.

It is manifest that many details of construction, arrangement and combination of parts may be made without impairing my invention, and I therefore reserve the right to make such modifications as fairly fall within the scope of the protection which I seek.

The claims of this application are subsidiary to the generic claims contained in an application filed by me, April 24, 1903, Serial No. 154,187.

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 frame having supporting gage parts, a rectilinearly reciprocating platform carried thereby, impression devices mounted on one side of said platform, a driving train for said impression devices mounted on the other side of said platform, a spring actuated clock work motor carried by said frame for operating said driving train and a single operating connection extending between said motor and said operating train.

2. In a time stamp, the combination with a frame having supporting gage parts, of a rectilinearly reciprocating platform carried by said frame, impression devices mounted on one side of said platform, a driving train arranged on the other side of said platform, a spring actuated motor mechanism carried by said frame for operating said driving train, a single operating connection between said motor mechanism and said driving train and an inking ribbon for inking the impression devices.

3. In a time stamp, the combination with a stationary frame, of a rectilinearly reciprocating platform carried thereby, impression devices carried on one side of said platform, operating means for said impression devices carried on the other side of said platform, a spring actuated motor carried on said frame and connected with said operating means by a separable connection arranged to permit said operating mechanism to be moved bodily out of engagement with said clock work when an impression is made and an inking ribbon for inking said impression devices.

4. In a time stamp, the combination with a stationary frame having gage parts adapted to engage the surface to be impressed, of a spring actuated motor mechanism carried by said frame, a rectilinearly reciprocating platform carried by said frame, impression devices mounted on one side of said platform, said impression devices being operatively connected with said motor mechanism by a connection which permits the same to be moved bodily out of engagement with the motor mechanism in making an impression and an inking ribbon for inking said impression devices.

5. In a time stamp, the combination with a stationary frame having gage parts adapted to engage the surface to be impressed, of a spring actuated motor mechanism carried by said frame, a rectilinearly reciprocating platform carried by said frame, impression devices mounted on one side of said platform, said impression devices being operatively connected with said motor mechanism

by a connection which permits the same to be moved bodily out of engagement with the motor mechanism in making an impression and an inking ribbon for inking the impression devices and means for shifting said ribbon across the face thereof.

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

FREDERICK PURDY.

Witnesses:
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