

A. L. DANIELLS & L. E. FORNES.

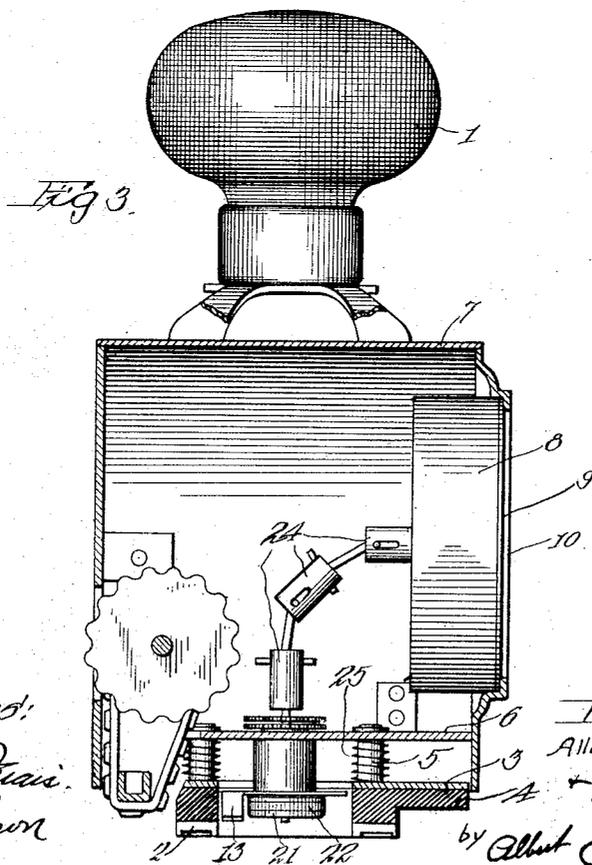
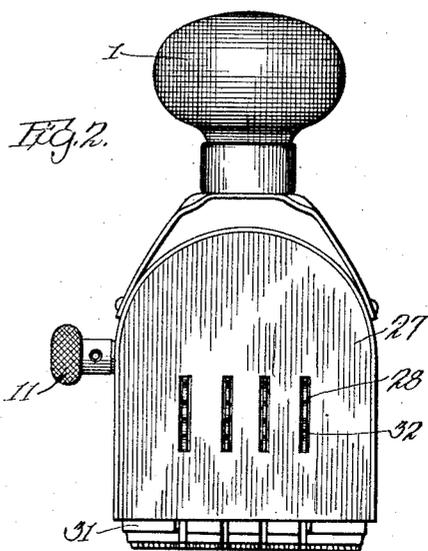
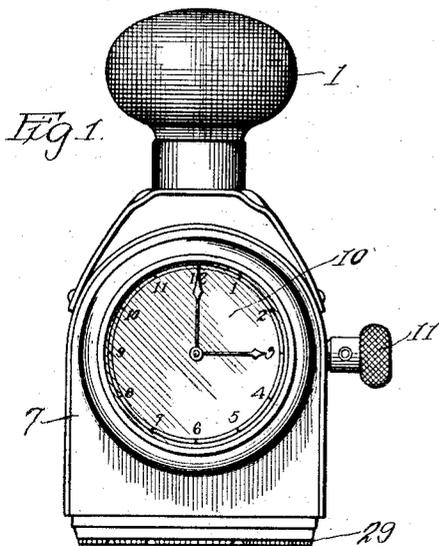
TIME STAMP.

APPLICATION FILED APR. 14, 1915.

1,280,175.

Patented Oct. 1, 1918.

2 SHEETS—SHEET 1.



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*W. A. Olson*

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*by Albert Schmitt, Atty*

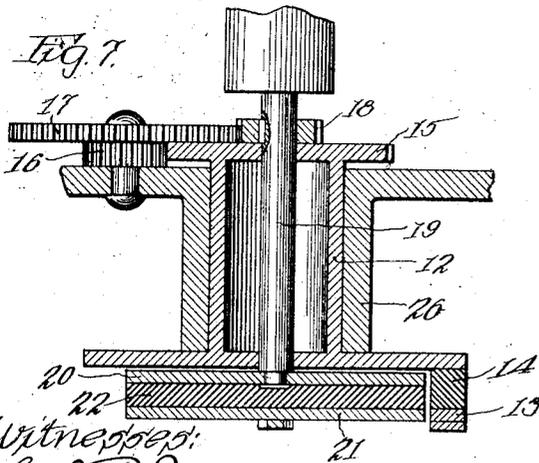
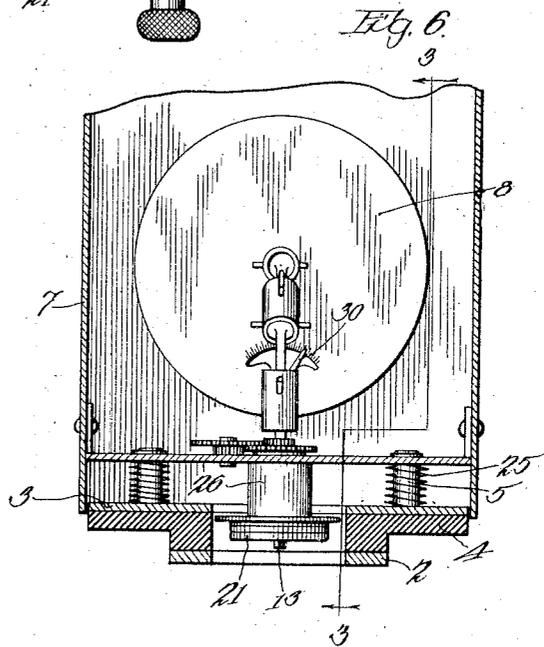
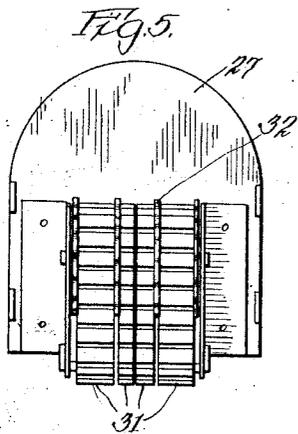
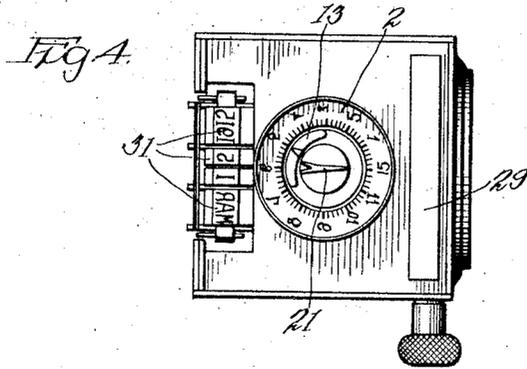
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 TIME STAMP.

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2 SHEETS—SHEET 2.



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# UNITED STATES PATENT OFFICE.

ALLAN L. DANIELLS AND LOUIS E. FORNES, OF CHICAGO, ILLINOIS.

TIME-STAMP.

1,280,175.

Specification of Letters Patent.

Patented Oct. 1, 1918.

Application filed April 14, 1915. Serial No. 21,223.

*To all whom it may concern:*

Be it known that we, ALLAN L. DANIELLS and LOUIS E. FORNES, both citizens of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Time-Stamps; and we 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 make and use the same.

Our invention relates to time stamps for imprinting the exact time on papers of any kind, its general objects being to provide a simple and strongly built time and date imprinting stamp which will be more durable and more easily manipulated than those now in common use. Heretofore, it has been customary to operate the hour and minute impressing means of such a stamp by means of a horizontally disposed movement, that is to say, with the staffs of the movement vertical and with the face of the watch covered by the casing of the stamp. With such a construction, the bearings for the lower ends of the staffs receive far more of the strains than the corresponding upper bearings and therefore wear much faster, while the hiding of the watch face makes it difficult to set the movements exactly in accordance with the standard time. Moreover, the jar upon the time imprinting members, which latter have usually been rigidly connected to the hour and minute hand arbors of the watch movement, have been transmitted to the latter, thereby also increasing the wear on the same. Or, where time stamps have been built with the actuating movement so mounted that the staffs were horizontal, this movement has been rigidly connected to the time-imprinting means, thereby causing severe strains to be transmitted to the movement whenever the stamp was used. So also, it has been customary heretofore to imprint the date by means of movable types, part of which must be taken out and replaced by others every day.

Our invention aims to provide a time stamp in which the movement is held vertically and exposes the face of the watch to permit an accurate setting of the latter (thereby also enabling a stamp to be used as a desk clock) and in which the vertical position of the movement maintains the staffs of the latter horizontal, so that the wear

will be evenly distributed over the bearings at the respective ends of said staffs; to provide type-carrying bands which may easily and quickly be shifted to alter the date impression without removing or bodily replacing any type elements to prevent the shock on the time-impression means from being transmitted to the watch movement through the operative connection between the same; and to provide means for normally supporting both the time-imprinting and the date-imprinting type faces above the base of the stamp. Further objects of our invention will appear from the following specification and from the accompanying drawings, in which:

Figure "1" is a front elevation of a time stamp embodying our invention.

Fig. "2" is a rear elevation of the same.

Fig. "3" is an enlarged vertical section through the stamp along the line 3—3 of Fig. 6.

Fig. "4" is a bottom view of the stamp.

Fig. "5" is a view of the inside of the rear face of the stamp and of the dater mounted thereon.

Fig. "6" is an enlarged fragmentary transverse section through the stamp.

Fig. "7" is an enlarged vertical section through the hour and minute-impressing means and the parts associated therewith.

While our invention may be embodied with substantially equal facility in a variety of types, of stamps, it is particularly adapted for hand stamps operated by pressure on a handle 1 and normally resting on the type face of a graduated dial 2 supporting a metal plate 3, said dial and plate being preferably separated by a cushion 4 of resilient material, such as soft rubber. Mounted on the plate 3 are vertical posts 5 projecting through perforations in a horizontal partition 6 positioned at a sufficient distance above the lower edge of a casing 7 to allow the plate 3 also to be housed by the vertical sides of this casing. Vertically positioned within the casing 7 and preferably rigidly secured to the latter, is a watch movement 8 presenting its face 9 through a glass dial 10 in the forward face of the casing, which movement may be wound and set by a bezel 11 projecting beyond one side of the casing.

Rotatably mounted on the horizontal partition 6 is a vertical cylinder 12 carrying at its lower end an hour-indicating pointer

13, which latter is preferably separated from the cylinder proper by a soft rubber cushion 14. The cylinder 12 is connected by suitable gears, 15—16—17—18 to a shaft, 5 19, rotatably mounted within the cylinder and supporting at its lower end a disk 20, carrying a minute indicating pointer 21, the latter being spaced from the disk 20 by a cushion 22. The shaft 19 is connected to 10 the minute-hand staff of the watch movement by links 24 which links are so interlocked as to permit relative longitudinal movement thereof while being relatively substantially rigid rotationally of each other.

15 The pointers 13 and 21 are both disposed within either the dial 2 or the cushion 4, the plate 3 being equipped with a perforation corresponding with the bore of the said dial and cushion, as shown in Fig. 3. Surrounding the posts 5 and interposed between the 20 plate 3 and the partition 6 are springs 25 which afford a cushioned support for the said plate, together with the casing, watch movement, etc., carried by this plate. Upon 25 depressing the handle 1, to depress the casing (and therefore the partition and the said indicators), the springs 25 are compressed and the said indicators may be forced downward into the same plane with 30 the dial 2, so that this dial together with the hour and minute-indicators may be simultaneously imprinted on any suitable object, then, on releasing a pressure upon the handle 1, (which handle is carried by the casing 35 7), the springs 25 will raise the partition 6 and the casing mounted on the latter, and in doing so will again raise the indicators 13 and 21 above the plane of the dial on the base of the stamp. During the downward pressing, the thrust upon the indicators is taken by a flange 26 secured to the partition 6, so that it will not be transmitted to the watch movement, any slight relative motion of the cylinder 12 with respect to the partition 6 being taken up by 40 the longitudinal lost motion between the successive links 24.

For imprinting the date simultaneously with the hour and minute indicators, we 50 mount within the casing a so-called band-dater presenting active date elements through alined openings in the plate 3 and the partition 6, these active date elements 31 being in the same plane with the type 55 faces of the time-impressing indicators. To support the band-dater most conveniently, we preferably secure the same to a rear-side 27 detachably fastened to the casing, which side has slots 28 through which the notched 60 wheels 32 of the dater project, thereby affording access to these wheels for changing the portions of the respective date bands presented in the same plane with the hour and minute indicators. By removing the 65 detachable rear side 27 of the casing, access

is also had to the regulating lever 30 of the movement, and to the entire interior of the casing for oiling the various moving parts.

It will be obvious from the above that the movement maintains all of its staffs horizontally for an even distribution of the wear on the respective ends of these staffs and on the bearings for them; that the flexible shaft connecting the movement with the time-impressing means (shown in the drawings as composed of link elements), will relieve the movement of the strains placed upon the same in the time stamp constructions heretofore in use; that the date may be changed much more quickly and easily than with the older methods, and without handling any loose type elements; that the appliance as a whole forms a neat desk clock which may either be kept standing on its inking pad or on its back, and which presents a dial enabling the time indication of the stamp to be instantly checked at any time; that the movement may be wound and set as easily as an ordinary watch, and that the entire appliance involves only simple elements and inexpensive construction. Moreover, an ordinary watch movement may be used by simply omitting the usual casing, fastening the movement to the casing of the stamp and coupling one end of the flexible link connection to the minute hand arbor. If additional matter besides the time and date indication is to be imprinted, the same can readily be mounted on the movable plate 3, as shown at 29 in Fig. 4. However, while we have shown and described the time stamp of our invention as including a series of jointed links 24, and as having thrust on the hour-impressing element taken up by a thrust flange 26, we do not wish to be limited to such particulars of our construction, it being evident that the same may be modified in many ways without departing from the spirit of our invention.

We claim as our invention:

1. In a time stamp, the combination of a supporting member, a dial plate yieldably carried thereby and normally projecting below the bottom of said supporting member, time impression means carried by the supporting member and normally disposed above the said dial plate, a watch movement carried by the supporting member with the minute-hand arbor thereof disposed parallel to the plane of said dial plate, and a plurality of relatively connected links rotationally connecting said arbor with the time impression means, the connections between the ends of adjacent links permitting relative longitudinal movement thereof, thereby preventing a shock upon the time impression means from being transmitted to the said arbor.

2. A time stamp including a carrier, a time dial and a plurality of date bands all

carried by the carrier and all projecting below the casing to present figures disposed in a common plane, a casing slidably and yieldingly supported by the carrier, time-indicating pointers mounted on the carrier but normally disposed above the said plane, a watch movement fast upon the casing, and a plurality of links operatively connecting said movement and said pointers, said links having lost motion between them to permit a relative vertical movement of the casing with respect to the carrier.

3. A time stamp including a casing having an aperture at one side, a watch movement mounted in the casing and presenting its face through said aperture, time impression means horizontally disposed near the bottom of said casing, and a flexible shaft connecting the watch movement with the time impression means.

4. A time stamp including a pair of time-impression members connected to a common vertical shaft and presenting type faces in a common horizontal plane, a support in which said shaft is rotatable, a watch movement fast upon said support and having the staffs of the said movement horizontally disposed, and flexible means operatively connecting said shaft with the watch movement, the said horizontal disposition of the staffs causing any shock due to the operation of the stamp in a vertical direction to be borne equally by the bearings supporting the respective ends of the said staffs.

5. A time stamp including a pair of time-impression members connected to a common vertical shaft and presenting type faces in a common horizontal plane, a support in which said shaft is rotatable, a watch movement fast upon said support and having the staffs of the said movement horizontally disposed, and flexible means operatively connecting said shaft with the watch movement, and a compressible support for all of the aforesaid elements, said compressible support equipped on its bottom with a dial-imprinting face and normally maintaining the said faces of the time-impression members above said dial-imprinting face.

6. In a time stamp, the combination of a casing open at one end and having an aperture at its other end, a watch movement mounted in the casing and presenting a face visible through said aperture, a door normally closing the other end, and date-impression means carried by said door, said door being detachable for simultaneously affording access to the date-impression means and the watch movement.

In testimony whereof we have signed our names in presence of two subscribing witnesses.

ALLAN L. DANIELLS.  
LOUIS E. FORNES.

Witnesses:

ALBERT SCHEIBLE,  
ALFRED C. HOFFMANN.

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