L. J. MELIND.

TIME STAMP.

APPLICATION FILED APR. 23, 1919.

1,411,290. Patented Apr. 4, 1922.

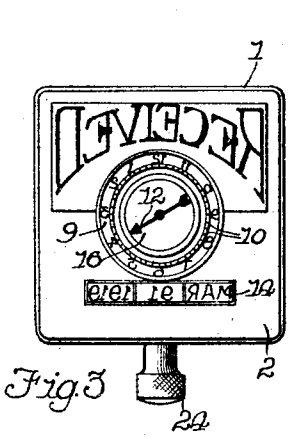


Fig. 3

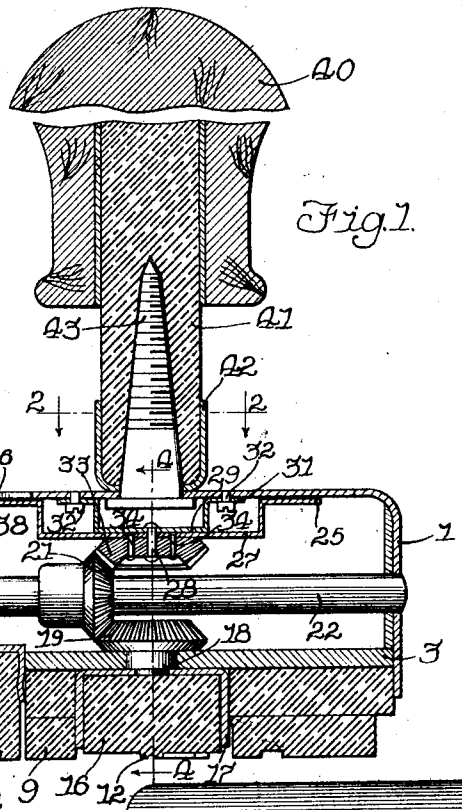


Fig. 1

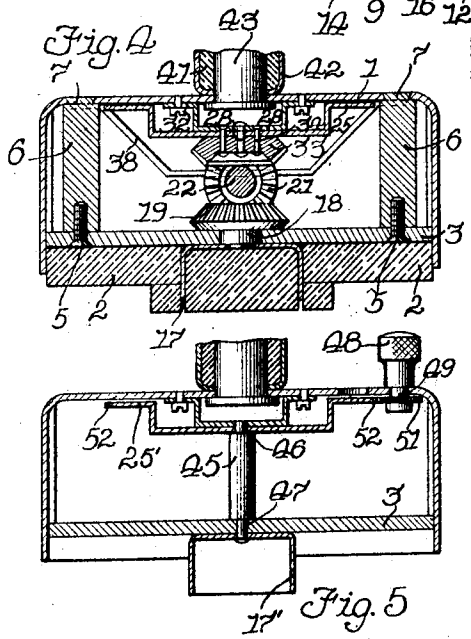


Fig. 4

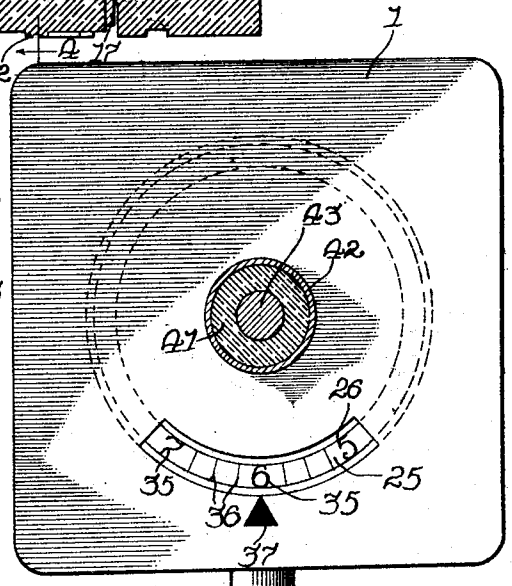


Fig. 2

Fig. 5

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TIME STAMP.

1,411,290. Specification of Letters Patent. Patented Apr. 4, 1922.

Application filed April 23, 1919. Serial No. 292,110.

To all whom it may concern:

Be it known that I, LOUIS J. MELIND, 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 drawings, forming a part of this specification.

My invention relates to time stamps and more specifically to time recording hand stamps used for recording the hour and date of receipt of letters, packages, etc.

The present invention is an improvement upon the form of time recording stamp disclosed in my copending application, Serial Number 248,275, filed August 5th, 1918. The particular improvement of the present form of stamp over that illustrated in my co-pending application resides in the indicating means for visually indicating the setting of the time recording impression means. In this general type of hand stamp the setting of the impression means is accomplished manually through a setting knob or other device on the stamp. In my copending application I have illustrated a novel indicating dial and pointer on the side of the stamp for indicating the setting which has been imparted to the impression means, thereby facilitating the operation of the stamp by avoiding the necessity of inverting the stamp and reading the reversed characters on the impression surface. I find, however, that there is a tendency for the hand of the operator to slightly obscure this indicating dial when operating the setting knob, and furthermore, this indicating dial, being disposed on the side of the stamp, is of such small size that it cannot be read with facility.

The primary object of my invention is, therefore, to provide a hand stamp of this type having large and readily visible indicating means for indicating the setting of the impression means. This indicating means is preferably visible from the top of the stamp.

A secondary object of my invention is to provide improved and simplified mechanism for operatively connecting the impression means, the indicating means, and the setting device.

Devices of this class have been greatly hindered in their practical exploitation due to their delicate and expensive mechanism which do not permit sudden jarring or rough usuage, to which such a device is subjected. Fine watch and clock mechanisms, employed to timely set the printing indicator, soon became inoperative. I have found that rigidness of structure together with simplicity manifested themselves as the most important features in order to make this device a practical success. It is a further object of my invention to overcome the above difficulties by providing a positive drive between the indicator dial and printing indicator with a setting connection interposed so as to manually set each individual marking on the printing indicator.

In the accompanying drawing I have illustrated a preferred embodiment of my invention to acquaint those skilled in the art how to practice the same.

Figure 1 is an enlarged sectional view of my improved time stamp;

Figure 2 is a plan view thereof taken on the plane of the line 2—2 of Figure 1;

Figure 3 is a bottom plan view of the same illustrating the impression surface;

Figure 4 is a sectional view taken on the plane of the line 4—4 of Figure 1; and

Figure 5 is a sectional view of a modified form of my invention.

The time stamp comprises a rectangular box-like casing 1 which is open at the bottom for the reception of the printing pad and rubber printing characters which form the impression surface of the stamp. The printing type are backed up by a soft rubber pad 2 which is suitably secured to a plate 3, supported slightly above the open bottom of the casing 1. The margins of the plate 3 bear upon a shoulder formed in the casing 1 by the insertion of two U-shaped sheet metal filler strips about the walls of the casing 1. The plate 3 is held in position by screws 5 threading up into two posts 6—6 which extend down from the top of the casing 1, where they are secured by riveting over the ends thereof as indicated at 7.

Referring to Figure 3, it will be noted that type are provided on the impression surface of the stamp to form the word "Received". It will be obvious that any other word or character suited to the intended utility of the stamp may be provided instead. In the center of the impression sur-

face there is provided a time recording printing dial 9 which consists of a plurality of type numerals disposed in dial formation and arranged to indicate the hours from one to twelve. The hour intervals are sub-divided into quarter hour intervals by the division marks 10. Co-operating with the numerals in the printing dial 9 is a rotatable printing arrow 12 which is adapted to be set by a setting knob on the side of the casing 1, as I shall presently describe. The type 14, representing the day, month and year, are contained in a channel member 15 which is secured to the plate 3 below the time recording dial 9. These type are removable and are changed from day to day in an obvious manner.

The printing arrow 12 is mounted on a circular pad 16 of soft rubber which is contained in an annular cup member 17 in the center of the impression dial 9. The cup member 17 is rotatably supported from the under side of the plate 3 by a shaft or rivet 18 which passes through the plate 3 and is secured to a small bevel gear 19 resting upon the upper side of the plate. This bevel gear meshes with another bevel gear 21 on the transverse shaft 22, the ends of which have bearing support in the sides of the casing 1. One end of the shaft 22 is reduced as indicated at 23, to provide a shoulder for engaging the casing, and this reduced end is extended out through the casing and bears a knurled setting knob 24. It will be apparent that by rotation of this knob any setting may be imparted to the printing arrow 12.

The indicator means for indicating the position of the printing arrow comprises primarily the indicating dial 25, and the arcuate slot 26, which is cut in the top of the casing 1 on the side of the setting knob 24. The indicating dial 25 has a depressed central portion 27 which is pivoted by a pin 28 to a cup 29 depending from the casing 1. The cup 29 has an annular flange 31 which is secured to the top of the casing by small screws 32. A bevel gear 33 is riveted to the under side of the depressed portion 27 by rivets 34, and meshes with the bevel gear on the shaft 22. The indicating dial 25 and gear 33 are rotatably supported from the cup 29 by extending the pivot pin 28 down through the bevel gear 33 and heading it over as indicated.

The indicating dial 25 bears numerals 35 and division marks 36 corresponding to the hour and quarter hour intervals on the printing dial 9. These characters are adapted to be exposed through the arcuate slot 26 in the top of the casing 1, and are intended to co-operate with an arrow head 37 which is stamped and enameled in the surface of the casing 1. By virtue of the exposed location of the indicating means on the top of the casing and the relatively large size of the indicating characters, the indicating means may be conveniently and readily viewed when setting the time stamp. To attain the printing arrow 12 in any adjusted position I have provided a yielding frictional member in the form of a spring bridge 38 arranged within the casing 1 above the transverse shaft 22. This bridge is formed with a V-shaped ridge which embraces the upper periphery of the shaft 22 and acts as a frictional deterrent against idle rotation of this shaft.

The time stamp is provided with a hand grip 40 which has flexible connection with the stamp proper through a rubber stem 41, whereby the stamp is free to adjust itself evenly upon the printing surface. The lower end of the rubber stem 41 is confined in a ferrule 42, and a screw 43 passes up from the casing 1 and threads into this portion of the stem. The upper end of the stem 41 passes freely into a hole provided in the base of the hand grip 40.

In Figure 5 I have illustrated a time stamp embodying the distinguishing features of my invention, but in a more simplified form. In this embodiment the indicator dial 25′ has direct connection with the cup 17′ through a rotatable shaft 45 having reduced ends 46 and 47 which are rigidly secured to the dial 25′ and cup 17′ respectively. The adjusting or setting motion is imparted directly to the indicating dial 25′ through a knob 48 on the top of the casing 1. The knob 48 has a stem 49 which projects into the casing 1 and carries a small spur pinion 51 therein. This spur pinion meshes with spur teeth 52 cut about the periphery of the dial 25′, and it will be apparent that by manipulating the knob 28 the printing arrow and indicating dial are actuated to set the stamp.

I do not intend to be limited to the particular details herein shown and described.

I claim:

1. In a stamp, a casing, a recording impression dial mounted on the bottom of said casing, an impression indicator rotating in said impression dial, an indicating dial in said casing, said indicating dial comprising a disk having dial characters thereon adapted to be exposed through a slot in the top of said casing, a gear connected to said impression indicator, a gear secured to said indicating dial, a setting shaft projecting into said casing, and a gear on said setting shaft meshing with said other gears, said setting shaft manually setting said impression dial for individual impressions made thereby.

2. In a stamp, a casing, a recording printing dial mounted on the bottom of said casing, a rotatable socket member in said printing dial, said socket member carrying a printing indicator co-operating with said

printing dial, a gear attached to said socket, a setting stem projecting into the side of said casing, a gear on said stem meshing with said first mentioned gear, an indicating disk in said casing, said disk having indicating characters thereon adapted to be exposed through a slot in the top of said casing, and a gear on said disk meshing with the gear on said setting stem, said setting stem adapted to be manually operated for the individual markings on said printing indicator.

3. In a stamp, a casing having sides and a top and an open bottom, a plate in said casing, a type pad on said plate having type thereon forming an impression surface, a shaft projecting through said plate, a cup carried on the lower end of said shaft, said cup containing a printing indicator co-operating with a printing dial on said impression surface, a bevel pinion on the upper end of said shaft, a setting shaft extending transversely through said casing, a bevel pinion on said latter shaft meshing with said first bevel pinion, an indicating disk pivoted to said casing adjacent the top thereof, a bevel pinion secured to said indicating disk and meshing with said second bevel pinion, and indicating characters on said indicating disk adapted to be exposed through a slot in the top of said casing, the markings on said printing indicator adapted to be individually presented to the impression surface by manual operation of said setting shaft.

In witness whereof, I hereunto subscribe my name this 2nd day of April, A. D. 1919.

LOUIS J. MELIND.