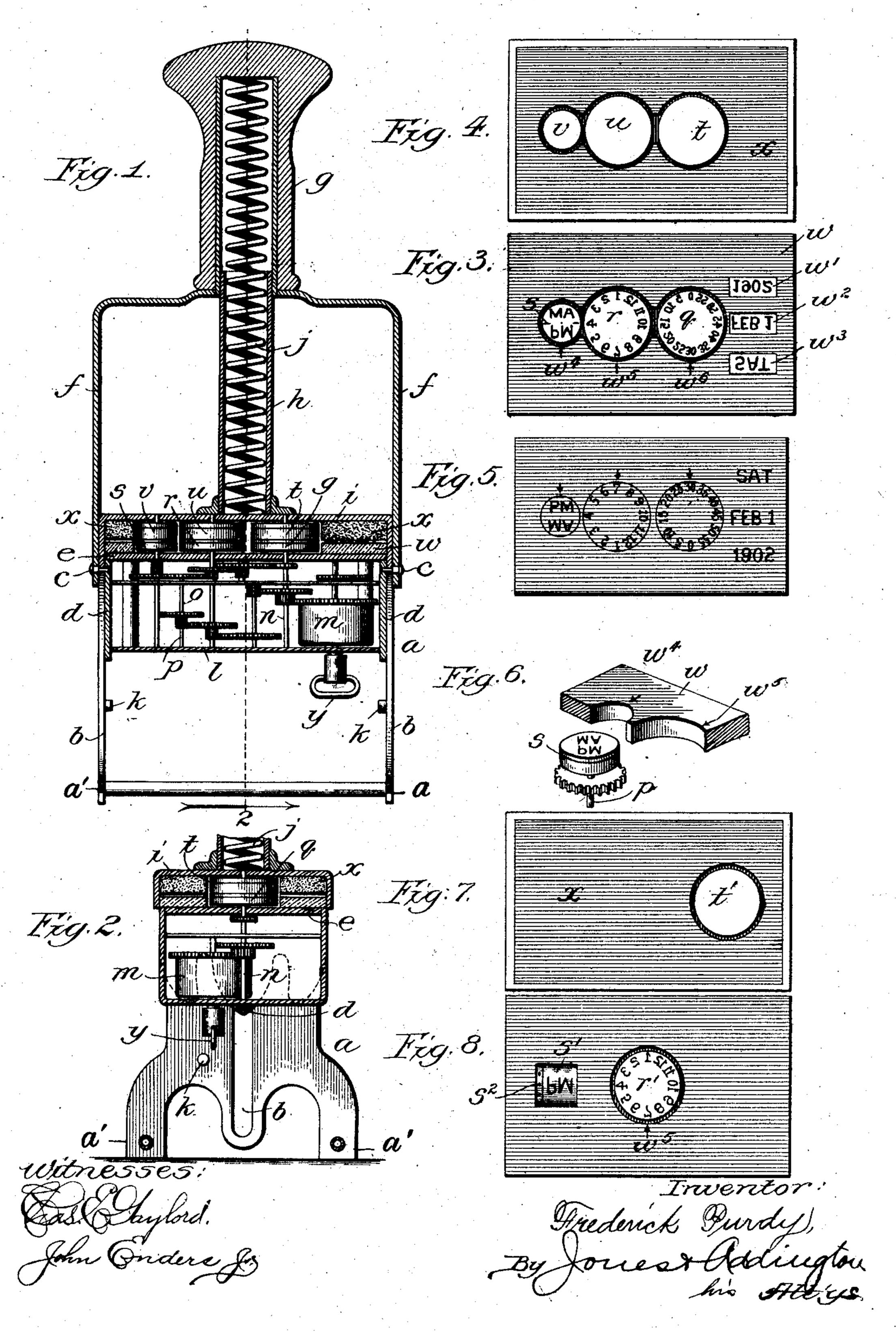
F. PURDY.
TIME STAMP.
APPLICATION FILED APR. 24, 1903.



UNITED STATES PATENT OFFICE.

FREDERICK PURDY, OF CHICAGO, ILLINOIS.

TIME-STAMP.

No. 882,165.

Specification of Letters Patent.

Patented March 17, 1908.

Application filed April 24, 1903. Serial No. 154,057.

. 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 ! 5 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 10 of this specification.

My invention relates to improvements in

automatic time stamps.

It is among the objects of this invention to provide a stamping device adapted to print 15 time, in which proper contact of the impression device or mechanism with the surface being stamped will be insured without the use of a platen, so that the size of the article which may be stamped thereby is unlimited, 20 and which will be automatically inked.

Another object of the invention is to construct an inking device in such a manner that it will not interfere with the movement of the means for varying the character of the 25 impression adapted to be made by the stamp.

There are various other objects of the invention which become apparent from the following description of one form of my invention which has been worked out for prac-30 tical purposes. This form of my invention is illustrated in the accompanying drawing,

in which:

Figure 1 is a central, longitudinal vertical sectional view of a hand stamp embodying 35 the features of my invention; Fig. 2 is a transverse vertical sectional view taken upon line 2-2, Fig. 1; Fig. 3 is a face view in detail of the stamp; Fig. 4 is a like view of my improved pad; Fig. 5 is a view of an impres-40 sion made by the stamp shown in Fig. 3; Fig. 6 is a perspective view in detail showing the stationary and movable pads and the manner of connecting the movable stamp with the latter; Fig. 7 is a face view of a 45 modified form of inking pad showing one portion stationary and another revoluble; and, Fig. 8 is a face view of a modified form of stamp mechanism in which a single dial is shown together with a cylinder having the 50 characters A. M. and P. M., thereon, which cylinder is intended to be moved manually.

Referring to the drawings, therein is represented a supporting base or frame a of any suitable form having the gage parts a' which bear upon the surface being stamped, when an impression is being made, which frame is

provided with the vertical slots b, at the respective ends, through which pivot pins or trunnions c, c, Fig. 1, are projected into vertical end pieces d, d, which are attached to or 60 integral with a stamp supporting plate e. The trunnions c are connected with the branching arm f, rigidly attached to a handle g, having a hollow tube therein fitted to telescope with a tube h attached to the hori- 65 zontal portion or casing plate i of the frame, into which tube is inserted the spiral spring j which serves to lift the handle and thereby hold the stamp against the inking-pad which is located beneath the plate i, as hereinafter 70 described. The ends d constitute cams with curved slots adapted to engage with studs k upon the frame plates a, to cause the rotation of the stamp for the purpose of making the impression.

Inclosed within a casing 1 is a clock train in which m represents the spring inclosing barrel, n the minute arbor, o the hour arbor and p an arbor which rotates once in twentyfour hours. Mounted upon the ends of said 80 arbors respectively, which projects through the plate e, are stamp disks q, r, s, respectively, which are adapted to rotate with said arbors. The disk q is provided with figures representing minutes, the disk r with char- 85 acters representing hours, and the disk s with the characters A. M. and P. M., respectively, arranged diametrically opposite each other. Circular pads, t, u, v, respectively, of absorbent material, are pivotally attached to the 90 plate i opposite to and coincident with said disk s or time stamp q, r, s, respectively, with which said pads are in contact when the stamp is in its normal or inking position. Attached to the plate e is a stamp w, upon 95 which are placed characters representing the year, month and day of the week, as shown at w^1 , w^2 and w^3 respectively, Fig. 3 and upon which may also be placed such characters as may be desired. An ink pad x, Figs. 1, 2 100 and 4 is attached to the plate i, which pad has circular openings formed therein for the reception of the revoluble pads t, u, v.

Upon the stamp w, as shown in Fig. 3, are indicating arrows w^4 , w^5 , w^6 , which designate 105 the respective characters from which the reading of the printed matter made by the stamp is to be read. Fig. 5 shows the printed impression made by the stamp, which would indicate that the impression was made 110 on Saturday, February 1st, 1902, at seven o'clock and thirty minutes p. m. The stamp

is, of course, operated by depressing the handle which causes a half revolution of the stamping mechanism upon the pivots c, which causes the stamp to be brought into a 5 printing position upon the surface provided to receive the impression, when, upon releasing the handle, the reverse action takes place caused by the spring j, and the stamp is returned to its normal inking position. A 10 winding stem y is provided for winding the clock-train.

While I prefer to employ revoluble pads in conjunction with the several time printing elements, it is not essential that more than 15 the element which prints the minute should be provided with such a pad. I have, accordingly in Fig. 7 shown a construction in which but a single revoluble pad t' is employed in conjunction with the stationary 20 pad x, said pad t' being located opposite the minute dial. Owing to the fact that the other printing elements move so slowly and are so close to the source of power, the friction of the contact between them and a plain 25 immovable pad is so slight that it need not be taken into account. It will be noted that the casing of the time stamp normally closes and shields the horologic motor and the impression means, thus protecting the same 30 against dust, dirt and injury.

It is obvious that for the purpose of a time stamp it is not necessary that more than one of the time printing elements should be moved automatically, viz., that actuated by 35 the hour-hand arbor. Such a construction is shown in Fig. 8, in which r' represents the hour dial which is moved automatically, while s' represents a cylinder having the characters A. M. and P. M. thereon. The 40 axis of said cylinder is at right angles to that of the dial r' and it is provided with indentations s², which enable it to be manually rotated by means of a pointed instrument. While it is obvious that such a device might 45 be used to advantage it is apparent that it lacks the nicety of precision of the preferred construction above described.

The device which I have designed may be carried from place to place and impressions 50 made therewith in rapid succession. The accuracy of each impression is insured by the gage parts which guide the impression mechanism into proper engagement with the surface being stamped. By providing the 55 gage parts instead of a platen to insure the accuracy of the impressions, the size of the article which may be stamped is unlimited.

As all the coöperating elements are contained in a unitary structure which is light and compact, this stamp may be readily moved from place to place for use, and since the impression mechanism is automatically inked, the impressions may be produced in rapid succession.

only one of the ways in which I contemplate inking the device. It is manifest that all of the parts of the device, which I have disclosed for the purpose of revealing my invention, are susceptible of various modifications 70 which will fall within the scope of my invention and are intended to be within the purview of the claims appended hereto.

Instead of varying the character of the impression adapted to be made by the im- 75 pression mechanism by the stamp disks shown herein, I may employ type wheels or other means, all of which I consider fall within the scope of the broad claims of this application.

In an application filed June 14, 1902, and renewed April 24, 1903, Serial No. 154,187, I have shown and described a form of time stamp wherein the horologic motor is mounted stationarily upon the frame and the im- 85 pression mechanism is movable therefrom in making an impression; the time stamp of the present application is one species embodying the general principle underlying the species in said application above mentioned 90 and I have made said application the broad case and have inserted in addition to claims. to the species therein disclosed, generic claims covering the species herein illustrated as well as the species disclosed in said above 95 mentioned application and it will, therefore, be understood that the present application so far as said generic claims are concerned is subsidiary to the application above mentioned.

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

1. In a portable stamping device, in combination an impression mechanism movable 105 to make an impression and having means for varying the character of the impression adapted to be made thereby, a frame supporting said impression mechanism and having gage parts arranged to bear upon the sur- 110 face to be stamped and permit said impression mechanism to pass between the same so as to insure proper contact of said impression mechanism with said surface in making an impression, a horologic motor 115 mounted to move with said impression mechanism and connected with said impression mechanism to operate the same, and a pad carried stationarily on said frame and arranged to engage and thereby automatically 120 ink said impression mechanism.

2. In a stamping device, in combination, an impression mechanism movable to make an impression and having means for varying the character of the impression adapted to 125 be made thereby, a frame supporting said impression mechanism, a horologic motor for operating said means, said motor being movable with said impression mechanism, means The pads herein shown are illustrative of | for revolving said impression mechanism 130

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when the device is operated to make an impression so as to bring the face of said impression mechanism into engagement with the surface to be stamped, and means for 5 automatically inking said impression mechanism without interfering with the progressive movement thereof and without interfering with the direct engagement of said impression mechanism with the surface to

10 be impressed.

3. In a stamping device, in combination, an impression mechanism movable to make an impression and having means for varying the character of the impression adapted to 15 be made thereby, a frame supporting said impression mechanism, a horologic motor connected with said means to operate the same and movable with said impression means, means for revolving said impression 20 mechanism when the device is operated to make an impression so as to bring the face of said impression mechanism into engagement with the surface to be stamped, and means for automatically inking said im-25 pression mechanism without interfering with the progressive movement thereof, and without interfering with the direct engagement of said impression mechanism with the surface to be impressed.

4. In a stamping device, in combination, an impression mechanism movable to make an impression and having means for varying the character of the impression adapted to be made thereby, a frame supporting said 35 impression mechanism, a horologic motor connected with said means to operate the same and movable with said impression mechanism, a pad for inking said impression mechanism and having movable parts to en-40 gage said means, and means for revolving said impression mechanism when the device is operated to make an impression so as to bring the face of said impression mechanism into engagement with the surface to be

45 stamped.

5. In a stamping device, in combination, an impression mechanism movable to make an impression and having means movable in a horizontal plane for varying the character 50 of the impression adapted to be made thereby, a frame supporting said impression mechanism, a horologic motor connected with said means to operate the same and mounted to move with said impression mech-55 anism, pads movable in horizontal planes and engaging said means to ink the same, and means for revolving said impression mechanism when the device is operated to make an impression so as to bring the face 50 of said impression mechanism into engagement with the surface to be stamped.

6. In a portable stamping device, in combination, an impression mechanism movable to make an impression and having means for 65 varying the character of the impression

adapted to be made thereby, a frame supporting said impression mechanism, a horologic motor also mounted upon said frame and connected with said means to operate the same and movable with said impression 70 mechanism, means arranged above said impression mechanism to automatically ink the same, and means for revolving said impression mechanism when the device is operated to make an impression so as to bring the face 75 of said impression into engagement with the

surface to be stamped.

7. In a portable stamping device, in combination, an impression mechanism, movable to make an impression and having means for 80 varying the character of the impression adapted to be made thereby, a frame supporting said impression mechanism and having gage parts arranged to bear upon the surface to be stamped and permit said im- 85 pression mechanism to pass between the same so as to insure proper contact of said impression mechanism with said surface in making an impression, a horologic motor connected with said means to operate the 90 same and movable with said impression mechanism, an inking pad carried by said frame above said impression mechanism and normally in engagement with the face thereof, and means for revolving said impression 95 mechanism when it is moved to make an impression so as to bring the face thereof into engagement with the surface to be stamped.

8. In a portable stamping device, in combination, an impression mechanism movable 100 to make an impression and having means for varying the character of the impression adapted to be made thereby, a frame supporting said impression mechanism, a horologic motor mounted to move with said impres- 105 sion mechanism and connected with said means to operate the same, a pad arranged above said impression mechanism and normally engaged by the face thereof, and means for revolving said impression mech- 110 anism when the device is operated to make an impression so as to bring the face of said impression mechanism into engagement with

the surface to be stamped.

9. In a portable stamping device, in com- 115 bination, an impression mechanism movable to make an impression and having means for varying the character of the impression adapted to be made thereby, a frame supporting said impression mechanism, a horo- 120 logic motor mounted upon said frame to move with said impression mechanism, a pad for inking said impression mechanism arranged above the same and having movable parts to engage said means, and means for 125 revolving said impression mechanism when the device is operated to make an impression so as to bring the face of said impression mechanism into engagement with the surface to be stamped.

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10. In a portable stamping device, in combination, an impression mechanism movable to make an impression and having means for varying the character of the impression 5 adapted to be made thereby, a frame supporting said impression mechanism, a horologic motor mounted to move with said impression mechanism in making an impression and connected with said means to operate 10 the same, an inking pad arranged above said impression mechanism and normally in engagement with the face thereof, said pad having movable parts to engage said means and move in unison therewith, and means 15 for revolving said impression mechanism when it is moved to make an impression so as to bring the face thereof into engagement with the surface to be stamped.

11. In a portable stamping device, in com-20 bination, an impression mechanism movable to make an impression and having means movable in a horizontal plane to vary the character of the impression adapted to be made thereby, a frame supporting said im-25 pression mechanism, a horologic motor for operating said means and movable with said impression mechanism, an inking pad arranged above said impression mechanism and normally in engagement with the face 30 thereof, said pad having parts movable in a horizontal plane to engage said means and move in unison therewith, and means for revolving said impression mechanism when it is moved to make an impression so as to 35 bring the face thereof into engagement with

the surface to be stamped. 12. In a portable stamping device, in combination, an impression mechanism movable to make an impression and having means for 40 varying the character of the impression adapted to be made thereby, a frame supporting said impression mechanism and having gage parts arranged to bear upon the surface to be stamped and permit said impression 45 mechanism to pass between the same so as to insure proper contact of said impression mechanism with said surface in making an impression, a horologic motor mounted to move with said impression mechanism in 50 making an impression and connected with said means to operate the same, an inking pad arranged above said impression mechanism and normally in engagement with the face thereof, and means for revolving said 55 impression mechanism when it is moved to make an impression so as to bring the face thereof into engagement with the surface to be stamped.

13. In a portable stamping device, in com-60 bination, an impression mechanism movable to make an impression and having means for varying the character of the impression adapted to be made thereby, a frame supporting said impression mechanism and hav-65 ing gage parts arranged to bear upon the sur-

face to be stamped and permit said impression mechanism to pass between the same so as to insure proper contact of said impression mechanism with said surface in making an impression, a horologic motor mounted to 70 move with said impression mechanism in making an impression and connected with said means to operate the same, an inking pad arranged above said impression mechanism and normally in engagement with the 75 face thereof, means for revolving said impression mechanism when it is moved to make an impression so as to bring the face thereof into engagement with the surface to be stamped, a handle for moving said im- 80 pression mechanism into engagement with the surface to be stamped, and a spring for returning said impression mechanism to its initial position after the impression has been made.

14. In a time stamp, the combination with an impression mechanism having parts adapted to move relatively to other parts of the impression mechanism to vary the character of the impression adapted to be made 90 thereby, of a pad for inking said impression mechanism, provided with one or more parts adapted to be engaged and moved coincident with the progressive movement of said impression mechanism by the movable part or 95 parts thereof.

15. In a device of the character described, the combination with an impression mechanism having a plurality of revoluble means for varying the character of the impression 100 adapted to be made thereby, of a mechanism for operating said means, and an inking pad having movable parts for engaging said revoluble means and adapted to be moved thereby coincident with the progressive movement 105 thereof.

16. In a portable stamping device, in combination, an impression mechanism movable to make an impression and having means for varying the character of the impression 110 adapted to be made thereby, a frame supporting said impression mechanism, a horologic motor mounted upon said frame and connected with said means to operate the same, and a pad suitably associated with 115 said impression mechanism to ink the same and having movable parts to engage said means and adapted to be moved thereby coincident with the progressive movement thereof.

17. In a device of the character described, the combination with an impression mechanism having means for varying the character of the impression adapted to be made thereby, of a mechanism for automatically actuat- 125 ing said means, and a freely movable inking pad for said impression mechanism adapted to engage and to be moved by said first mentioned means coincident with the progressive movement thereof.

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18. In a device of the character described, the combination with a movable impression mechanism having means for varying the character of the impression adapted to be 5 made thereby, of a motor for actuating said means, and means freely mounted upon a stationary support for inking said impression mechanism and adapted to be moved by said first mentioned means coincident with the

10 progressive movement thereof.

19. In a device of the character described, the combination with an impression mechanism having means for varying the character of the impression adapted to be made there-15 by, of mechanism for operating said means, an inking pad with which said mechanism is adapted to engage, said pad being freely mounted and adapted to engage and be moved by said means coincident with the 20 progressive movement thereof.

20. In a device of the character described, the combination with an impression mechanism having means for varying the character of the impression to be made thereby, of a 25 mechanism for automatically operating said means, and an inking pad freely journaled on a stationary support and adapted to be engaged and moved by said means coincident with the progressive movement thereof.

30 21. In a device of the character described, the combination with an impression mechanism having a plurality of means for varying the character of the impression adapted to be made thereby, of mechanism for auto-35 matically operating said means, and a plurality of freely mounted pads one for inking each of said plurality of means and movable coincident with the progressive movement thereof.

22. In a device of the character described, the combination with an impression mechanism having a plurality of revoluble means for varying the character of the impression to be made thereby, of a mechanism for operating 45 said means, and an inking pad for each of said means loosely journaled on a stationary support and adapted to be engaged and

moved by said means.

23. In a device of the character described, 50 the combination with a movable section and a stationary section, an impression mechanism having means for automatically varying the character of the impression adapted to be made thereby, carried by said movable sec-55 tion, and a freely mounted inking pad for said impression mechanism carried by said stationary section and adapted to be engaged and moved by movable parts of said impression mechanism coincident with the progres-60 sive movement therefor, said inking pad being adapted to be separated from the impression mechanism when the movable part is operated to make an impression.

24. In a device of the character described, 65 the combination with a movable section and 1

a stationary section, of an impression mechanism having means for automatically varying the character of the impression adapted to be made thereby carried by said movable section, a freely mounted inking pad carried 70 by said stationary section adapted to normally engage a movable part of said impression mechanism, said pad being journaled to move coincident with the progressive movement of the means for varying the character 75 of the impression when said means is in contact therewith.

25. In a time stamp, the combination with a frame having a horizontal table, of a pad mounted upon the underface of said table, a 80 revolving casing carrying a horologic motor and the impression mechanism actuated thereby, said impression mechanism being adapted to normally engage said pad, and means for revolving said casing with its con- 85 tained motor and impression mechanism in

making the impression.

26. A tumbler time stamp comprising a frame, a horologic motor, impression means operated thereby, both said motor and said 90 means being carried by the reversible tumbler mechanism and means for automatically inking said impression means without interfering with the progressive movement thereof and without interfering with the direct 95 engagement of said impression mechanism

with the surface to be impressed.

27. A tumbler time stamp comprising a frame, a horologic motor and impression means operated thereby, both said motor 100 and said means being carried by the reversible tumbler mechanism, and automatic inking means for inking said impression mechanism without interfering with the direct engagement thereof with the surface to be impressed. 105

28. A time stamp comprising a frame having a casing plate, a horologic motor and impression means operated thereby, a casingmovable relative to said casing plate inclosing said motor and carrying said impression 110 means, said impression means being normally faced against and shielded by said casing plate.

29. A time stamp comprising a horizontal frame plate suitably supported, a pad mount- 115 ed on the under face thereof, a casing movable relative to said casing plate, a horologic motor and impression means both carried by said casing, said impression means being normally faced against and engaging said pad. 120

30. A platenless portable self-inking time stamp, comprising a self-contained unitary structure having an open frame with gage parts which engage the surface to be impressed, said open frame permitting an un- 125 obstructed view of said surface and permitting said gage parts to be readily disposed thereon at the desired place, impression mechanism having time controlled elements and adapted to directly engage the surface to 130

be impressed in making an impression, said impression mechanism partaking of a right line movement in approaching said surface whereby the impression mechanism aids the 5 gage parts in smoothing out the surface to be impressed without blurring the impression made thereby, a spring-actuated clock movement for driving the time controlled elements of the impression mechanism wholly carried 10 by said frame and mounted to move with the said impression mechanism, and automatic non-sliding inking means for inking said impression mechanism between the impressions without interfering with the direct en-15 gagement of the impression mechanism with the impressed surface and without interfering with the progressive movement of said time controlled elements.

31. A platenless portable self inking time stamp, comprising a self-contained unitary structure having an open frame with gage parts which engage the surface to be impressed, said open frame permitting an unobstructed view of said surface and permitting said gage parts to be readily disposed thereon at the desired place, impression mechanism having time controlled elements

and adapted to directly engage the surface to be impressed in making an impression, said impression mechanism partaking of a 30 right line movement in approaching said surface whereby the impression mechanism aids the gage parts in smoothing out the surface to be impressed without blurring the impression made thereby, a spring-actuated clock 35 movement for driving the time controlled elements of the impression mechanism wholly carried by said frame and mounted to move with said impression mechanism, and a flat faced non-sliding inking pad for auto- 40 matically inking said impression mechanism between successive impressions without interfering with the direct engagement of the impression mechanism with the impressed surface and without interfering with the pro- 45 gressive movement of said time controlled elements.

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

FREDERICK PURDY.

Witnesses:

M. R. ROCHFORD, EDWIN B. H. TOWER, Jr.