

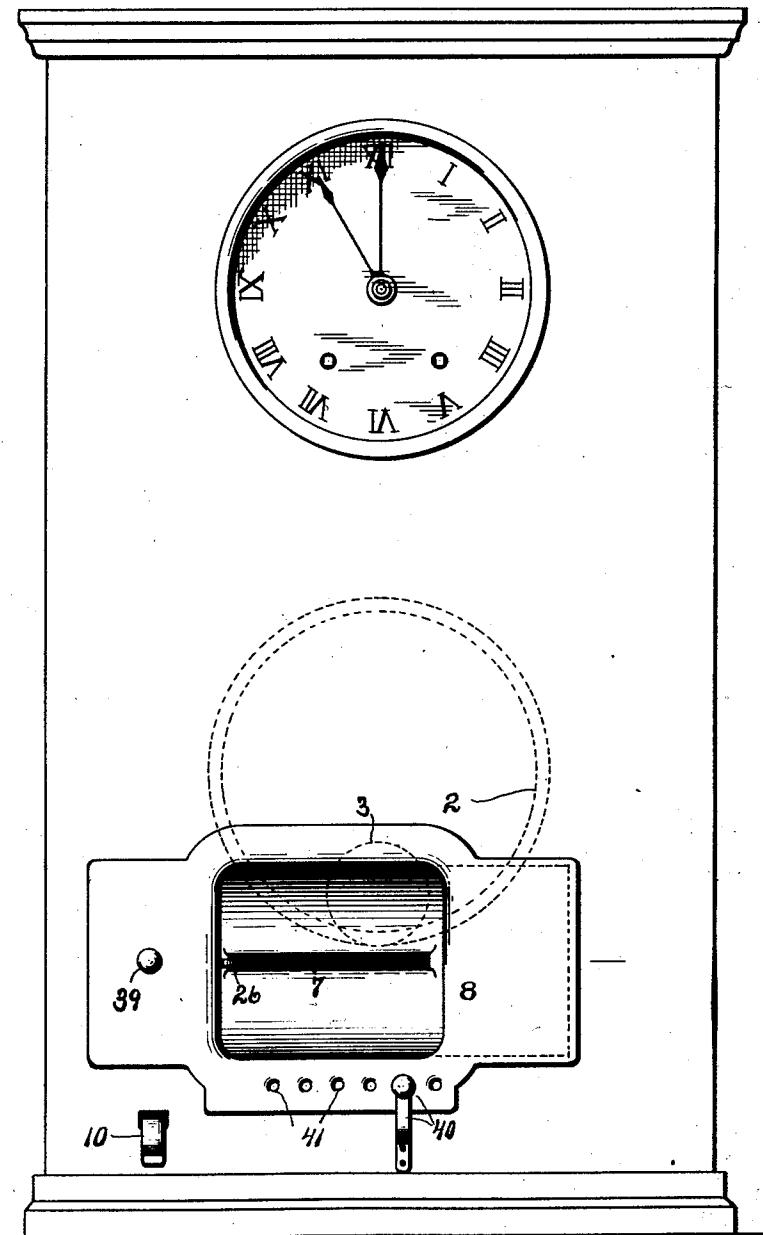
C. E. TOMLINSON.
CARD HOLDER FOR TIME RECORDERS.
APPLICATION FILED FEB. 20, 1912.

1,069,303.

Patented Aug. 5, 1913.

5 SHEETS—SHEET 1.

Fig. 1



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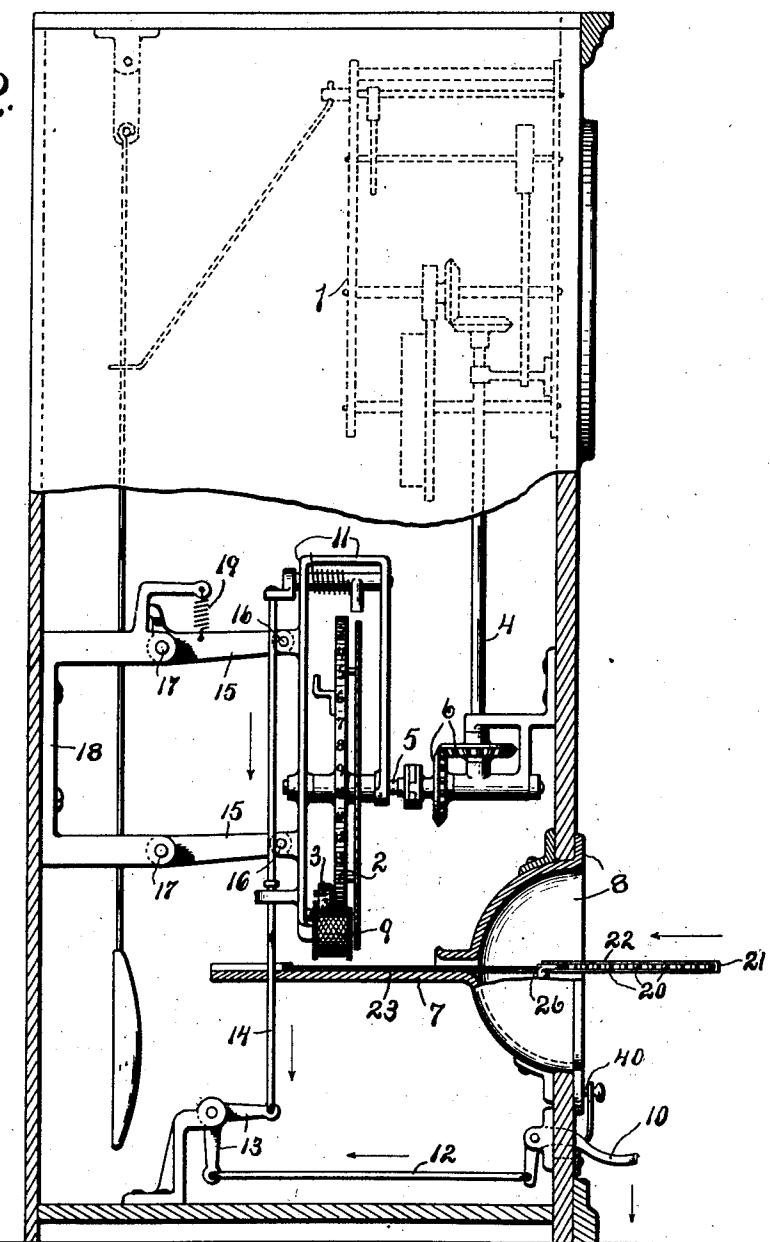
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5 SHEETS—SHEET 2.

Fig. 2.



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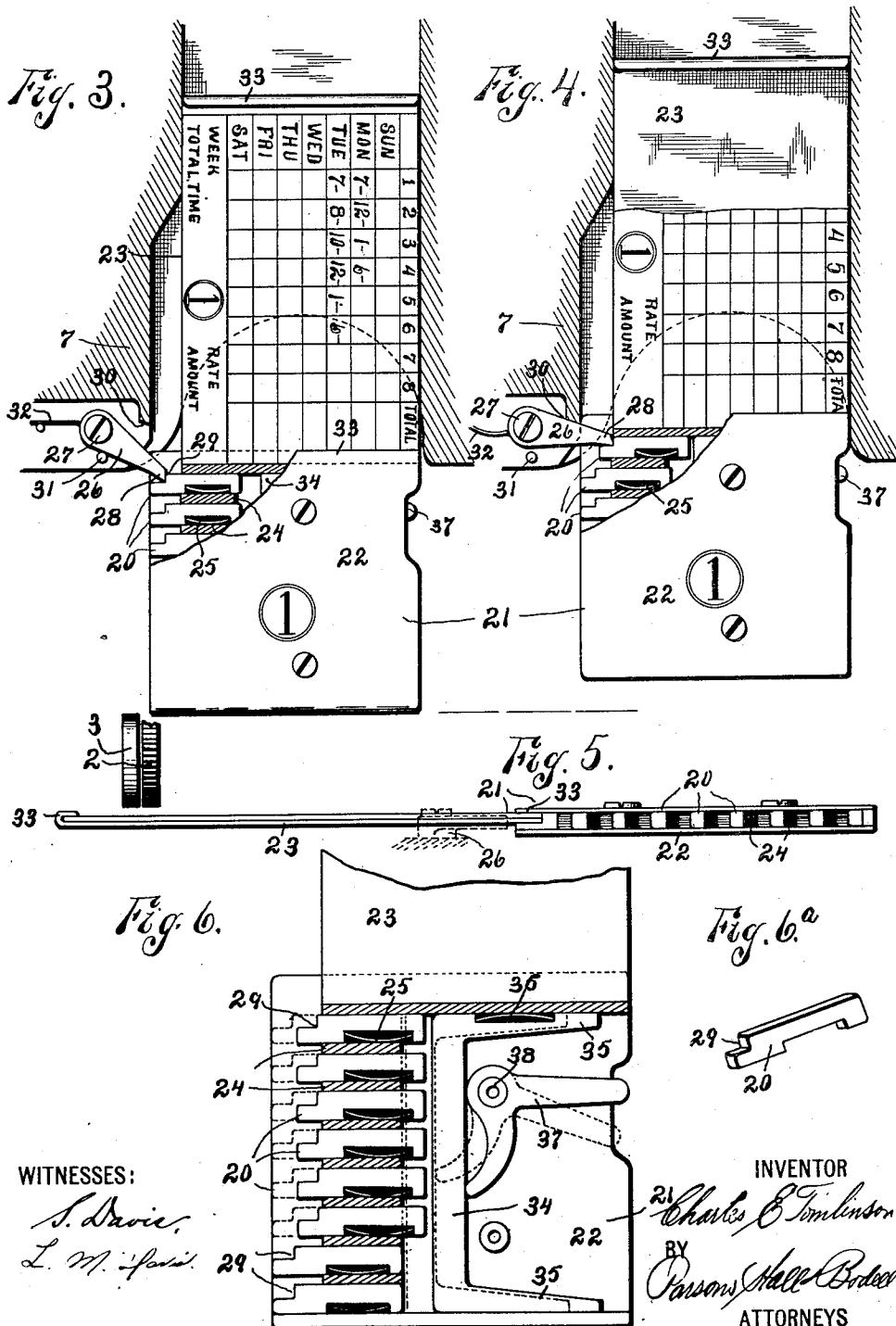
CARD HOLDER FOR TIME RECORDERS.

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6 SHEETS—SHEET 3.



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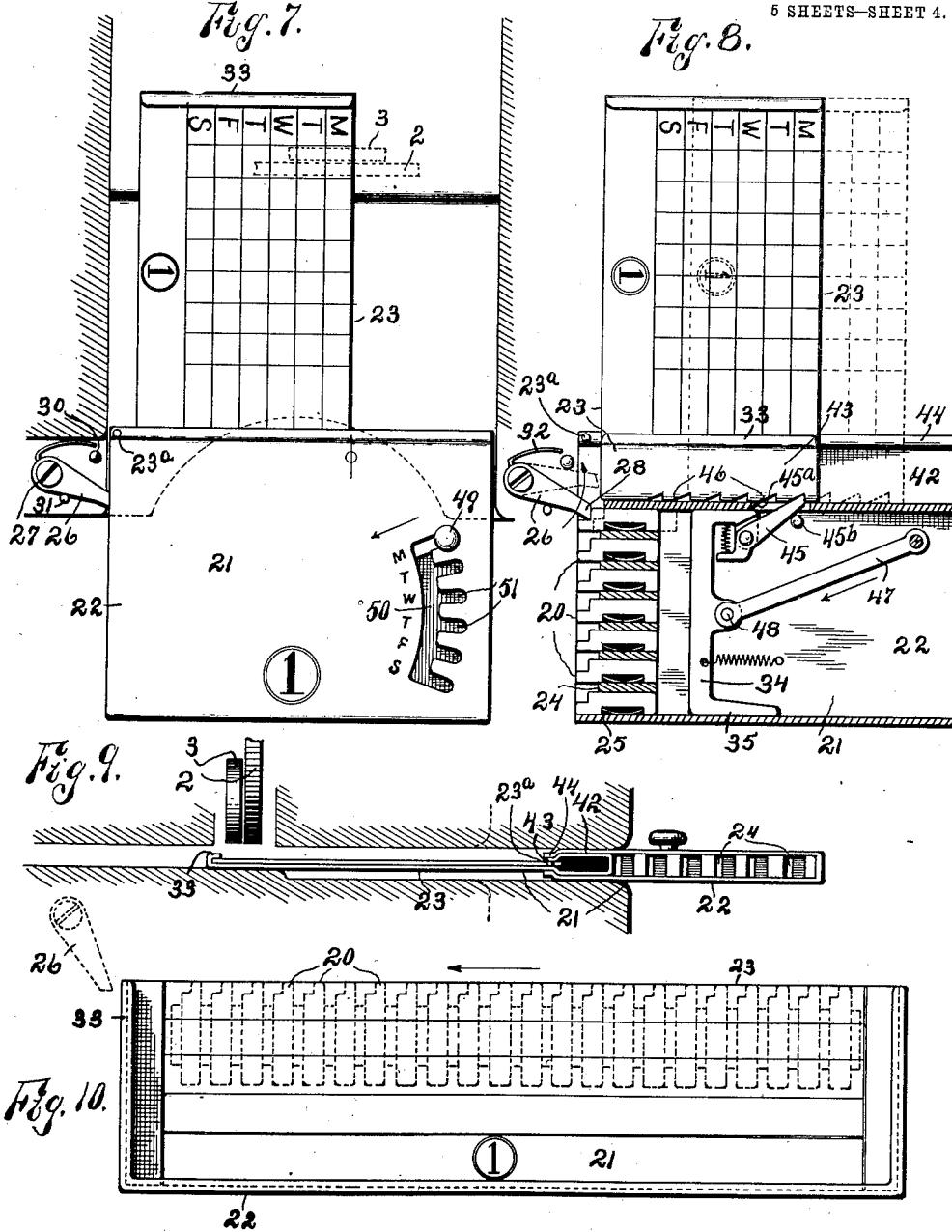
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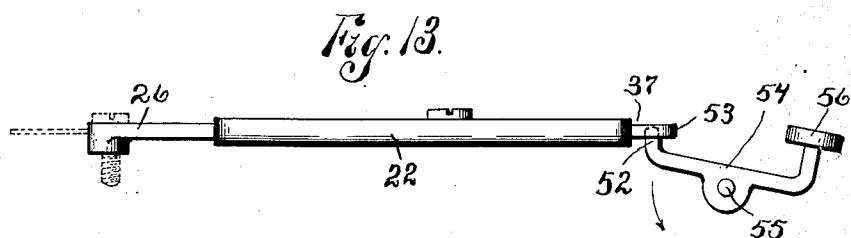
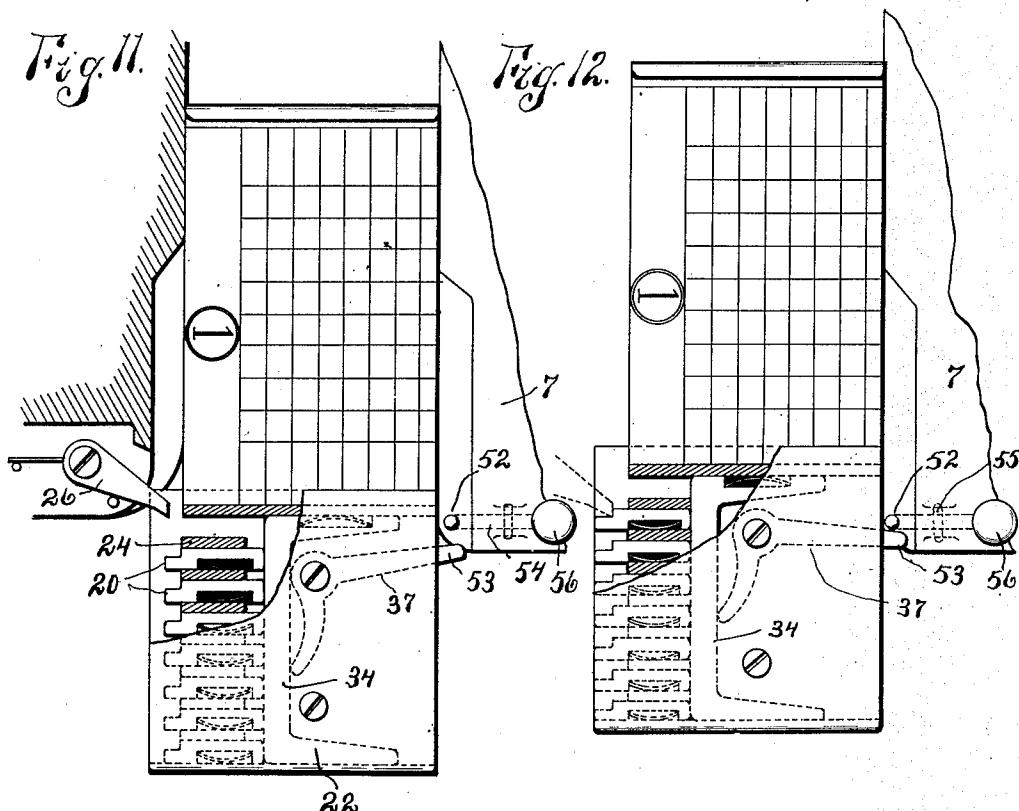
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6 SHEETS—SHEET 5



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UNITED STATES PATENT OFFICE.

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CARD-HOLDER FOR TIME-RECORDERS.

1,069,303.

Specification of Letters Patent.

Patented Aug. 5, 1913.

Application filed February 20, 1912. Serial No. 678,823.

To all whom it may concern:

Be it known that I, CHARLES E. TOMLINSON, of Syracuse, in the county of Onondaga and State of New York, have invented 5 a certain new and useful Card-Holder for Time-Recorders, of which the following is a specification.

This invention relates to recording machines and has for its object a particularly 10 simple and efficient means for automatically controlling the positions of records on the record sheets or cards used in connection with the machine; and it consists in the combinations and constructions hereinafter 15 set forth and claimed.

In describing this invention reference is had to the accompanying drawings in which like characters designate corresponding parts in all the views.

20 Figure 1 is a front elevation of one form of recording machine in connection with which my invention may be used. Fig. 2 is a side elevation, partly in section, of the machine shown in Fig. 1. Figs. 3 and 4 are plan views, partly broken away, of one form of card holder, contiguous portions of the recording machine being shown, the mechanism associated with the holder being shown in its position occupied when the holder is approaching the limit of its movement, in Fig. 3, and when the holder is at the limit of its movement, in Fig. 4. Fig. 5 is an edge view of the card holder, contiguous parts of the recording machine being shown. 25 Fig. 6 is a sectional view through the body of the card holder showing the mechanism therein. Fig. 6^a is a detail view of one of the movable stops associated with each card holder. Figs. 7 and 8 are plan views, similar 30 to Figs. 3 and 4, of a slightly modified form of card holder, the body of the card holder in Fig. 8 being shown in section. Fig. 9 is an edge view similar to Fig. 5, of the card holder seen in Figs. 7 and 8. Fig. 10 is a 35 different form of card holder from that shown in Figs. 3, 4, 7 and 8. Figs. 11 and 12 are plan views similar to Figs. 3 and 4, showing the means associated with the machine for operating the resetting 40 mechanism on the card holder. Fig. 13 is an edge view, looking upwardly, of parts seen in Figs. 11 and 12, parts being omitted.

This invention comprises, a card holder

for the individual record cards of recording machines having card guides, there being 55 one holder for each workman, and such holders being detachable from the machine, and mechanism for automatically determining successive positions of the card holder relatively to the guide, comprising means 60 carried by the card holder.

The recording machine, with which my invention may be used, may be of any desirable form, size and construction and is here shown as a time recorder comprising a 65 time movement 1, a printing element, as type wheels 2, 3 connected to the time movement to be operated thereby by means of shafts 4, 5 connected respectively to the time movement, and to one of the wheels as 2, 70 and miter gears 6 connecting the shafts. The other type wheel 3 is actuated by the wheel 2 connected to the shaft 5, in any well known manner. The shaft 5 is formed of two sections having their contiguous ends 75 connected by a universal clutch of well known construction operable to permit a slight depression of the part of the shaft associated with the type wheel 2 during the printing operation. The universal coupling 80 is composed of three plates having interfitting tongues and grooves extending diametrically of the plates at different angles as will be understood by those skilled in the art. The time recorder is also formed 85 with a guide 7 inclosing a slot for the card holder and having a face plate 8 on the front face of the time recorder, the guide 7 serving as a platen. A suitable inking ribbon 9 is interposed between the type wheels and 90 the platen and the type wheels are movable toward and from the platen to effect the printing of a record on the card held by the card holder in the guide 7. This movement of the type wheels is here shown as effected 95 by means of a handle 10 located on the front side of the machine and connected to the oscillating frame 11 carrying the type wheels, by means of a link 12, angle lever 13 and link 14, the link 12 connecting the 100 handle 10 and one arm of the angle lever 13, and the link 14 connecting the other arm of the angle lever and the frame 11, and being connected to the frame in any suitable manner. The frame 11 is supported by arms 105 15 pivoted at their opposite ends respectively

at 16 and 17 to the frame 11 and to a bracket 18 supported by the rear wall of the casing of the machine. The downward movement of the frame is against the action of the returning spring 19.

5 The means for effecting the movement toward and from the platen forms no part of this invention, and as various means for effecting such movement are well known, further description is thought to be unnecessary.

10 The mechanism for automatically determining the successive positions of the card holder relatively to the guide 7, that is into 15 the guide, comprises a series of successively effective stops 20 carried by each card holder 21 and means preferably associated with the machine and arranged to engage the foremost effective stop and limit the movement 20 of the card holder into the guide and move such stop out of effective position and expose the next stop to the action of such means during the next positioning of the card holder relatively to the guide.

25 As seen in Figs. 3, 4, 7 and 8 each card holder 21 comprises a body 22 and a flat card support 23, the body and card support being flat and arranged in alignment, and the body confining a chamber in which is located the series of abutments 20. These abutments are preferably movable independently of each other, that is, all are not formed on a single movable part, and said abutments 20 are movable in 30 guides 24 extending in a direction at a right angle to the movement of the card holder into the guide 7, Fig. 6, the abutments being arranged with their engaging ends exposed at an open side edge of the body 22. The 35 abutments are held in either their normal or their shifted positions by means of impulsive locking means as spring brakes 25 carried thereby and bearing against the walls of the guides 24. The means associated with the machine for shifting the 40 abutments one by one, is here shown as a pawl 26 pivoted at one side of the guide 7 and arranged with its pivot 27 extending crosswise of the guide and having its engaging end 28 projecting through the open 45 edge of the body 22 into position to engage the angular surface 29 at the end of each stop 20. Owing to the position of the pivot 27 and the engaging end 28 of the pawl, said 50 end moves in an arc curving in the direction of movement of the stops 20, so that when the card holder is inserted in the guide 7, the pawl 26 will engage the foremost effective stop 20 and shift the same from the 55 position shown in Fig. 3, to that shown in Fig. 4, and when the stops reach the position of the foremost stop shown in Fig. 4, further pivotal movement of the pawl 26 is prevented by a stop 30 on the guide. The 60 pawl is returned to its operative position

65 into engagement with a pin 31, by a spring 70 75 80 85 90 95 100 105 110 115 120 125 130 135 140 145 150 155 160 165 170 175 180 185 190 195 200 205 210 215 220 225 230 235 240 245 250 255 260 265 270 275 280 285 290 295 300 305 310 315 320 325 330 335 340 345 350 355 360 365 370 375 380 385 390 395 400 405 410 415 420 425 430 435 440 445 450 455 460 465 470 475 480 485 490 495 500 505 510 515 520 525 530 535 540 545 550 555 560 565 570 575 580 585 590 595 600 605 610 615 620 625 630 635 640 645 650 655 660 665 670 675 680 685 690 695 700 705 710 715 720 725 730 735 740 745 750 755 760 765 770 775 780 785 790 795 800 805 810 815 820 825 830 835 840 845 850 855 860 865 870 875 880 885 890 895 900 905 910 915 920 925 930 935 940 945 950 955 960 965 970 975 980 985 990 995 1000 1005 1010 1015 1020 1025 1030 1035 1040 1045 1050 1055 1060 1065 1070 1075 1080 1085 1090 1095 1100 1105 1110 1115 1120 1125 1130 1135 1140 1145 1150 1155 1160 1165 1170 1175 1180 1185 1190 1195 1200 1205 1210 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chine in the direction indicated by the arrow, the guide being held in its adjusted position in any suitable manner, as by a spring-pressed pin 40 for entering any one of a series of holes 41 in the face plate of said guide 7. However, instead of providing the machine with movable parts for effecting the shifting of the card from day to day, the card support 23 may be shifted relatively to the body 22, and preferably such shifting is effected at the same time that the stops 20 are being reset.

In Figs. 7 and 8, the body 22 is of sufficient width to permit the day to day shifting 15 of the card support 23, and is formed with a groove or channel 42 in one edge thereof in which the margin 43 of the card support projects, such margin being bent in the form shown in Fig. 9, in order to snugly fit the 20 channel 42, the channel having a contracted entrance 44 for holding the card support in position. In the embodiment of my invention shown in Figs. 7 and 8, the card support 23 is shifted by the resetting member 34 which is shown as carrying a pawl 45 projecting through the bottom of the channel 42 into position to engage a rack 46 formed on the edge of the card holder 23. In this form 25 of my invention the resetting member 34 is operated by means of a link 47 pivoted at 48 to the member 34 and having a handle 49 movable in an arc-shaped slot 50 formed in the front face of the body 22, the slot being 30 concentric with the axis 48, and on its side 35 farthest removed from such axis, being provided with notches or radially extending slots 51 corresponding in number to the days of the week represented on the card.

In operation, at the end of each day the 40 handle 49 is moved inwardly out of one slot 51, thus causing the member 34 to reset the stops 20, the handle is then moved in the slot 50 until it is alined with the next notch 51 and then said handle 49 is pulled outwardly into such next notch. During the 45 reciprocating movement of the member 34, effected by the movement of the handle 49 out of one notch in one direction into another notch in the other direction, the pawl 45 moves in one direction and takes hold of a tooth of the rack 46 and then moves in the opposite direction advancing the card support 23 one step laterally in the channel 42. The card support is returned by hand to its 50 starting position in engagement with a shoulder 23^a, and the pawl 45 is withdrawn out of engagement with the rack 46 to permit the return of the support 23, by moving the member 34 inwardly by means of the 55 handle 49 until the pawl 45 engages a surface 45^a at one end of the opening in the bottom of the channel 42 for said pawl, which surface holds the pawl out of engagement with the rack. The card support is prevented 60 from unintentional displacement to the

right, Fig. 8, by the fact that the pawl normally engages a stop 45^b arranged to limit the pivotal movement of the pawl in one direction. Thus the support 23 is normally locked from movement in either direction.

As seen in Fig. 10, the card holder 21 instead of having its body and card support arranged in alinement, as in Figs. 3, 4, 7 and 8, may be formed with a chamber containing stops directly beneath the card supporting surface. In this form of card holder which may be used to hold cards upon which a large number of registrations are to be made or for cost keeping, space is provided for a large number of stops without making the card holder longer than the card used. As before stated the lever 37 operating the resetting member 34 may be operated either by hand at the beginning or 70 end of each day, or as seen in Figs. 11, 12 and 13 may be operated by means associated with the clock, this means being here shown as a shoulder 52 which is movable into the path of the end 53 of the lever 37 so that 75 during the first insertion of the card holder into the guide the end 53 of such lever will engage the shoulder 52 causing the lever to move the resetting member 34, this shoulder being set in operative position during a certain period of time as, for instance, from 80 shortly before the beginning of the working period until shortly after. The shoulder may be controlled in its movement into and out of operative position either automatically by the clock, or may be set by hand 85 by an authorized person having access to the clock. As here shown the shoulder 52 is carried by one arm of a hand operated lever 54 pivoted at 55 between its ends to the card guide 7 and having a button or handle 56 at its opposite end. However, as time cams and means for automatically operating devices by time controlled mechanism is common in the art, obviously the shoulder 52 might be operated from the time movement. 90 When the shoulder 52 is employed, it may act as a stop for determining the first position of the card holder, that is the stop 20 for determining the first position of the card holder may be dispensed with; and 95 during the movement of the card holder into the guide, the end 53 of the resetting lever 37 would engage the shoulder 52 and be moved until the member 34 abuts against the inner ends of the stop guides 24, thus 100 limiting the movement of the card holder into the guide 7. My card holder can be built for the most part of sheet metal in a durable and inexpensive manner, and the mechanism carried by the card holder is simple, and economical of manufacture and 105 cannot readily get out of order.

In use, one card holder is assigned to each workman and when he enters or leaves the factory or begins or finishes a job, he places 110

the card holder in the card guide 7 and the stops 20 automatically determine the position of the records thereon. If the card holder used in Figs. 7 and 8 is employed, 5 the workman at the end or beginning of each day, operates the resetting means by the handle 49, to shift the card support 23 and also reset the stops 20. If the form shown in Figs. 3 and 4 is used, the lever 37 10 is operated to reset the abutments either at the end or beginning of each day and the card guide shifted laterally by hand, in case no automatic means for shifting such guide or the type wheels is employed. 15 Generic claims for certain features disclosed herein, but not claimed broadly, are contained in certain of my pending applications, among others, application filed August 27, 1908, Sr. No. 450,469 and application 20 filed August 10, 1911, Sr. No. 643,286.

What I claim is:

1. The combination of a card holder for the individual record cards of recording machines having card guides, the holder being detachable from the machine and provided with a flat portion, and mechanism for automatically determining successive positions of the card holder relatively to the guide of the recording machine, said mechanism comprising means carried by the flat portion of the card holder, substantially as and for the purpose specified. 25 30

2. The combination of a card holder for the individual record cards of recording machines having card guides, the holder being detachable from the machine and provided with a chamber, and mechanism for automatically determining successive positions of the card holder relatively to the 35 guide of the recording machine, said mechanism comprising means located in said chamber, substantially as and for the purpose set forth. 40

3. The combination of a card holder for the individual record cards of recording machines having card guides, the holder being detachable from the machine and comprising a flattened casing confining a chamber, the casing having an opening, and mechanism for automatically determining successive 45 50 positions of the card holder relatively to the guide of the recording machine, said mechanism comprising means located in the chamber and operable through the opening, substantially as and for the purpose described. 55

4. The combination of a card holder for the individual record cards of recording machines having card guides, the holder being detachable from the machine and comprising a flattened casing confining a chamber, the chamber being open at one edge, and mechanism for automatically determining successive 60 65 positions of the card holder relatively to the guide of the recording

machine, said mechanism comprising means located in the chamber and exposed to, and operable through, such open edge, substantially as and for the purpose specified. 70

5. The combination of a card holder for the individual record cards of recording machines having card guides, the holder being detachable from the machine and comprising a flat card support, and a casing 75 alined with the card support and confining a chamber, and mechanism for automatically determining successive positions of the card holder relatively to the guide of the recording machine, said mechanism comprising means located in said chamber, substantially as and for the purpose set forth. 80

6. The combination of a card holder for the individual record cards of recording machines having guides, the holder being detachable from the machine, and provided with a flat portion, and mechanism for automatically determining successive positions of the card holder relatively to the guide of the recording machine, said mechanism comprising a series of consecutively arranged stops carried by the flat portion of the card holder, substantially as and for the purpose described. 85 90

7. The combination of a card holder for the individual record cards of recording machines having card guides, the holder being detachable from the machine and comprising a flattened casing confining a chamber, and mechanism for automatically determining successive positions of the card holder relatively to the guide of the recording machine, said mechanism comprising a series of consecutively arranged stops located in the chamber, substantially as and for the purpose specified. 95 100 105

8. The combination of a recording machine having a card guide, a holder for individual record cards, the holder being detachable from the machine and movable relatively to the guide, a series of successively effective movable stops carried by the card holder, and means associated with the machine and arranged to engage the foremost effective stop and limit the movement of the card holder relatively to the 110 guide and move such stop out of effective position and expose the next stop to the action of such means during the next positioning of the card holder relatively to the guide, substantially as and for the purpose set forth. 115

9. The combination of a recording machine having a card guide, a holder for individual record cards, the holder being detachable from the machine and movable relatively to the guide and being provided with a chamber, a series of successively effective stops in the chamber, and means associated with the machine and arranged to engage the foremost effective stop and limit 120 125 130

the movement of the card holder relatively to the guide, and also move such stop out of effective position and expose the next stop to the action of such means during the next positioning of the card holder relatively to the guide, substantially as and for the purpose described.

10. The combination of a recording machine having a card guide, a holder for individual record cards, the holder being detachable from the machine and movable relatively to the guide, and comprising a flattened casing confining a chamber, the casing having an opening, a series of successively effective stops located in the chamber and having their engaging portions accessible through such opening, and means associated with the machine for engaging the foremost effective stop through such opening and limiting the movement of the card holder relatively to the guide and displacing said stop and exposing the next effective stop in position to be engaged by said means during the next positioning of the card holder relatively to the guide, substantially as and for the purpose specified.

11. The combination of a recording machine having a card guide, a holder for individual record cards, the holder being detachable from the machine and movable relatively to the guide, and comprising a flattened casing confining a chamber, the chamber being open at one edge, a series of successively effective stops located in the chamber and having their engaging portions accessible through such open edge, and means associated with the machine for engaging the foremost effective stop through the open edge and limiting the movement of the card holder relatively to the guide and displacing said stop, and exposing the next effective stop in position to be engaged by such means during the next positioning of the card holder relatively to the guide, substantially as and for the purpose set forth.

12. The combination of a card holder for the individual record cards of recording machines having card guides, the holder being detachable from the machine, and mechanism for automatically determining successive positions of the card holder relatively to the guide of the recording machine, said mechanism comprising a series of successively effective stops, the stops being movable relatively to each other, substantially as and for the purpose described.

13. The combination of a card holder for the individual record cards of recording machines having card guides, the holder being detachable from the machine and provided with a chamber, and mechanism for automatically determining successive positions of the card holder relatively to the guide of the recording machine, said mechanism comprising a series of successively

effective stops in the chamber, the chamber being formed with guides, and the stops being slidably independently of each other in the guides, respectively, substantially as and for the purpose specified.

14. The combination of a recording machine having a card guide, a holder for individual record cards, the holder being detachable from the machine and movable relatively to the guide, a series of successively effective stops carried by the card holder, a movable pawl associated with the machine contiguous to the guide, the pawl projecting into the path of the card holder in position to engage the foremost effective stop and move such stop out of effective position, and expose the next stop to the action of the pawl during the next positioning of the card holder relatively to the guide, and a stop for limiting the movement of the pawl, substantially as and for the purpose specified.

15. The combination of a recording machine having a card guide, a holder for individual record cards, the holder being detachable from the machine and movable relatively to the guide, a series of successively effective movable stops carried by the card holder, a pivoted pawl associated with the machine and arranged to project into the path of the card holder to engage the foremost effective stop, the engaging end of the pawl being movable in an arc curving in the direction of movement of each stop for moving such stop out of effective position, and exposing the next stop to the action of the pawl during the next positioning of the card holder relatively to the guide, and a stop for limiting the pivotal movement of the pawl, substantially as and for the purpose described.

16. The combination of a recording machine having a card guide, a holder for individual record cards, the holder being detachable from the machine and movable relatively to the guide, and comprising a flattened casing confining a chamber, the chamber being open at one edge, a series of successively effective stops located in the chamber and having their engaging portions accessible through such open edge, a pivoted pawl associated with the machine and arranged with its axis extending crosswise of the plane of movement of the card holder into the guide, and the pawl being arranged at one side of the guide and having its free end projecting into the path of the card holder into position to enter through the open edge of the chamber to engage the foremost effective stop and move the same out of effective position, and expose the next effective stop into position to be engaged by such pawl during the next positioning of the card holder relatively to the guide, and a stop for limiting the pivotal movement of the pawl.

movement of the pawl, substantially as and for the purpose specified.

17. The combination of a card holder for the individual record cards of recording machines having card guides, the holder being detachable from the machine and comprising a flat card support, and a stop support alined with the card support, and mechanism for automatically determining successive positions of the card holder relatively to the guide of the recording machine, said mechanism comprising a series of successively effective stops carried by the stop support, substantially as and for the purpose set forth.

18. The combination of a card holder for the individual record cards of recording machines having card guides, the holder being detachable from the machine and comprising a flat card support and a flattened casing alined with the card support and confining a chamber, the casing having an opening, and mechanism for automatically determining successive positions of the card holder relatively to the guide of the recording machine, said mechanism comprising a series of successively effective stops located in the chamber, and having their engaging portions accessible through such opening, substantially as and for the purpose described.

19. The combination of a card holder for the individual record cards of recording machines having card guides, the holder being detachable from the machine, and mechanism for automatically determining successive positions of the card holder relatively to the guide of the recording machine, said mechanism comprising a series of successively effective stops carried by the card holder for determining the extent of movement of the card holder relatively to the guide of the recording machine during successive positionings of the card holder, the stops being displaceable one by one, during successive positionings of the card holder relatively to the guide of the recording machine, and stop resetting means carried by the card holder, substantially as and for the purpose described.

20. The combination of a card holder for the individual record cards of recording machines having card guides, the holder being detachable from the machine, and mechanism for automatically determining successive positions of the card holder relatively to the guide of the recording machine, said mechanism comprising a series of successively effective stops carried by the card holder for determining the extent of movement of the card holder relatively to the guide of the recording machine during successive positionings of the card holder, the stops being displaceable one by one, during successive positionings of the card holder,

relatively to the guide of the recording machine, and stop resetting means carried by the card holder, such means being common to all of the stops, substantially as and for the purpose set forth.

21. The combination of a card holder for the individual record cards of recording machines having card guides, the holder being detachable from the machine and comprising a flat portion, and mechanism for automatically determining successive positions of the card holder relatively to the guide of the recording machine, said mechanism comprising a series of successively effective stops carried by the flat portion for determining successive positions of the card holder relatively to the guide of the recording machine, the stops being displaceable one by one, during successive positionings of the card holder relatively to the guide of the recording machine, and stop resetting means carried by such flat portion, substantially as and for the purpose described.

22. The combination of a card holder for the individual record cards of recording machines having card guides, the holder being detachable from the machine and provided with a chamber, and mechanism for automatically determining successive positions of the card holder relatively to the guide of the recording machine, said mechanism comprising a series of independently movable and successively effective stops in the chamber for determining successive positions of the card holder relatively to the guide of the recording machine, the stops being displaceable one by one, during successive positionings of the card holder relatively to the guide of the recording machine, and stop resetting means movable in the chamber, such means being common to all of the stops, substantially as and for the purpose specified.

23. The combination of a card holder for the individual record cards of recording machines having card guides, the holder being detachable from the machine and provided with a chamber, and mechanism for automatically determining successive positions of the card holder relatively to the guide of the recording machine, said mechanism comprising a series of independently movable and successively effective stops in the chamber for determining successive positions of the card holder relatively to the guide of the recording machine, the stops being displaceable one by one, during successive positionings of the card holder relatively to the guide of the recording machine, and stop resetting means movable in the chamber, and comprising a rectilinearly movable slide movable in the chamber, substantially as and for the purpose set forth.

24. The combination of a card holder for the individual record cards of recording ma-

chines having card guides, the holder being detachable from the machine and comprising a flat card support, and a flattened casing alined with the card support and containing a chamber, the casing having an opening at one edge thereof, and mechanism for automatically determining successive positions of the card holder relatively to the guide of the recording machine, said mechanism comprising a series of successively effective stops located in the chamber for determining successive positions of the card holder relatively to the guide of the recording machine, the stops having their engaging portions accessible and operable through such opening, the stops being displaceable one by one through such opening during successive positionings of the card holder relatively to the guide of the recording machine, and resetting means in the chamber comprising a slide common to all of the stops and engaging edge walls of the chamber, substantially as and for the purpose described.

25. The combination of a card holder for the individual record cards of recording machines having card guides, the holder being detachable from the machine, and mechanism for automatically determining successive positions of the card holder relatively to the guide of the recording machine, said mechanism comprising a series of successively effective movable stops carried by the card holder for determining the extent of movement of the card relatively to the guide of the recording machine during successive positionings of the card holder, the stops being displaceable one by one, during successive positionings of the card holder relatively to the guide of the recording machine, and resetting means carried by the card holder and comprising a pivoted lever, substantially as and for the purpose specified.

26. The combination of a card holder for the individual record cards of recording machines having card guides, the holder being detachable from the machine and provided with a chamber, and mechanism for automatically determining successive positions of the card holder relatively to the guide of the recording machine, said mechanism comprising a series of independently movable and successively effective stops in the chamber for determining successive positions of the card holder relatively to the guide of the recording machine, the stops being displaceable one by one, during successive positionings of the card holder relatively to the guide, and resetting means comprising a lever located in the chamber, substantially as and for the purpose set forth.

27. A card holder for the individual record cards of recording machines having card guides, the holder being detachable from the machine and provided with a

chamber, and mechanism for automatically determining successive positions of the card holder relatively to the guide of the recording machine, said mechanism comprising a series of independently movable and successively effective stops in the chamber for determining successive positions of the card holder relatively to the guide of the recording machine, the stops being displaceable one by one during successive positionings of the card holder relatively to the guide of the recording machine, and stop resetting means comprising a rectilinearly movable member slidible in the chamber and being common to all of the stops, and an operating lever pivoted between its ends and having one arm thereof arranged to coöperate with said member, substantially as and for the purpose described.

28. A card holder for the individual record cards of recording machines having card guides, the holder being detachable from the machine and movable relatively to the guide of the recording machine, and comprising a body, and a card support adjustable relatively to the body, substantially as and for the purpose specified.

29. A card holder for the individual record cards of recording machines having card guides, the holder being detachable from the machine and movable relatively to the guide of the recording machine, and comprising a body, and a card support adjustable relatively to the body, and means carried by the body for adjusting the card support, substantially as and for the purpose set forth.

30. A card holder for the individual record cards of recording machines having card guides, the holder being detachable from the machine and movable relatively to the guide of the recording machine, and comprising a body and a card support slidable along the body, substantially as and for the purpose described.

31. A card holder for the individual record cards of recording machines having card guides, the holder being detachable from the machine and movable relatively to the guide of the recording machine, and comprising a body, and a card support adjustable relatively to the body, mechanism carried by the body for automatically determining successive positions of the card holder relatively to the guide, and means carried by the body for shifting the card support relatively to the body, substantially as and for the purpose specified.

32. A card holder for the individual record cards of recording machines having card guides, the holder being detachable from the machine and movable relatively to the guide of the recording machine, and comprising a body, and a card support adjustable relatively to the body and being formed with a rack and means carried by the body for co-

acting with the rack for shifting the card support relatively to the body, substantially as and for the purpose set forth.

33. A card holder for the individual record cards of recording machines having card guides, the holder being detachable from the machine and movable relatively to the guide of the recording machine, and comprising a body in the form of a flattened casing containing a chamber, the body being formed with an external channel at one end, and a card support having a portion fitting and slidable in the channel and provided with a rack, and means for shifting the card holder relatively to the body and comprising means located within the chamber and having a pawl working through the bottom of the channel and coacting with the rack, substantially as and for the purpose described.

34. The combination of a recording machine having a card guide, a card holder detachable from the machine and movable relatively to the card guide, and comprising a body, and a card support adjustable relatively to the body, mechanism for automatically determining successive positions of the card holder relatively to the guide, and means for shifting the card support relatively to the body, substantially as and for the purpose specified.

35. In a card holder for the individual record cards of recording machines having card guides, the holder being detachable from the machine and movable relatively to the guide of the recording machine, and comprising a body, a card support shiftable relatively to the body, a series of successively effective stops carried by the body, the stops being displaceable one by one during successive positionings of the card holder relatively to the guide of the recording machine, and means carried by the body for resetting the stops and for shifting the card support relatively to the body in one operation, substantially as and for the purpose set forth.

36. In a card holder for the individual record cards of recording machines having card guides, the holder being detachable from the machine and movable relatively to the guide of the recording machine, and comprising a body, a card support shiftable relatively to the body, a series of successively effective stops carried by the body, the stops being displaceable, stop resetting means carried by the body and comprising a movable member common to all of the stops, means associated with said member for coacting with the card support for shifting the same, and an operating element coacting with said member, substantially as and for the purpose described.

37. The combination of a recording machine having a guide, a card holder detachable from the machine, a series of successively effective stops carried by the card holder for determining the extent of movement of the card holder relatively to the guide during successive positioning of the card holder, means associated with the machine for displacing the stops, one by one, during successive positionings of the card holder relatively to the guide, stop resetting means carried by the card holder and including an operating member, and means associated with the machine and movable at a predetermined period into the path of said operating member to actuate the same when the card holder is being inserted in the guide, substantially as and for the purpose specified.

38. In a workman's time recorder of the individual card type, a casing and printing mechanism associated therewith including an imprint making element, a card holder for an individual record card, the holder being insertible into the casing for locating the card in relation to the imprint making element and being removable from the casing, and a mechanism for automatically registering successive spaces on the card with the imprint making element comprising a plurality of independently movable abutments associated with the card holder, substantially as and for the purpose specified.

39. In a workman's time recorder of the individual card type, the combination with a casing having associated therewith a device for coöperating with stop surfaces, of a card carrier having a plurality of shiftable surfaces associated therewith and a resetting device for said stop surfaces, substantially as and for the purpose set forth.

40. In a workman's time recorder of the individual card type, a casing, an imprint making element located therein and operating to make an imprint at a fixed printing point, a card carrier comprising two sections relatively movable in reference to each other, means associated with one of the sections for engaging the card, and a plurality of shiftable stop surfaces associated with the other section, substantially as and for the purpose described.

In testimony whereof, I have hereunto signed my name in the presence of two attesting witnesses, at Syracuse, in the county of Onondaga, and in the State of New York, this 20 day of Jan. 1912.

CHARLES E. TOMLINSON.

Witnesses:

C. C. SCHOENECK,
FREDERIC G. BODELL.