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AUTOGRAPHIC REGISTER
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Fig. 8. 14ª 1416

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## UNITED STATES PATENT OFFICE

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## AUTOGRAPHIC REGISTER

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10 Claims. (Cl. 282-7)

This invention relates to improvements in various forms of recording or writing machines of the type employing one or more carbon or transfer sheets or strips for transferring inscriptions made on one record strip to one or more underlying record strips. Although the invention may be applied to various forms of machines of the class mentioned, it is herein disclosed as adapted for use in recording machines of the autographic register type such as shown in United States Letters Patent No. 1,735,858 granted November 19, 1929 to L. F. Hagemann.

The present invention has for its object to provide an improved autographic register with means whereby any record or memoranda entered on the top or original strip may also be automatically entered on a card, paper or the like temporarily introduced into the machine, the desired copies of such record or memoranda also appearing on the other copy strips.

Such an arrangement is particularly useful for dealing with cards used in a lending library for example and for other purposes wherein a record is required on a card or the like which must be handed to a person or filed away apart from the record in the machine. It is suitable for the production, for example, of summary or analysis sheets relative to the transactions recorded on the original strips or forms used in the machines.

A further object of the invention is to provide an improved construction and arrangement for guiding the supplemental record sheet or card into inscription receiving position, for retaining it in such position against movement during inscription reception, for supporting and holding the card in position for receiving supplemental inscription independently of the other record strips, and for subsequently removing the inscribed card from the machine.

Other objects of the invention will be in part pointed out in the following detailed disclosure of certain illustrative but preferred embodiments of the invention and will be in part obvious in connection therewith.

According to the invention an autographic register, for example of the type shown in the Hagemann patent referred to, is provided with means whereby a record card or the like can be inserted beneath the record strips in the machine and beneath a carbon strip under the record strips, and held there while the record is made on the top strip, said record appearing on the copy strip or strips and on the card.

55 After the record has been made the machine is

operated in the usual manner. The card may be withdrawn before operation of the machine depending upon the purpose for which it is required. One copy strip, for example, can be detached after operation and another copy fed into the closed filing compartment of the machine. By suitable arrangement of carbon sheets any desired number of copy strips may be employed, as will be understood.

The invention furthermore includes the fea- 10 tures of construction, combination of elements, and arrangement of parts, exemplified in the detailed disclosure below, and the scope of the application of which is indicated in the claims.

For a full and complete understanding of its 15 nature and objects the invention will be described with reference to the accompanying drawing showing means for inserting a paper strip into a register beneath the bottom carbon sheet and in which:

Fig. 1 is a fragmentary transverse sectional view of an autographic register embodying the invention, parts being shown in elevation, and

Fig. 2 is a plan view of Fig. 1, showing particularly the features of the invention, and other  $_{25}$  parts being omitted.

Since the general structural features of the machine are known, as for example in the Hagemann patent mentioned, it is unnecessary to show them in detail herein. Consequently the frame, casing and other structural features are shown only in a fragmentary and diagrammatic manner, or are omitted entirely from the disclosure. The side walls of the register body are shown at 1, one of which carries a bracket 2 attached thereto in any desired manner, and hinged to which at 2a is a cover 3 having an opening through which the record strips are exposed for receiving inscriptions in the usual manner.

Carried on brackets 4 attached to the register body is the carbon sheet supply receptacle 5 from which the carbon sheets are adapted to be led over the writing platen or plate 6 which is in the form of a shallow box or guideway. The platen 6 is carried on the registery body, appropriately attached thereto and is provided with a top plate 7 cut away at 8 and a solid bottom plate 9, the cut away portion providing an opening of a size sufficient to allow the desired record to be made on a card or strip inserted in the guideway formed between the upper and lower plates 7 and 9 which are spaced apart a small distance for this purpose. A strip of paper inserted in the guideway shown in the drawing at 55

one side may be passed through and extracted at the opposite side of the register.

In order to facilitate the passage of the strip, feed rollers 10 and 11 are mounted on spindles 5 12 and 13 to one of which may be attached an operating handle. The spindles 12 and 13 are geared together preferably so as to be caused to rotate in unison. Openings 10a and 11a are formed in the lower and upper guideway plates 10 into which the roller peripheries extend for gripping the record card or strip. As will be seen from Fig. 1 an aperture or entrance passageway 14 permits the strip to be inserted between the top plate 7 and the bottom plate 9. A window 15 is formed in the top plate so that by means of markings on the strip the latter can be properly located in the guideway box. The lower plate 9 of the guideway is provided with a downwardly inclined curved extension 14a adjacent 20 to the entrance passageway 14 so as to form a guide and support for the entering record card, said passageway 14 being enlarged so as to form a receiving mouth adjacent to said guide 14a. Also a similarly curved downwardly inclined 25 guideway extension 14b is provided at the opposite side of the register, extending past the brackets 2 and 4 and having upper and lower guiding plates spaced apart similarly to the plates 7 and 9, so as to guide the inscribed record cards 30 outwardly beyond the brackets to an exit passageway 16. An extension 16a on the bottom plate beyond the exit passageway provides a writing plate for supporting the record card for receiving supplemental inscription. This writing 35 plate may be of any desired size and shape.

In order to hold the free ends of carbon sheets a preferably flat bar 17 is hinged to the box at 18. This bar may be secured at its free end by a pin, which engages a hole in the bar. 40 outer edge of the bar 17 may serve as a knife or guide for enabling used carbon sheets to be torn off easily. In use, the lowest carbon sheet is pulled over the top face of the writing plate guideway and its free edge is secured by the 45 hinged bar. The desired record strips are then assembled over the carbon sheet, the record strips being interleaved with carbon sheets from the roll in known manner as desired, the free ends of all carbon sheets being secured by the 50 hinged bar and the record strips being engaged by the usual feed mechanism. The hinged cover 3 is closed and also serves to hold the interleaved carbons in position.

A card or the like can then be introduced into the open side 14 of the writing plate guideway and will lie beneath the lowest carbon sheet. Thus a record made on the top record strip will be transferred to the card and to the various copy record strips according to the arrangement of the interleaved carbon or carbons.

It will be observed that the feed rolls 19 and
11 are arranged to grip the supplemental record
card and not only to feed it through the passageway and to and from inscription position, but
to hold it securely in position during the writing
operations, thus preventing accidental movements thereof during the writing and avoiding
imperfect and confused inscription. Furthermore, when the inscribed supplemental card is
fed outwardly along the guideway extension 14b
by action of the feed rolls, it may be stopped for
reception of additional inscription when parts
thereof come into position upon the writing plate
16a. During such additional writing the record
75 card will be held from movement on the writing

plate by the gripping action of the rollers 10 and 11. Upon completion of the entry of the supplemental data on the card, the latter may be completely ejected and disposed of as desired.

Upon reference to Fig. 1 it will be noted that 5 the carbon sheet support 5 is positioned above the inclined guideway 14b and just outside of the record feed rollers 10 and 11. Also the cover 3 for the platen is hinged at 2a just inside of the feed rollers. By means of this disposition of the 10 elements the feed rollers and the carbon sheet are conveniently accessible for manipulation. The carbon sheet may be extended from its support 5 into operative position to transfer inscriptions to the record card in the guideway 15 between the upper plate 8 and lower plate 9, in which position it is held by the clamping bar 17. The feed rollers are positioned intermediate the length of the guideway 14b so that the record is guided and maintained in correct position 20 at the parts thereof approaching the feed rollers and also at the parts receding from said rollers.

The guideway may be open at one side only and may be arranged to receive either a card or a paper strip. The opening 14 through which 25 the record card or the like is inserted is preferably arranged at the side of the register opposite to that on which the supply carbon roll is disposed but may also, of course, be differently arranged.

Instead of the bar 17 the apertured hinged cover may be formed so as to serve as a knife for tearing off the used portions of the carbon sheets.

The writing plate or box is preferably detachable and may be hinged at one end in the known 35 manner.

It will be understood that a register constructed according to the invention may be used with any desired number of record strips and interleaved carbon sheets.

It is to be understood that the foregoing disclosure relates only to illustrative embodiments of the invention, and that modifications and changes may be made and parts of the improvements used while others are omitted, without departing from the spirit and scope of the invention.

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

1. An autographic register including, in combination, a platen having plates spaced apart a short distance to provide a transverse guideway for receiving and holding a supplemental record strip, and extensions at both sides of the register forming ingress and exit passageways for said record strip, one of said extensions having adjacent to its passageway a writing plate for supporting said strip for receiving supplemental inscription.

2. An autographic register including, in combination, a platen having plates spaced apart a short distance to provide a transverse guideway for receiving and holding a supplemental record strip, extensions at both sides of the register 65 forming ingress and exit passageways for said record strip, one of said extensions having adjacent to its passageway a writing plate for supporting said strip for receiving supplemental inscription and cooperating feed rolls at one of 70 said extensions for feeding said strip and for holding it in inscription position.

3. An autographic register including, in combination, a platen having plates spaced apart a short distance to provide a transverse guideway 75

for receiving and holding a supplemental record strip, and extensions at both sides of the register forming ingress and exit passageways for said record strip, one of said extensions having adjacent to its passageway a writing plate for supporting said strip for receiving supplemental inscription and cooperating feed rolls positioned at said last mentioned extension for feeding said strip transversely of the machine, said rolls being 10 positioned in the vicinity of said writing plate so as to retain said strip in writing position upon said writing plate.

4. An autographic register including, in combination, a platen having plates spaced apart a 15 short distance to provide a transverse guideway for receiving and holding a supplemental record strip, a guideway extension forming an exit passageway inclined outwardly and downwardly at one side of the machine and having an outwardly 20 disposed exit opening, and a writing plate for said record strip positioned adjacent to said exit

opening.

5. An autographic register including, in combination, a platen having plates spaced apart a 25 short distance to provide a transverse guideway for receiving and holding a supplemental record strip, a guideway extension forming an exit passageway inclined outwardly and downwardly at one side of the machine and having an outwardly 30 disposed exit opening, a writing plate for said record strip positioned adjacent to said exit opening, and cooperating feed rolls at said extension for feeding said strip and holding it in writing position upon said writing plate.

6. An autographic register including, in combination, a shallow box-like guiding structure having an apertured top plate and a solid bottom writing plate, said guiding structure having apertures positioned outside of the adjacent side wall 40 of the register, one of which provides an ingress opening for the reception of a card or the like between the top and bottom plates, and the other of which provides an egress opening for the card, and feed rollers positioned on said guiding struc-45 ture outside of the side wall of the register for

feeding the card.

7. An autographic register including, in combination, a shallow box-like guiding structure having an apertured top plate and a solid bottom 50 writing plate, said guiding structure having apertures positioned outside of the adjacent side wall of the register, one of which provides an ingress opening for the reception of a card or the like between the top and bottom plates, the other of which provides an egress opening for the card, feed rollers positioned on said guiding structure outside of the side wall of the register for feeding the card, and a bar hinged to said top plate for clamping a carbon sheet in transfer position.

8. An autographic register including, in combination, a writing platen having a shallow boxlike record guiding structure with a lower writing plate and an upper writing plate closely spaced from the lower plate, said upper writing plate being discontinuous to present an opening through which a supplemental record strip in the guiding structure may be exposed for inscription reception, said upper and lower plates having extensions positioned outside of the adjacent register side wall and inclining outwardly and downwardly therebeyond to form an inclined guide- 10 way, said guideway presenting a record passageway opening adjacent its outer extremity, and record feed rollers positioned at said inclined guideway outwardly beyond the adjacent register wall to grip and feed said supplemental record 15

strip.

9. An autographic register including, in combination, a writing platen having a shallow boxlike record guiding structure with a lower writing plate and an upper writing plate closely 20 spaced from the lower plate, said upper writing plate being discontinuous to present an opening through which a supplemental record strip in the guiding structure may be exposed for inscription reception, said upper and lower plates hav- 25 ing extensions positioned outside of the adjacent register side wall and inclining outwardly and downwardly therebeyond to form an inclined guideway, said guideway presenting a record passageway opening adjacent its outer extremity, 30 record feed rollers positioned at said inclined guideway outwardly beyond the adjacent register wall to grip and feed said supplemental record strip, a carbon sheet support positioned above said inclined guideway and outwardly beyond said 35 feed rollers, for supporting a carbon sheet in transfer position over said record guiding structure, and a cover for the register movably mounted at a point inside of said feed rollers.

10. An autographic register including, in com- 40 bination, a writing platen having a shallow boxlike record guiding structure with a lower writing plate and an upper writing plate closely spaced from the lower plate, said upper writing plate being discontinuous to present an opening through 45 which a supplemental record strip in the guiding structure may be exposed for inscription reception, said upper and lower plates having extensions positioned outside of the adjacent register side wall and inclining outwardly and downwardly therebeyond to form an inclined guideway, said guideway presenting a record passageway opening adjacent its outer extremity, record feed rollers positioned at said inclined guideway outwardly beyond the adjacent register wall to  $_{55}$ grip and feed said supplemental record strip, said feed rollers being positioned intermediate the ends of said guideway so as to guide the rec-

ord strip both to and from the rollers.

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