No. 737,721. PATENTED SEPT. 1, 1908.

H. F. ECKERT.

# CARD OR SHEET PLATEN FOR TYPE WRITING MACHINES.

APPLICATION FILED NOV. 16, 1900.

NO MODEL. 4 SHEETS—SHEET 1.

Fig. 1.

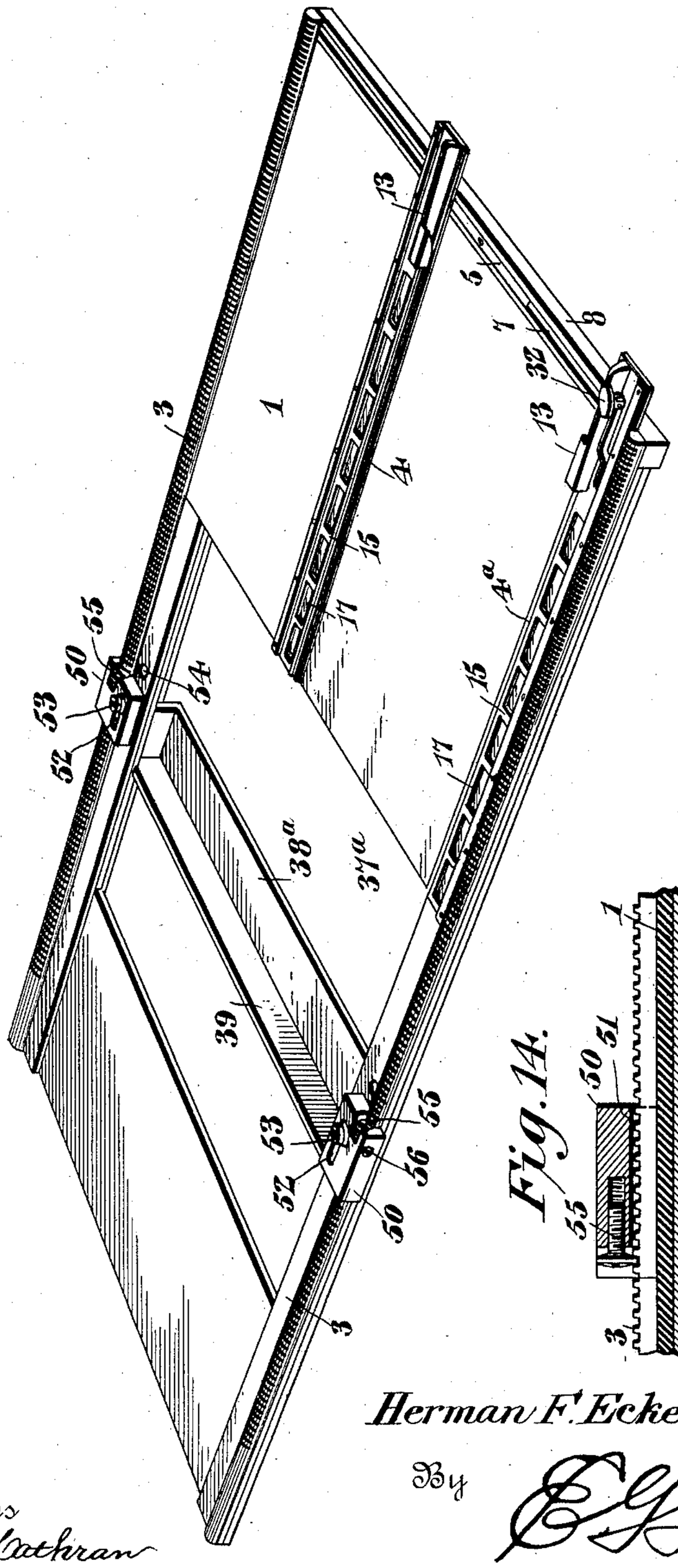


Fig. 3.

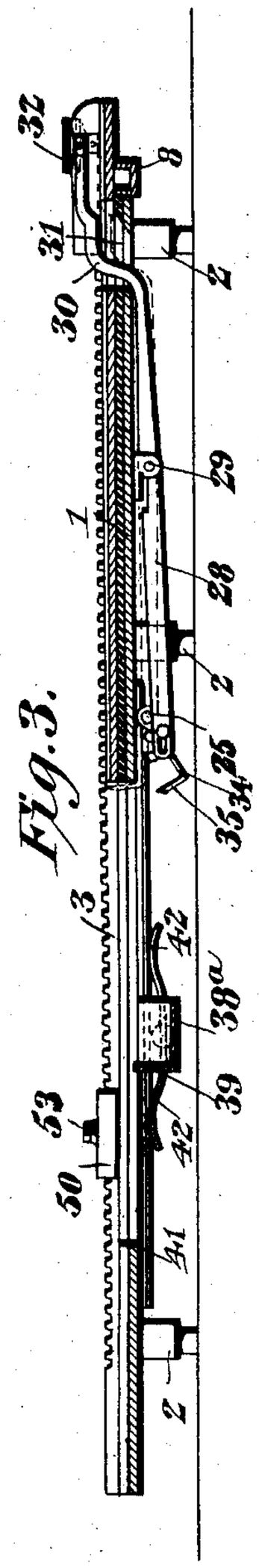


Fig. 14.




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NO MODEL. 4 SHEETS—SHEET 2.

Fig. 2.

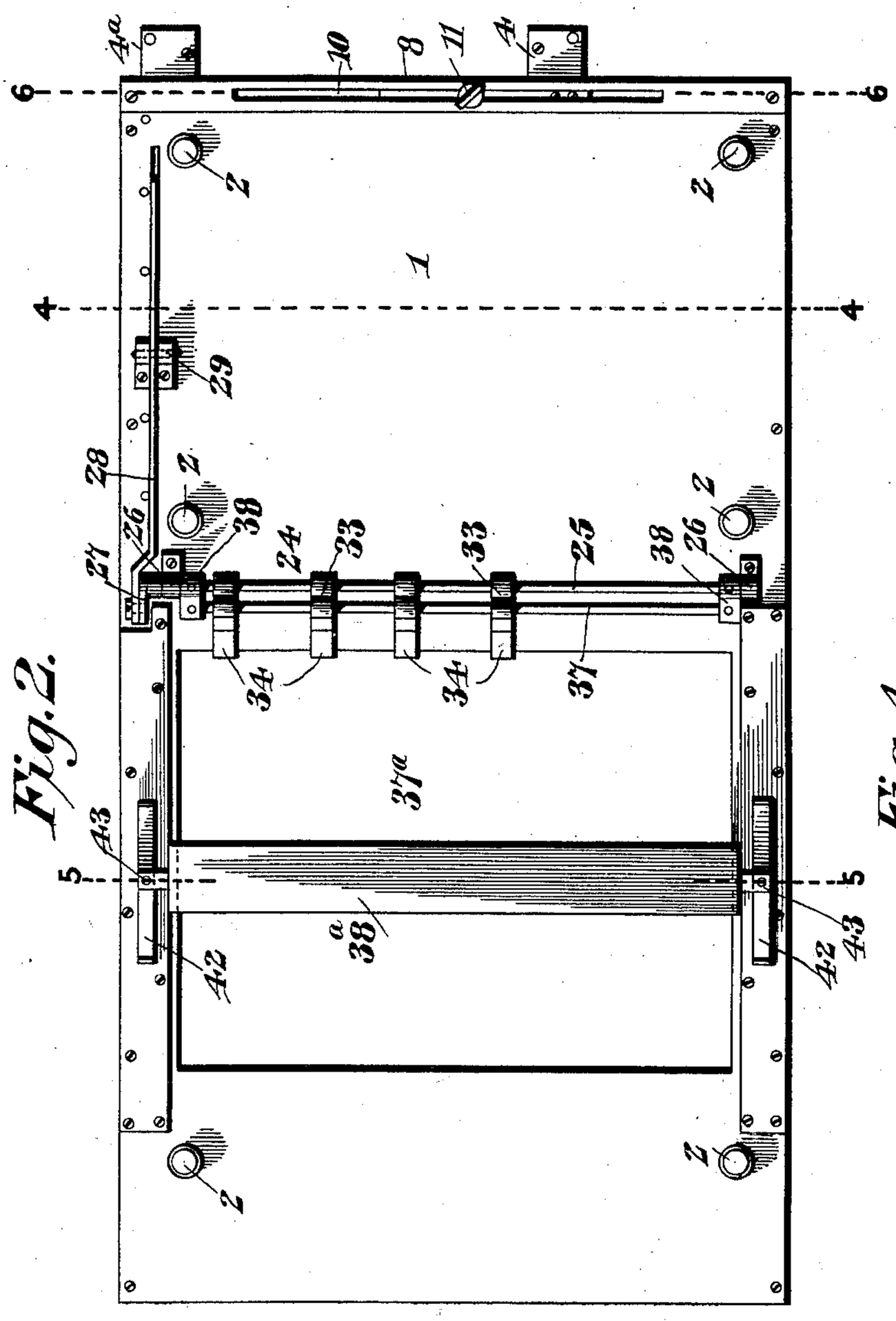
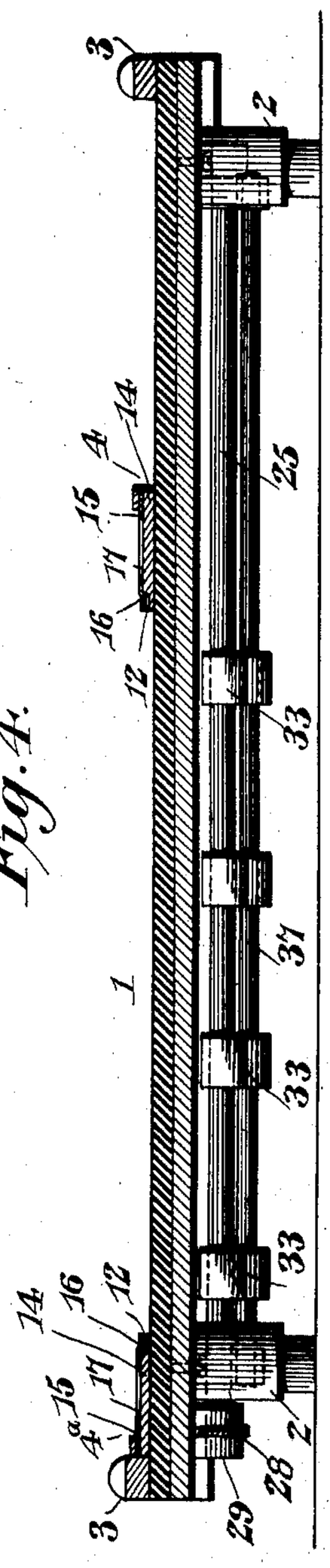



Fig. 4.

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NO MODEL. 4 SHEETS—SHEET 3.

Fig. 5.

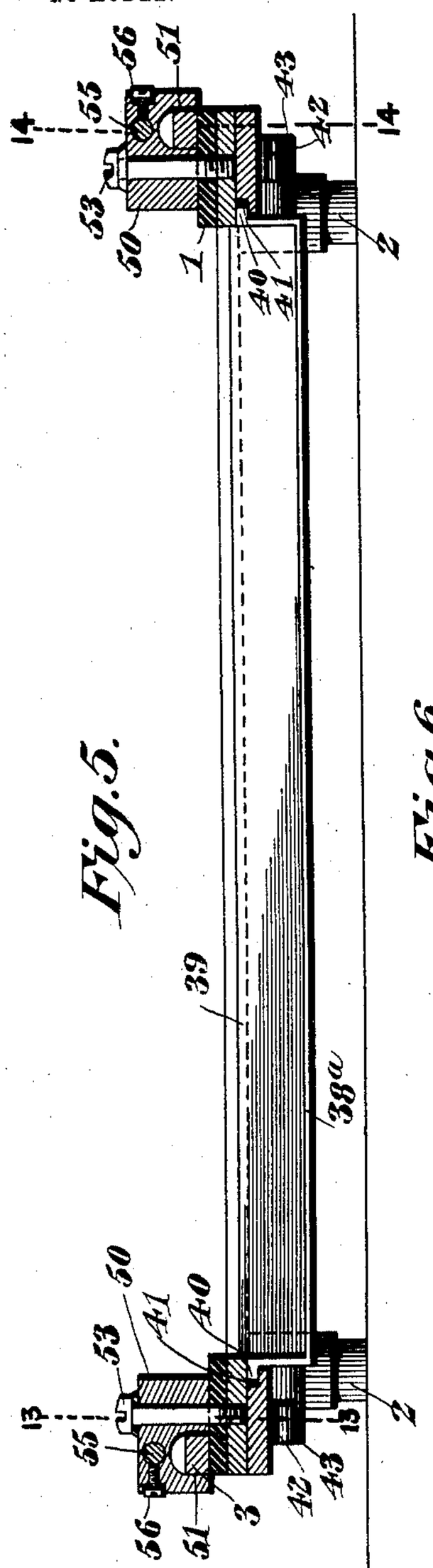


Fig. 6.

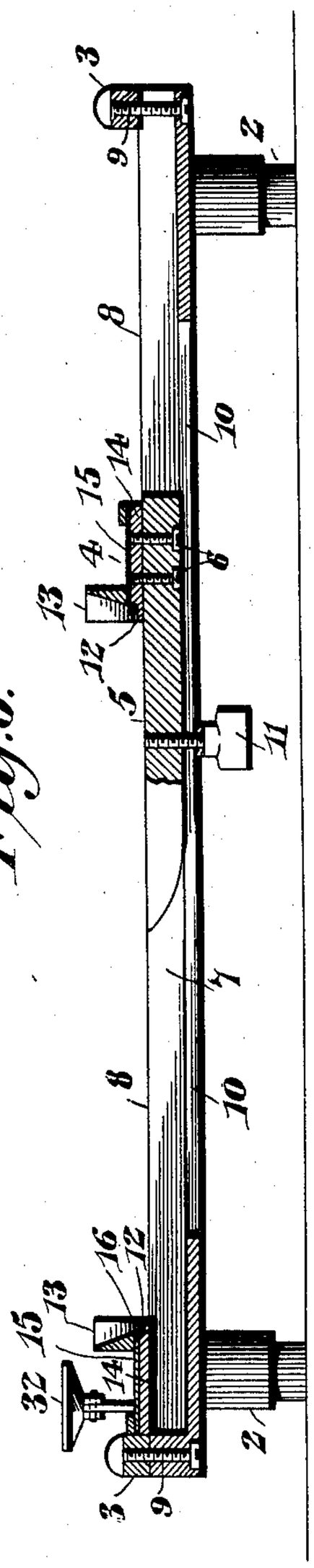


Fig. 7.

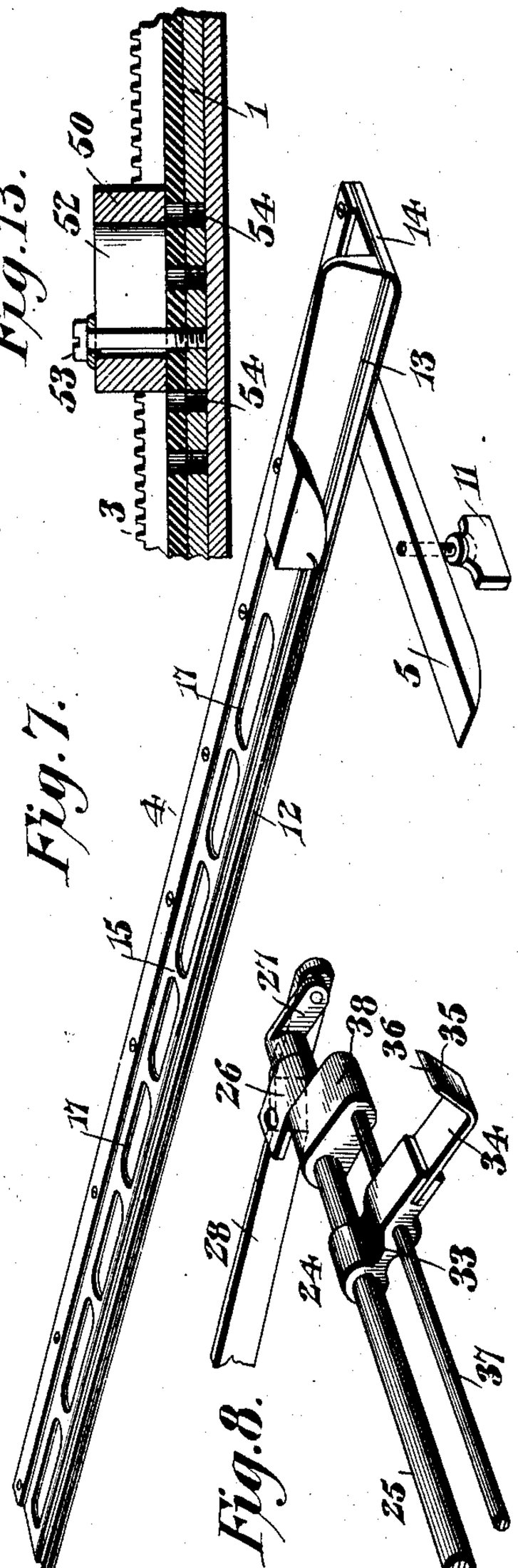


Fig. 8.




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NO MODEL. 4 SHEETS—SHEET 4.

*Fig. 9.*

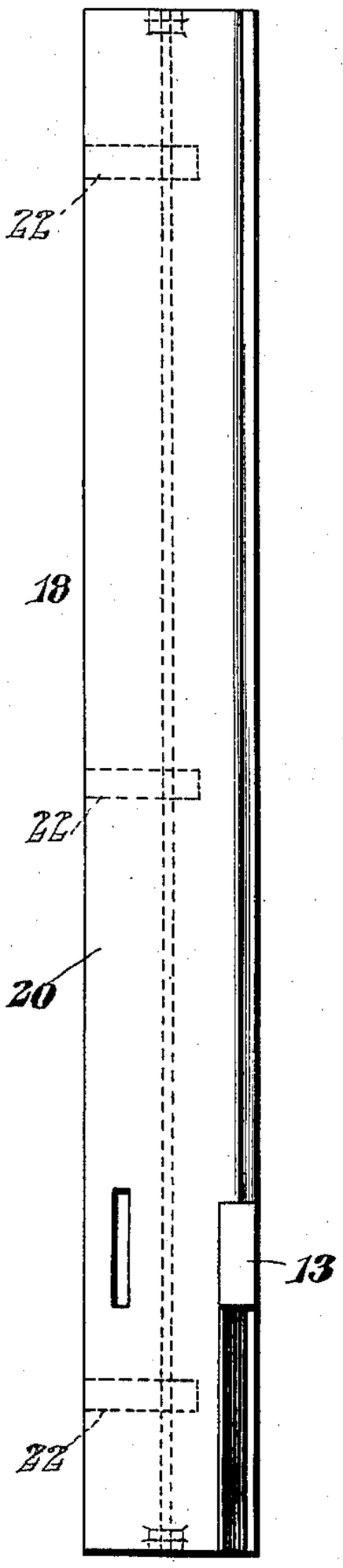



*Fig. 10.*

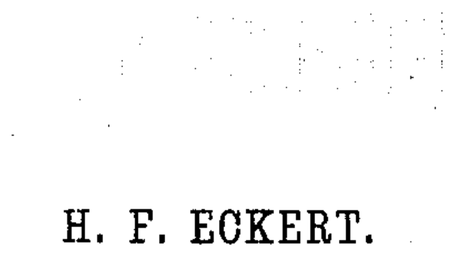
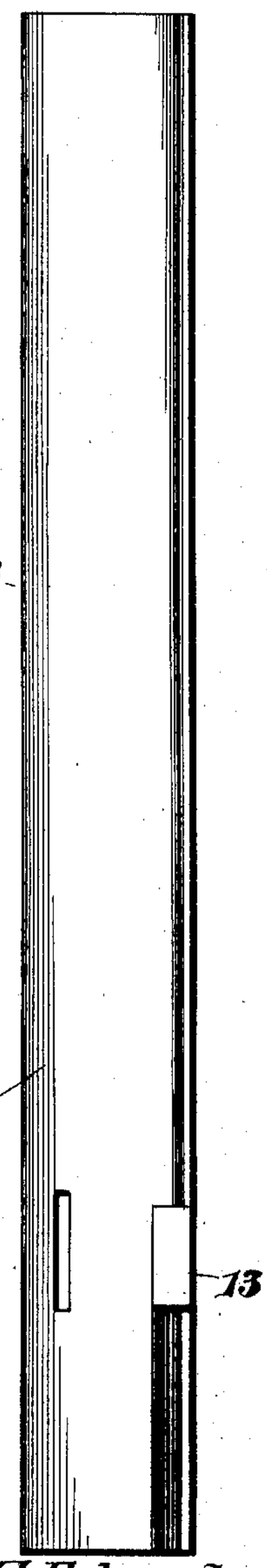



*Fig. 12.*


*Fig. 11.*

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No. 737,721. Patented September 1, 1903.

# UNITED STATES PATENT OFFICE.

HERMAN F. ECKERT, OF CLEVELAND, OHIO, ASSIGNOR, BY MESNE ASSIGNMENTS, TO ELLIOTT-FISHER COMPANY, A CORPORATION OF DELAWARE.

## CARD OR SHEET PLATEN FOR TYPE-WRITING MACHINES.

SPECIFICATION forming part of Letters Patent No. 737,721, dated September 1, 1903.

Application filed November 16, 1900. Serial No. 36,733. (No model.)

*To all whom it may concern:*

Be it known that I, HERMAN F. ECKERT, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and useful Card or Sheet Platen for Type-Writing Machines, of which the following is a specification.

This invention relates to type-writing machines, and has special reference to an improved card or sheet platen designed to facilitate the handling of card or sheet work.

To this end the invention contemplates the complete equipment of a flat platen for type-writing machines with improved means to provide for the convenient and accurate manipulation of the work, whether in card or sheet form, although the same possesses special value in card-printing involving the printing of any desired data upon index-cards.

Index-cards and similar work vary in size, shape, thickness, and ruling, according to the purpose for which they are adapted, and the present invention meets these different requirements by providing means for insuring an accurate printing upon the card or sheet, irrespective of its size or shape. In this connection one of the important objects of the invention is to associate with the platen holding guides or guideways for the work, which are automatically adjustable or variable to accommodate themselves to different thicknesses of sheets or cards, while at the same time not interfering with their function of providing guiding and holding means for the work.

Another object of the invention is to equip the platen with an improved stop device whose main or entire function is to locate the card or sheet accurately in the guide or guideways at the proper printing-point, so that when the machine is slid back to the stops provided therefor the same is in a position for printing on the first or any line of writing without the necessity of stopping to locate the line by the use of the line-spacer or line-finder or the shifting of the machine.

A further object along this line is to provide a stop device whose stop element or elements are of a disappearing form, or, in other words, which automatically move out of the way after a card or sheet is located in its printing position and which may be conveniently thrown into the path of the work when the latter is shoved into position.

The invention also has in view the provision of improved machine-stops for arresting the type-writing machine in position for the first line of writing without resorting to the ordinary expedients for accomplishing this result.

With these and many other objects in view, which will more readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination, and arrangement of parts hereinafter more fully described, illustrated, and claimed.

The essential features of the invention to effect the carrying out of the objects specified are necessarily susceptible to a wide range of modification without departing from the spirit or scope thereof; but the preferred embodiments of the improvements are shown in the accompanying drawings, in which—

Figure 1 is a perspective view of a card or sheet platen for type-writing machines equipped with the improvements contemplated by the present invention. Fig. 2 is a bottom plan view of the same, showing more plainly the mounting and relative arrangement of the stop device and the adjustable trip for the printed cards or sheets. Fig. 3 is a vertical longitudinal sectional view of the platen, showing in full and dotted lines the active and inactive positions of the stop element or elements of the stop device. Fig. 4 is a transverse sectional view on the line 4 4 of Fig. 2. Fig. 5 is a similar view on the line 5 5 of Fig. 2. Fig. 6 is a transverse sectional view on the line 6 6 of Fig. 2, showing more clearly the mounting of the adjustable guide having a range of adjustment substantially coextensive with the transverse width of the platen. Fig. 7 is a detail in perspective of one of the holding-guides and its attached parts. Fig. 8 is a detail in perspective of a section of the stop device, showing one of the swinging stop elements. Fig. 9 is a detail plan view of a modified form of the self-adjusting holding-guide. Fig. 10 is a cross-sec-

tional view of the form of guide shown in Fig. 9. Fig. 11 is a detail plan view of another form of self-adjusting holding-guide. Fig. 12 is a detail cross-sectional view of the form of holding-guide shown in Fig. 11. Fig. 13 is a sectional view on the line 13 13 of Fig. 5. Fig. 14 is a similar view on the line 14 14 of Fig. 5.

Like numerals of reference designate corresponding parts in the several figures of the drawings.

The improvements forming the subject-matter of the present application are especially designed for use in connection with the flat platen of a book-type-writing machine and possesses special utility with the type of platen shown in the drawings and designated by the reference-numeral 1. This platen is of the same general nature as the flat platen used—for instance, in connection with the Fisher book-type-writing machine, a type of which is exemplified in the patent to R. J. Fisher, No. 573,868—and the general purpose of the invention is the same as that disclosed in the pending application of H. J. Halle, Serial No. 732,921, filed October 7, 1899. A detail description of the platen and the use thereof in connection with the traveling printing mechanism is therefore deemed unnecessary; but it may be observed in this connection that the improvements contemplated by the present case render the platen distinctively one for card or sheet work and which may be permanently equipped for that purpose.

With this end in view it may be found desirable to provide the platen at the under side thereof with a plurality of pendent rest-feet 2, adapted to rest upon any suitable machine-support which will permit of a sufficient elevation of the platen so as not to interfere with the turning or flopping over of the work in the manner hereinafter described. The platen 1 has associated therewith the usual track-rails or machine-guides 3, which in a permanently-equipped platen for card or sheet work are designed to be fastened to the upper side of the platen at the opposite side edges thereof, always in position for guiding the traveling printing mechanism over the platen, although it will of course be understood that the invention may be carried out in connection with the detachable machine rails or guides which are utilized in some embodiments of the Fisher book-type-writing machines.

The invention contemplates the employment of holding-guides arranged in one or more pairs in proper relation to the traveling printing mechanism and its platen and having guiding and holding means for the edges of the card or sheet, whereby the work may not only be guided to and held in the proper position for being printed upon, but will also be guided beyond the temporary printing area of the platen, which area necessarily varies according to the length of the holding-guides and the interval therebetween.

For illustrative purposes a pair of holding-guides 4 4ª are shown in the drawings, said guides being arranged longitudinally of the platen over the upper writing-surface thereof and disposed in substantial parallelism, so that whatever the relative distance may be between the guides the printing area of the platen will necessarily be located therebetween. The holding-guides 4 4ª may be mounted in any suitable manner upon the platen; but there is disclosed in the present case a novel way of mounting these guides whereby the same are widely adjustable to take in a large range of work. In other words, provision is made whereby substantially the entire transverse width of the platen or any fraction thereof may be utilized as the printing area, according to the size of the card or sheet to be printed upon. This wide range of adjustment may be accomplished by fixedly positioning one of the guides 4ª contiguous to one edge of the platen and alongside of one of the machine rails or guides 3, while the other holding-guide 4 is capable of a transverse adjustment between the fixed guide 4ª and the opposite machine-rail 3 at the opposite side edge of the platen. The guiding and holding of the widely-adjustable holding-guide 4 is shown in the drawings as preferably effected through the medium of a slide-stem 5, rigidly united by fasteners or other suitable means, as at 6, to the adjustable holding-guide 4 at or contiguous to the front end thereof. The said slide-stem 5 projects laterally from the adjustable holding-guide 4 and slidably registers within the guiding-channel 7, formed longitudinally in the upper side of the transverse guide-bar 8, arranged at the front edge of the platen 1 and extending transversely from side to side thereof. The said guide-bar 8 is held rigidly in a fixed position at the front edge of the platen by any suitable means, but preferably by being fastened or otherwise suitably secured, as at 9, to the front extremities of the oppositely-located machine-rails 3, as plainly shown in Fig. 6 of the drawings. In addition to the guiding-channel formed longitudinally in the upper side thereof the said guide-bar 8 is provided in its lower side with a longitudinally-disposed slot 10, which receives a binding-screw 11, engaging in a threaded opening in the slide-arm 5 and which when tightened serves to lock or hold the said stem within the guiding-channel therefor. By loosening the screw 11 from the under side of the guide-bar 8 the said screw may be moved along within the slot 10, so as to provide a manipulating-knob or finger-piece to provide for the shifting of the adjustable holding-guide 4 laterally to any desired position within the range of its adjustment between the fixed holding-guide 4ª and the oppositely-located machine-rail 3.

In the practical construction of the card or sheet platen the holding-guides 4 4ª are arranged over the printing portion thereof, so

as to facilitate the insertion of the card or sheet from the front edge of the platen, and while the said holding-guides 14ª may be variously formed or constructed without departing from the spirit or scope of the invention, still one of the important features of the latter resides in so shaping the guideways of the holding-guides as to render the same self-adjusting to different thicknesses of cards or sheets, as well as forming frictional self-retainers for holding the work in the printing position without slipping thereof.

To illustrate a few of the ways in which the combination described can be successfully effected, reference will be made to several modifications of the holding-guides, and inasmuch as the same are of duplicate construction a description of one guide will suffice. Referring to the form of holding-guide shown in Figs. 1 to 7, inclusive, of the drawings, the same essentially consists of a straight elongated body provided at one edge with a guide-way 12, closed at the upper and lower sides thereof to form a complete housing for the edge of the card or sheet slidably engaged therein, and said guideway preferably is open at both ends and extends the full length of the guide-body to permit of the entrance of the individual cards or sheets at one end and their displacement or delivery from the opposite end. At this point it may be observed that to facilitate the entrance of the individual cards or sheets the guideway preferably terminates short of the front end of the guide-body, and beyond such point the latter is provided with an elevated entrance-guide 13, of substantially the same form and subserving the same function as the corresponding entrance-guide disclosed in the Halle application aforesaid.

Referring more particularly to the automatic self-adjustment of the holding-guide, this is effected in the form shown in Fig. 7 by constructing the guide-body respectively of a base-strip 14 and a yielding section or strip 15, arranged in superimposed relation to the base-strip 14 and preferably formed of spring sheet material having sufficient resiliency to permit of the holding thereof under the pressure occasioned by different thicknesses of cards or sheets which may be placed in the guideway 12. In the form being described the guideway 12 is preferably provided with a suitable interior guiding-shoulder 16 to prevent the lateral displacement of the card or sheet while it is being slipped through the guides or while being printed upon, and obviously the guiding-shoulder 16 might be produced in any suitable way and might be provided upon the base strip or section 14 or upon the yielding section 15 without affecting the result to be accomplished. Whatever the disposition of the guiding-shoulder may be the free edge of the yielding section or strip 15 projects beyond the same, so as to be capable of freely moving toward and from the contiguous edge of the base strip or section 14. At the edge opposite the guideway 12 the yielding strip or section 15 is held fast or rigid to the base section or strip 14 by means of a suitable fastening, and in the construction shown the said yielding section or strip 15 is provided throughout its length with a plurality of openings 17, which make the spring action of the yielding section or strip 15 sufficiently delicate to permit of the free slipping of the cards or sheets through the guides, while at the same time exerting a sufficient pressure thereon to act as a retainer for holding the card or sheet in position while being printed upon.

Divers variations of the automatic or self-adjusting guideways may be resorted to, a few additional forms being shown in Figs. 9 to 12, inclusive. In the construction shown in Figs. 9 and 10 the holding-guide, which is designated in its entirety by the reference-number 18, is provided at one edge with a guideway 12ª for the edge of the card or sheet and essentially consists of a base member 19 and a spring-pressed clip member 20, pivotally mounted intermediate its side edges upon a suitable pivot 21 and having arranged thereunder a pressure-spring 22, which exerts a tension in a direction to hold the head of the clip member, constituting a part of the guide member 12ª, pressed toward the contiguous edge of the base member 19. This construction necessarily permits of the automatic or self-adjustment of the guide to accommodate different thicknesses of work, while at the same time constituting a retainer or holding means for the work.

The construction shown in Figs. 11 and 12 involves the forming of the holding-guide from a folded spring-metal body 23, the free edges of which are arranged in superposed relation to form the guideway 12ª for the edges of the card or sheet. This construction also obviously permits of the automatic expansion and contraction of the guideway 12ª to accommodate different thicknesses of cards or sheets, as well as serving as an automatic retaining means for holding the card or sheet in a printing position.

Many other equivalent modifications may be resorted to.

In carrying out the invention there is associated with the holding-guides means for locating the work accurately in the guideways at the proper printing-point, and the present invention contemplates the employment of a stop or stop device of a disappearing form which will automatically move to an inoperative plane out of the way after a card or sheet has been arrested in its writing position by the said stop or stop device. While various embodiments of such a stop may be utilized in carrying out the invention, still a preferable construction is shown in the drawings and essentially consists in the employment of one or a plurality of stop elements 24, designed to be thrust to an active interfering position with reference to the inserted

card or sheet and also adapted to automatically seek an inoperative plane out of the way when released, so that there will be no obstruction to the printed card or sheet being moved beyond the printing area.

In the construction shown in the drawings the stop element or elements 24 are illustrated as being controlled in connection with a rocker-support 25 in the form of a rock-shaft extending transversely beneath the platen and journaled in suitable bearings 26, said rock-shaft being fitted at one end with a crank-arm 27, to which is pivotally jointed one end of an actuating-lever 28. This actuating-lever 28 is shown as pivotally supported intermediate its ends, as at 29, beneath the platen and has an angled front end portion 30, extending through a slot 31 in the front part of the platen, preferably contiguous to one corner thereof, and bearing an operator's key 32, which is depressed by the operator when it is desired to rock the shaft or support 25 in a direction for thrusting the element or elements 24 to an active position with reference to the inserted card or sheet.

While the stop element or elements 24 may be of any desired form, as shown in the drawings, each of the same preferably consists of a double sliding collar 33 and an angled arresting-finger 34, having an upturned tip 35, preferably formed with a thin top edge or point 36. The double collar 33 of each stop element 24 slidably engages with a rocker support or shaft 25 and also with a guide-rod 37, arranged in parallelism with the said support or shaft 25 and carried by the supporting-arms 38, mounted upon the support or shaft 25 and offset from one side of the same, so that the guide-rod 37 will swing in unison with the rocking movement of the support. A plurality of the stop elements 24 are preferably employed, although the same are individually adjustable and capable of being slid to any position with reference to the printing area between the holding-guides 4 4ª, according to the size or shape of the card or sheet, or all of the said stop elements 24 may be arranged to abut, so that the upturned tips 35 thereof will lie side by side to constitute a stop-flange or wall for the card or sheet should such an arrangement of the stops be found desirable in connection with any particular kind of work.

The stop element or elements are so arranged with reference to the platen that normally the same will be disposed out of the way and preferably below the writing-surface of the platen; but upon manipulating the key 32 the stop element or elements will be moved to a position which causes their upturned tips or active portions 35 to project above the plane of the writing-surface of the platen and beyond the printing area between the holding-guides, so that when a card or sheet is inserted into said guides and moved backward upon the platen the same will engage with the stop element or elements and be arrested thereby in the proper printing position. In the construction shown the stop element or elements will drop automatically by gravity to an inactive position, although the same obviously could be caused to disappear by manual or other means, the essential feature being that the stop element or elements must move out of the way to permit of the card or sheet being pushed from its writing position to a point beyond or outside of the temporary printing area. It is therefore within the purview of the invention to provide various modifications of the stop device, so long as the essential features noted are preserved.

In the practical use of a platen equipped with the improvements described there is usually associated therewith means for turning the work face downward after being printed upon and displaced from the printing area; but as the means for accomplishing this result are broadly covered in the aforesaid Halle application, Serial No. 732,921, no claim is made, broadly, thereto in the present application. However, there is shown in the drawings a novel form of card or work trip which may constitute a part of the platen equipment. This trip and its mounting may be briefly referred to as follows: The trip for turning the work is associated with the drop-opening 37ª, through which the printed cards or sheets fall, and the trip member essentially consists of a trip-ledge 38ª, provided with an upstanding back 39, extending transversely across the platen beneath the plane of the drop-opening 37ª. This trip device differs from that claimed in the Halle application in the addition of the upstanding back 39, which constitutes a stop to arrest the card or sheet in proper position to be tripped or turned. The trip or trip-ledge 38ª is provided at its end edges with supporting flanges or ribs 40, slidably engaging guide-grooves 41 at the under side of the platen, thus permitting the trip or trip-ledge to be adjusted to and from the plane of the holding-guides for varying the size of the drop-openings 37ª to suit the size of the card or sheet. In the construction shown the trip or trip-ledge 38ª is held stationary in the adjusted position by bowed holding-springs 42, fitted intermediate their ends to supporting-studs 43, projecting from the ends of the trip or trip-ledge. The terminals of these springs frictionally bear against the under side of the platen.

As a part of the platen equipment the invention also contemplates the provision of improved machine-stops for arresting the machine-frame or printing mechanism in position for the first line of writing without stopping to locate the line by the use of the line-spacer, line-finder, or the shifting of the machine.

The preferable type of stops and the preferable arrangement thereof are shown in the drawings, the same being placed on the track-rails or machine-guides 3 at a point in rear

of the temporary printing area, so that when the machine or traveling printing mechanism is slid to the rear after several lines on a card or sheet have been written the machine or printing mechanism will be accurately located in position for writing on the first line of the new or succeeding card or sheet. In carrying out the invention a pair of the stops (designated by the reference-number 50) is preferably employed, and, as shown in the drawings, each of the stops essentially consists of a stop-block provided in its under side with a groove 51, conforming in shape and transverse dimensions to a track-rail or guide 3, so as to permit the stop-block to have a neat fit over the said rail or guide when pressed upon the adjacent top portion of the platen.

Each stop-block 51 is further provided with a longitudinally-disposed slot 52, adapted to receive therein a fastening-screw or screw-bolt 53, adapted to engage in any one of a series of threaded adjustment-holes 54, formed in the platen alongside of the rail or guide on which the stop or stop-block is fitted, said adjustment-holes 54, in connection with the fastening-screw or screw-bolt 53, providing means for locating the stop or stop-block in different planes when a more extensive adjustment is required than can be accomplished through the medium of the adjusting device 55, with which each stop-block is equipped. This adjusting device 55 of each stop-block is preferably in the form of a screw whose head is disposed at one end of the block and projects into the plane of the track-grooves 51, so as to engage in the notches or between the teeth of the track-rail 3. After the positioning of the stop-block 50, and with the fastening-screw 53 thereof loosened, it will be obvious that by turning the head of the adjusting-screw 55 while said head is engaged with a notch of a track-rail the stop-block will necessarily be caused to move to the desired point of adjustment.

The expedient described provides for a nicety of adjustment whereby the stop or stop-block may be accurately located precisely in a plane for stopping the machine or printing mechanism in a position for writing on the first line of a card or sheet. After having obtained the proper positioning and adjustment of the stops or stop-blocks 50 the fasteners or fastening-screws 53 thereof are tightened, so as to firmly clamp the stops upon the rails and the adjacent portion of the platen, and the adjusting-screws 55 are locked against turning by the clamps 56, preferably in the form of set-screws mounted in the sides of the stop-blocks and adapted to impinge against the screws 55 or the wall of the threaded socket in which said screws work.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described card or sheet platen for type-writing machines will be readily apparent to those skilled in the art without further description, and it will be understood that various changes in the form, proportion, and minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. In a type-writing machine, the combination with a flat platen, and the main tracks or guides for the type-writing machine, of a work-holder disposed between said tracks or guides, and having holding and guiding means adjustable to different thicknesses of work.

2. In a type-writing machine, the combination with a flat platen, and the main tracks or guides for the type-writing machine, of a work-holder arranged between said tracks or guides and having holding and guiding means automatically adjustable to different thicknesses of work.

3. In a type-writing machine, the combination with a flat platen, and the main tracks or guides for the type-writing machine, of a card or sheet holder arranged between said tracks or guides and comprising guideways for the edges of the work, said guideways being adjustable to different thicknesses of work.

4. In a type-writing machine, the combination with a flat platen, and the main tracks or guides for the type-writing machine, of a card or sheet holder arranged between said tracks or guides, said holder comprising guideways self-adjustable to different thicknesses of work, and means for holding the same in fixed position.

5. In a type-writing machine, the combination with a flat platen, and the main tracks or guides for the type-writing machine, of a card or sheet holder located between said tracks or guides and comprising guideways for the edges of the work, said guideways having means to permit of self-adjustment to different thicknesses of work.

6. In a type-writing machine, the combination with a flat platen, and the main tracks or guides for the type-writing machine, of a work-holder located between the said tracks or guides and comprising a holding-guide provided at one edge with a guideway for the work, said guideway consisting of superimposed fixed and yielding sections.

7. In a type-writing machine, the combination with a flat platen, and the tracks or guides for the traveling machine, of a work-holder comprising a holding-guide having at one edge a guideway consisting of a fixed base-section, and a superimposed yielding spring-plate section forming one of the inclosing-walls of the guideway.

8. In a type-writing machine, the combination with the flat platen, and the rails for the traveling printing mechanism, of a work-

holder comprising a pair of holding-guides, one of which is arranged in a fixed position against one of the machine-rails, and the other of which is transversely adjustable within the area between the said fixed guide and the opposite machine-rail.

9. In a type-writing machine, the combination with a flat platen, and the main tracks or guides for the type-writing machine, of a transverse guide-bar arranged at the front edge of the platen, and a pair of relatively fixed and adjustable holding-guides arranged between the said tracks or guides, one of said holding-guides having a slidable adjustable connection with said guide-bar.

10. In a type-writing machine, the combination with the flat platen, of a longitudinally-channeled guide-bar arranged at the front edge of the platen, and relatively fixed and adjustable holding-guides arranged over the platen, the adjustable guide carrying a slide-stem adjustably registering within the guide-bar.

11. In a type-writing machine, the combination with the flat platen, and the main tracks or guides for the type-writing machine, of a work-holder disposed between said tracks or guides, and comprising a base-section and a superimposed inherently resilient plate forming one of the inclosing walls of the guideway and designed to yield to accommodate work of different thicknesses.

12. In a type-writing machine, the combination with a flat platen, and the main tracks or guides for the type-writing machine, of a work-holder arranged between said tracks or guides and having at one edge a guideway consisting of a fixed base-section, and a superimposed inherently resilient yielding section, said resilient section being cut out at intervals.

13. In a type-writing machine, the combination with a flat platen, and the main tracks or guides for the type-writing machine, of a work-holder disposed between the tracks or guides, said work-holder comprising a holding-guide having at one edge a guideway consisting of a base-section, and a superimposed spring-plate section which is inherently resilient throughout its entire extent to permit a maximum yielding of said plate in immediate proximity to the work.

14. In a type-writing machine, the combination with a flat platen, and the main tracks or guides for the type-writing machine, of a work-holder located between the tracks or guides and consisting of a base-section formed with a longitudinally-disposed shoulder adjacent to one edge, and a superimposed yielding plate-section extended beyond the shoulder and secured continuously along its opposite longitudinal edge.

15. In a type-writing machine, the combination with a flat platen, and the main tracks or guides for the type-writing machine, of a work-holder disposed between said tracks or guides, said work-holder comprising a holding-guide having at one edge a guideway consisting of a base-section, and a superimposed yielding spring-plate section forming one of the inclosing walls of the guideway and secured throughout the extent of one longitudinal edge to the base-section.

16. In a type-writing machine, the combination with a flat platen, and the main tracks or guides for the type-writing machine, of a work-holder disposed between said tracks or guides for the carriage, said work-holder comprising a holding-guide having at one edge a guideway consisting of base-section and a superimposed yielding spring-plate section of open-work form.

17. In a type-writing machine, the combination with a flat platen, and the main tracks or guides for the type-writing machine, of a work-holder disposed between said tracks or guides for the carriage and comprising a holding-guide having at one edge a guideway consisting of a base-section, and a superimposed yielding spring-plate section of open-work form, said spring-plate section being continuously secured along one longitudinal edge to the base-section.

18. In a type-writing machine, the combination with a flat platen, and the main tracks or guides for the type-writing machine, of a work-holder disposed between said tracks or guides for the carriage, said work-holder comprising a base-section and a resilient top section having a series of openings.

19. In a type-writing machine, the combination with the platen, and the main tracks or guides for the traveling type-writing machine, of a work-holder for the work, and an adjustable disappearing stop arranged to arrest the work at the proper printing position.

20. In a type-writing machine, the combination with the platen, and the main tracks or guides for the traveling type-writing machine, of a work-holder for the work, and an adjustable automatically-disappearing stop arranged to arrest the work at the proper printing position.

21. In a type-writing machine, the combination with the flat platen, the main tracks or guides for the traveling machine and a work-holder having guiding means for the work, of a stop located at one edge of the platen and adjustable transversely with reference to the printing area, and arranged to arrest the work at the proper printing position.

22. In a type-writing machine, the combination with a flat platen, and the main tracks or guides for the type-writing machine, of a work-holder arranged between the said tracks or guides for the carriage, and a stop device comprising a plurality of stop elements arranged to arrest the work at the proper printing position.

23. In a type-writing machine, the combination with a flat platen, and the main tracks or guides for the type-writing machine, of a work-holder arranged between the said tracks or guides, and a stop device comprising a plu-

rality of adjustable stop elements arranged to arrest the work at the proper printing position.

24. In a type-writing machine, the combination with a flat platen, and the main tracks or guides for the type-writing machine, of a work-holder arranged between said tracks or guides, and a stop device comprising a plurality of individually-adjustable stop elements arranged to arrest the work at the proper printing position.

25. In a type-writing machine, the combination with the platen having an edge over which the printed matter falls, of a work-holder located in front of said edge, and a disappearing stop adapted to be projected above said edge to arrest the work at the proper printing position.

26. In a type-writing machine, the combination with the flat platen, and the main tracks or guides for the type-writing machine, of work-holding members arranged between said tracks or guides, a stop device comprising a plurality of stop elements adapted to project above the writing-surface to arrest the work at its proper printing position, and a rocker-support for said stop elements.

27. In a type-writing machine, the combination with a flat platen, and the main tracks or guides for the type-writing machine, of a work-holder located between the said tracks or guides, a stop device comprising a plurality of individually-adjustable stop elements, each consisting of a slidable collar and an angled arresting-finger, a rocker-support mounted beneath the platen, and means for actuating said support to project the stop elements above the writing-surface of the platen, for the purpose of arresting the work at the proper printing position.

28. In a type-writing machine, the combination with the platen, and the main tracks or guides for the traveling type-writing machine, of a stop adjustable transversely with respect to the platen and capable of being moved into and out of the path of the work disposed above the writing-surface, whereby the work may be arrested at the proper printing position and may thereafter be moved beyond such position.

29. In a type-writing machine, the combination with the flat platen, and the main tracks or guides for the type-writing machine, of a work-holder comprising a pair of holding-guides located between the track-rails or guides for the carriage, and substantially coextensive longitudinally with the writing-surface, one of said holding-guides being transversely adjustable within the area defined between the adjacent machine-rail and the other holding-guide, and a stop located at the rear end of the printing area and transversely adjustable with respect to the platen.

30. In a type-writing machine, the combination with the flat platen, and the main tracks or guides for the type-writing machine, of a work-holder comprising a pair of holding-guides located between the track-rails or guides for the carriage, and substantially coextensive longitudinally with the writing-surface, one of said holding-guides being transversely adjustable within the area defined between the adjacent machine-rail and the other holding-guide, and a stop located at the rear end of the writing-surface and movable to positions both above and below the writing-surface.

31. In a type-writing machine, the combination with the flat platen, and the main tracks or guides for the type-writing machine, of a work-holder comprising a pair of holding-guides located between the track-rails or guides for the carriage and substantially coextensive longitudinally with the writing-surface, one of said holding-guides being transversely adjustable within the area defined between the adjacent machine-rail and the other holding-guide, and a stop transversely adjustable with respect to the platen and movable to positions both above and below the writing-surface.

32. A flat platen for type-writing machines provided with a drop-opening for the printed card or sheet, a work-holder having guides leading to said opening, an adjustable trip-ledge arranged beneath the opening and transversely of the platen, said trip-ledge having a slidable connection at its ends with the platen, and slidable spring-retaining devices for holding the trip-ledge stationary in the adjusted position.

33. A platen for type-writing machines provided with a drop-opening for the printed card or sheet, a trip-ledge arranged to turn the printed card or sheet face downward, and a stop member projecting above the plane of the trip-ledge to arrest the card or sheet in proper position to be tripped or turned.

34. A flat platen for type-writing machines provided with a drop-opening for the printed card or sheet, and a trip-ledge disposed to effect the reversal of the card or sheet dropped into the drop-opening, said trip-ledge being provided with an upstanding back located at the rear edge of the ledge to constitute a stop member for arresting the card in proper position to be tripped or turned.

35. A flat platen for type-writing machines provided with a drop-opening to receive the printed card or sheet, an adjustable trip element, and frictional retaining means for holding the trip element in its adjusted positions.

36. A flat platen for type-writing machines provided with a drop-opening to receive the printed card or sheet, an adjustable trip element, and yielding retaining means engaging the platen to hold the trip element in its adjusted positions.

37. A flat platen for type-writing machines provided with a drop-opening to receive the printed card or sheet, an adjustable trip element, and holding-springs carried at the ends

of the adjustable trip element and bearing against the under side of the platen to retain said element in its adjusted positions.

38. A flat platen for type-writing machines provided with a drop-opening and having guiding-grooves, a trip-ledge provided with supporting-flanges slidably engaging the guide-grooves in the platen, and frictional retaining means for holding the trip-ledge in its adjusted positions.

39. A flat platen for type-writing machines provided with a drop-opening and having guide-grooves at its under side, a trip-ledge disposed transversely of the platen and having supporting-flanges engaging the guide-grooves, and retaining-springs carried by the opposite ends of the trip-ledge and frictionally engaging the under side of the platen to hold the trip-ledge in its adjusted positions.

40. A flat platen for type-writing machines provided with a drop-opening to receive the printed card or sheet, an adjustable trip-ledge disposed below the opening, and holding-springs fixedly connected intermediate of their ends with the ends of the trip-ledge and bearing against the under side of the platen to hold the trip-ledge in its adjusted positions.

41. In a type-writing machine, the combination with the platen, and the track-rails, of stop-blocks having grooves fitting the rails, adjusting-screws whose heads project into the plane of the grooves and engage between the teeth of the track-rails.

42. In a type-writing machine, the combination with the platen, and the track-rails, of machine-stops arranged upon the rails in a position for arresting the backward movement of the machine or printing mechanism, each stop comprising a block, an adjusting-screw mounted in the block, and engaging between the teeth of a rail, a clamping device for said adjusting-screw, and a fastening-screw engaging with the block and having an adjustable mounting upon the platen.

43. In a type-writing machine, the combination with the flat platen, and the track-rails, of a machine-stop, an adjustable device for retaining the machine-stop at different points but permitting limited independent movement of the stop, and an adjusting device for positively moving the stop to effect a nice adjustment thereof within such restricted limits of movement.

44. In a type-writing machine, the combination with a platen, and the track-rails for the traveling machine, of a slotted machine-stop associated with a rail, an adjustable member engaging the slot in the stop to retain the latter within prescribed limits of movement, and an adjusting member engaging the stop and rail, respectively, to positively move the stop and thereby effect its adjustment within such limits.

45. In a type-writing machine, the combination with a flat platen, of a trip-ledge arranged to turn a printed card or sheet face downward, and a stop member to arrest the card or sheet in proper position to be tripped or turned.

46. In a type-writing machine, the combination with a flat platen, of a trip-ledge arranged to turn a printed card or sheet face downward, and a stop member projected above the plane of the trip-ledge to arrest the card or sheet in proper position to be turned.

47. In a type-writing machine, the combination with a flat platen, of a trip-ledge arranged to turn a printed card or sheet face downward and adjustable to trip cards or sheets of different sizes, and a stop member located in a plane above the trip-ledge to arrest the card or sheet in proper position to be tripped.

48. In a type-writing machine, the combination with a flat platen, of a trip-ledge arranged to turn a printed card or sheet face downward, and provided with a stop member to arrest the card or sheet in proper position to be tripped or turned, said ledge and stop member being adjustable in unison.

49. In a type-writing machine, the combination with a flat platen, and a card-guide, of a trip-ledge disposed to turn face downward a card or sheet discharged from the card-guide, and a stop member for arresting the card or sheet in proper position to be turned.

50. In a type-writing machine, the combination with a flat platen, and a card-guide, of a trip-ledge adjustable toward and from the end of the card-guide and arranged to turn a printed card or sheet face downward, and a stop member to arrest the card or sheet in proper position to be tripped or turned.

51. In a type-writing machine, the combination with a flat platen, and a card-guide, of a trip-ledge and a stop member adjustable in unison with respect to the end of the guide and arranged to turn a printed card or sheet face downward.

52. In a type-writing machine, the combination with a flat platen, and a card-guide, of a stop member disposed beyond the end of the guide to facilitate the stacking of the discharged cards by arresting them at the same point.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

HERMAN F. ECKERT.

Witnesses:
CHARLES J. HALLE,
I. F. KEITH.