April 21, 1953 D. A. GUNN 2,635,607

CARD PANEL AND TRANSFER FIXTURE

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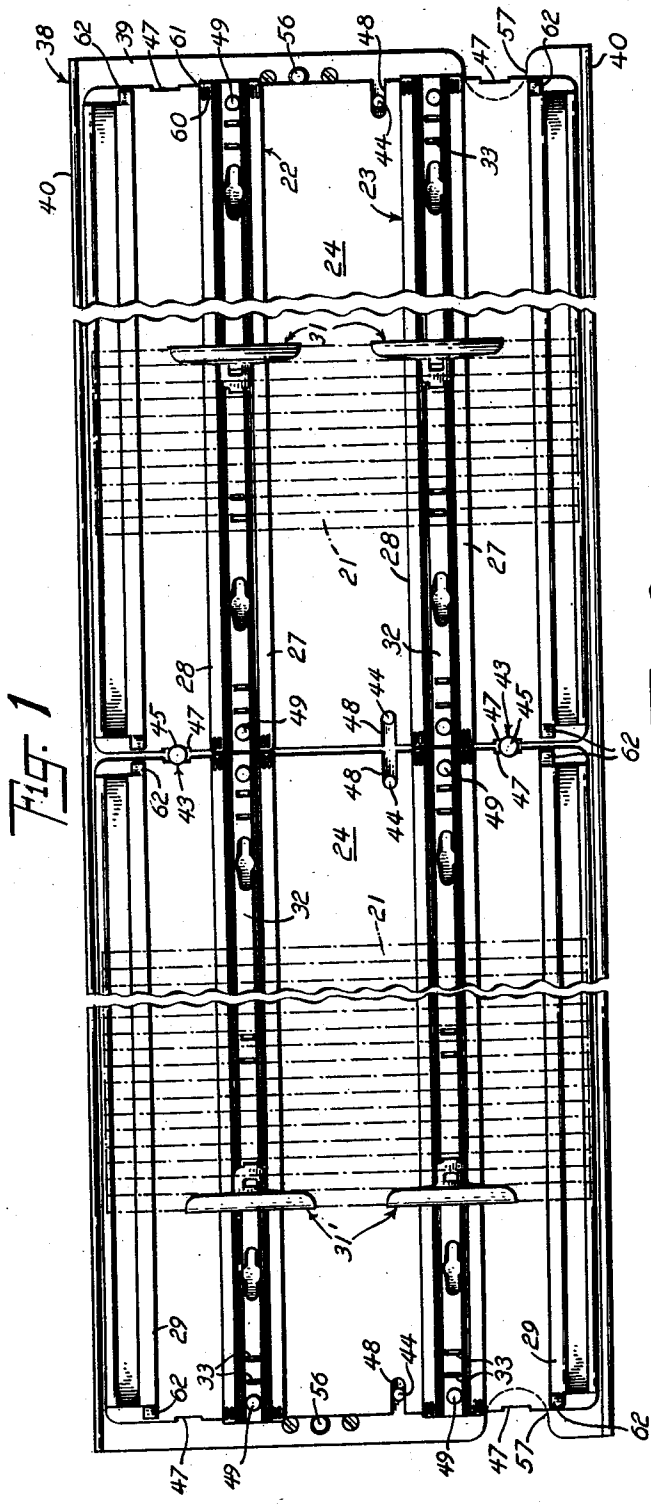


FIG. 1

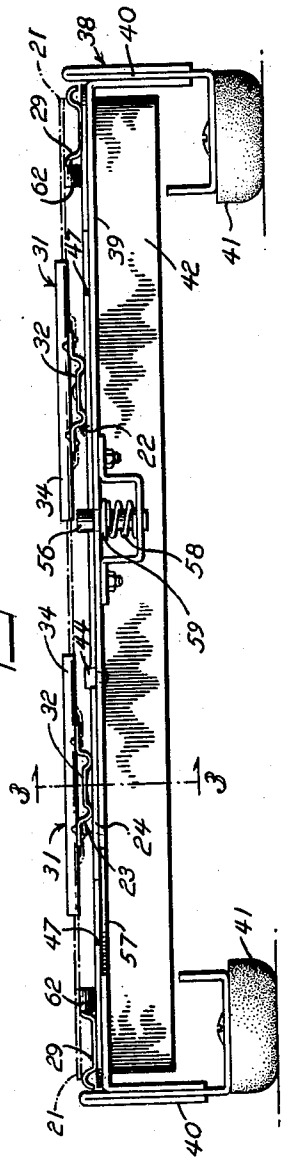


FIG. 2

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Fig. 3

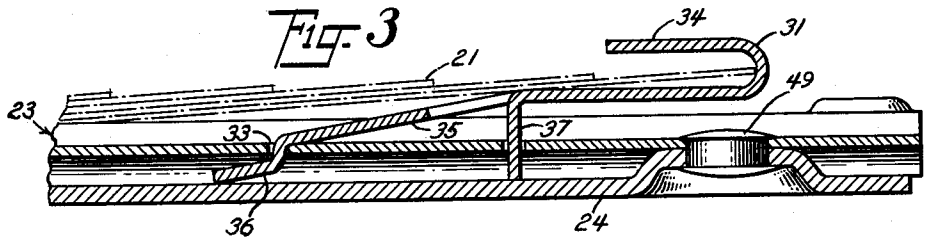


Fig. 4

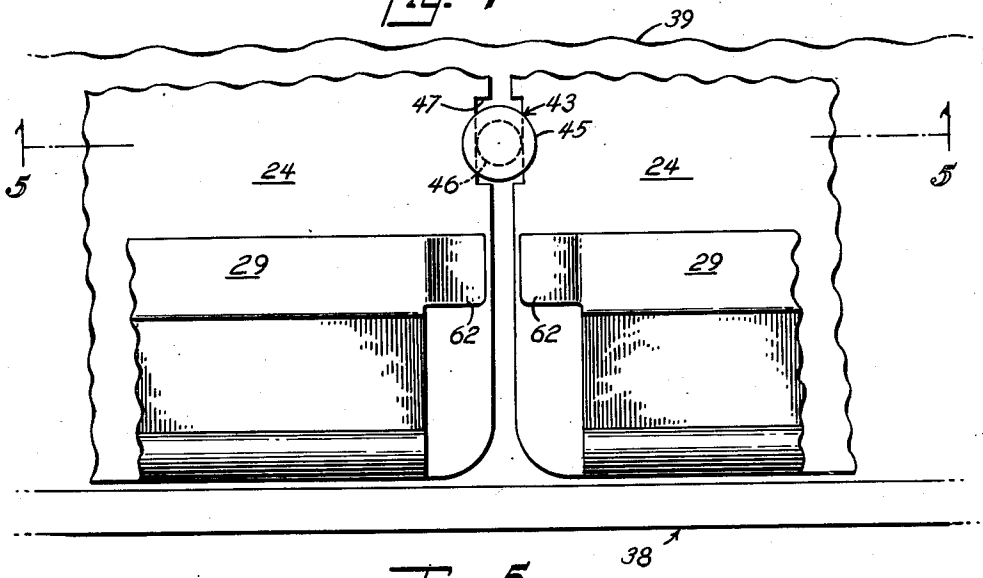


Fig. 5

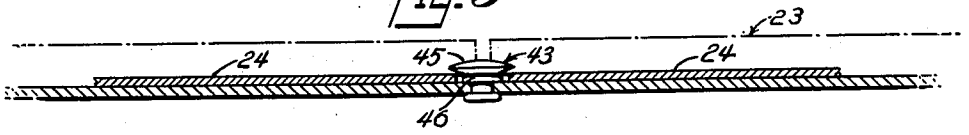


Fig. 9

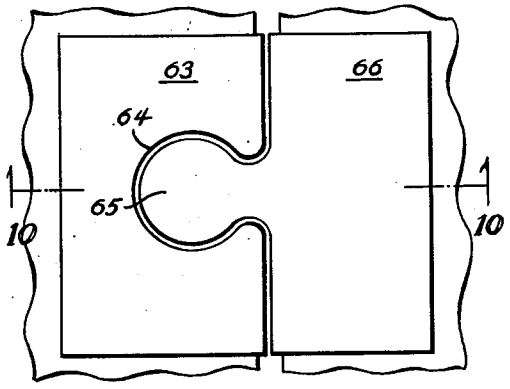
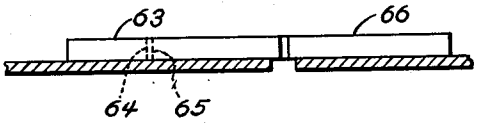


Fig. 10



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CARD PANEL AND TRANSFER FIXTURE

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Fig. 6

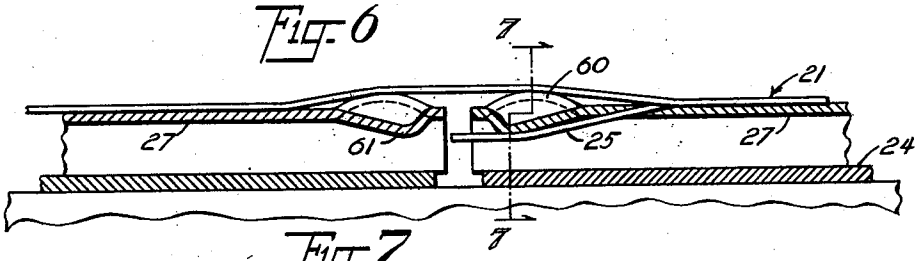


Fig. 7

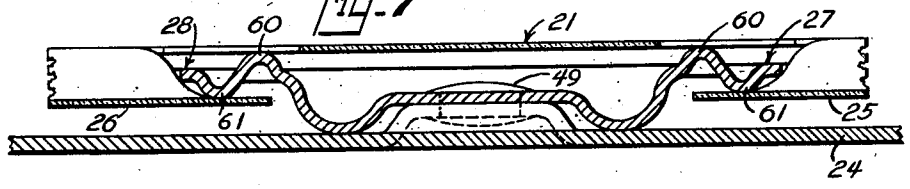
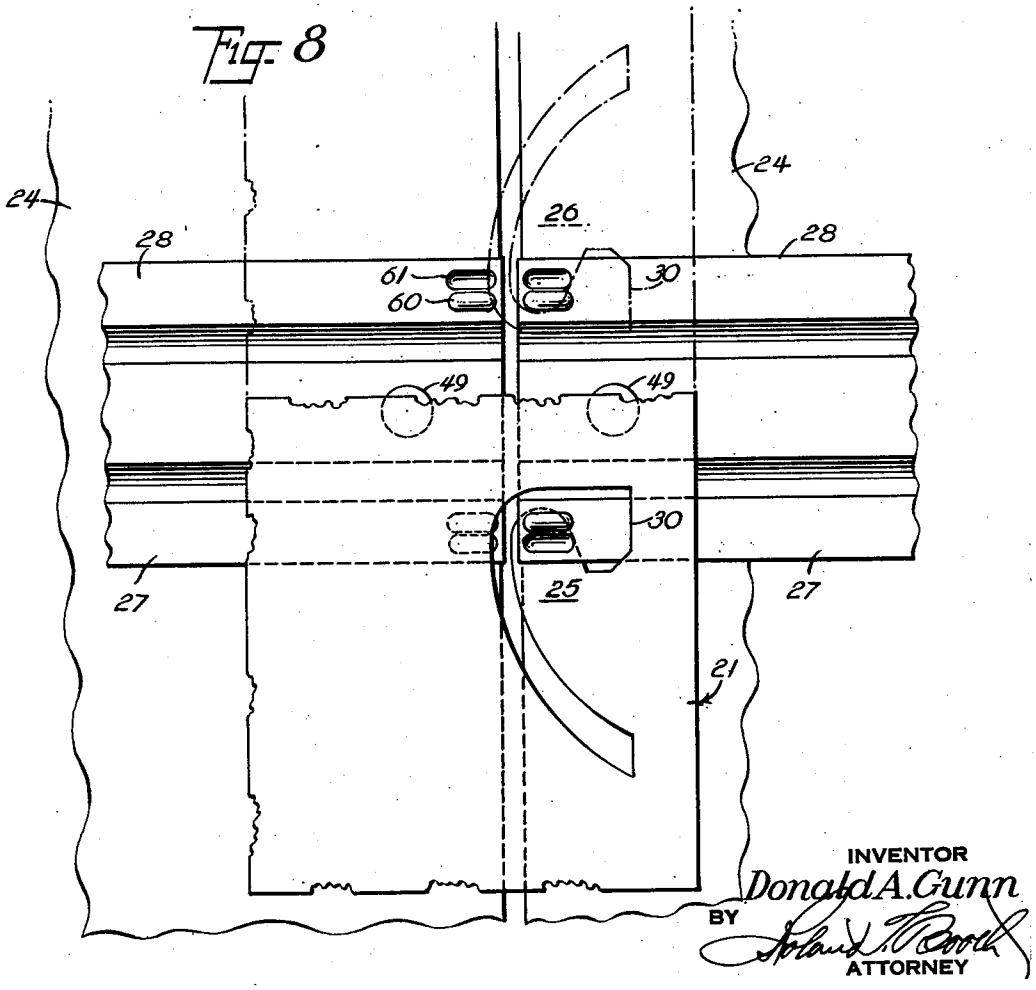


Fig. 8



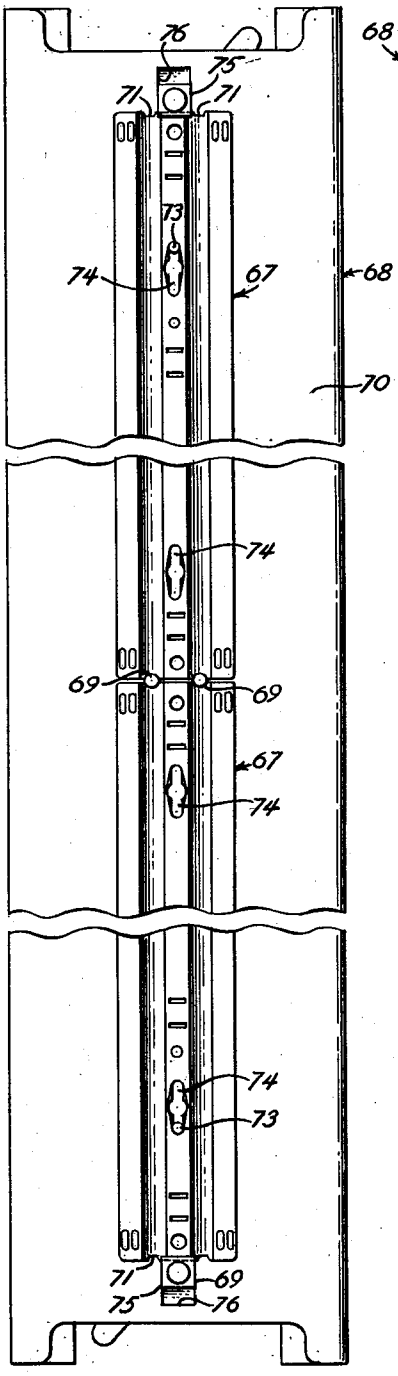
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Fig. 11



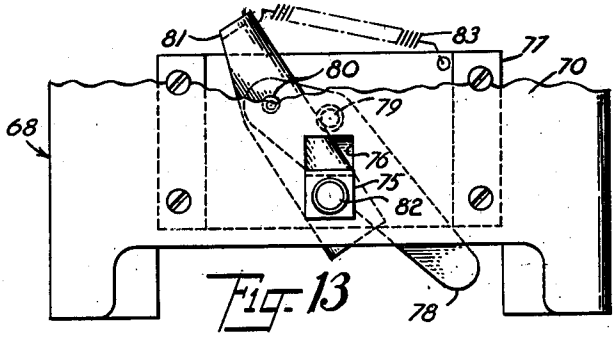


Fig. 13

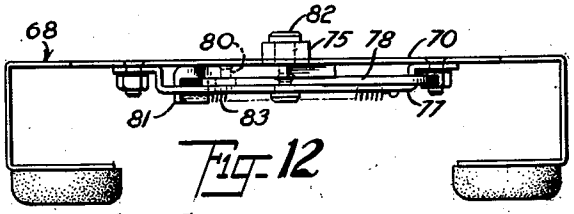


Fig. 12

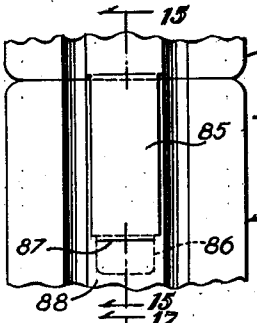


Fig. 14

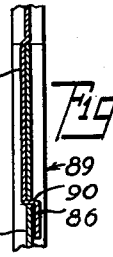


Fig. 15

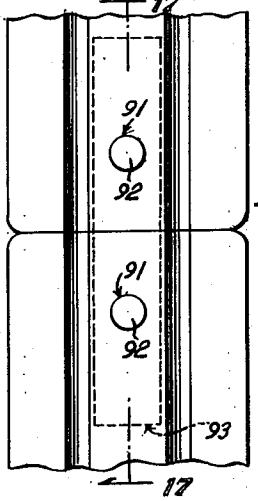


Fig. 16

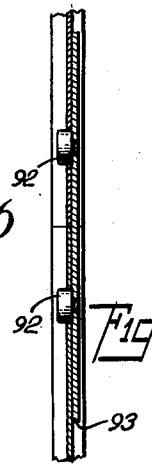


Fig. 17

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Patented Apr. 21, 1953 2,635,607

UNITED STATES PATENT OFFICE

2,635,607

CARD PANEL AND TRANSFER FIXTURE

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Application November 28, 1949, Serial No. 129,826

10 Claims. (Cl. 129—16)

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The present invention relates to mounting means for a type of card which has been in use for many years in connection with indexing systems, and which has fixing tongues cut out from the card to be distorted rearwardly for engagement behind laterally directed marginal flange portions of a runway. The cards are thus slidably located on runways and are capable of arrangement in nested overlapping formation leaving a strip of each card exposed beyond the free end of an adjacent card, which exposed strip portion thus serves conveniently for the reception of written matter. The cards, being slidably engaged upon the runways, are separable longitudinally of the runways so that new cards may be engaged on the runways between any two previously adjacent cards for building up an index or written matter in a manner which makes it possible to maintain a predetermined order, for example, alphabetical or numerical order, or continuity in written matter.

Examples of the cards, the mounting means and the operating technique are described, for example, in the prior United States patents numbered 1,048,056; 1,048,058; 1,628,124; 1,675,331; 1,820,889; 1,845,843; 1,903,206; 1,925,343; and 2,081,841.

A similar arrangement is being currently used for photographic printing processes, in which event the exposed edge of each card is intended to bear a single line or several lines of written matter so that the cards can be engaged upon a runway and closed up into closely disposed overlapping nested relationship to build up successive lines of written matter visible on the exposed edges. The written matter is thus built up on the runways, which are mounted permanently or removably on panels, and the panel of cards is then photographed. It is thus possible to produce photographically or by photolithographic means, a result which bears a reasonable resemblance to printed matter from cards on which the written matter is applied by a typewriter, especially where print-faced type and variable spacing is used. The system lends itself especially well to the compilation of parts manuals, schedules, telephone indexes etc., some items of which are varied from time to time, for in that way, the majority of the work can be preserved and the rectification restricted to the varied items. The system is described in the copending application of Charles M. Ehnes, S. N. 81,124 filed March 12, 1949.

In operation of the process, cards are built up in the required overlapping relationship to fill

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the runways to a predetermined extent and whether used, for example, merely for building up an index, or for the compilation of matter to be photographed, it will be appreciated that the insertion of new cards between others in an intermediate position on a runway will result in the displacement of some of the lower cards already on the runway, if overfilling of a runway or panel beyond the predetermined extent is to be avoided. Thus, where a series of panels are utilized to contain matter in some predetermined relationship it is necessary, when new cards are inserted, to engage on the next runway of the series the cards displaced from a preceding runway.

The invention provides card mounting runways for mounting cards of the class described, and means for locating said runways in closely disposed end to end aligned relationship for direct sliding transfer of cards from one runway to another.

The cards employed are quite thin and are essentially somewhat flexible, and the clearance between the rearwardly deflected lugs and the back of a card when it is engaged on a runway, is small. Consequently, if the clearance between the adjacent ends of aligned runways is excessive, satisfactory direct transfer of the cards across the gap may not be easy to achieve, and that is especially so if the die-cuts forming the card fixing lugs are small.

To avoid having to rely on precision manufacture of the runways, it may be preferable in many cases to provide, at or near the ends of the runways, means whereby the clearance between the back of a card and its attachment lugs is increased as the card is moved across the point of transfer from one runway to another. By such means the presence of an appreciable gap at the point of transfer can be tolerated, as will later be understood.

The invention will now be described with reference to the accompanying diagrammatic drawings, in which:

Fig. 1 is a plan view of a transfer fixture according to a preferred form of the invention with panels set up thereon with fixed runways in alignment for transfer of cards from one panel to another, the nested cards, as they are seen in the built up form, being indicated in dot and dash lines.

Fig. 2 is an end view corresponding to Fig. 1.

Fig. 3 is a fragmentary section on the line III—III of Fig. 2.

Fig. 4 is an enlarged fragmentary plan view

serving to illustrate details of the means for holding the inner ends of the panels flat against the face of the transfer fixture.

Fig. 5 is a section on the line V—V of Fig. 4.

Fig. 6 is a fragmentary sectional elevation illustrating the manner in which a card and its tongues are automatically distorted to facilitate transfer across the gap between one runway and another.

Fig. 7 is a section on the line VII—VII of Fig. 6.

Fig. 8 is an enlarged fragmentary plan view substantially corresponding to Figs. 6 and 7 but in Fig. 8 the right-hand half of the card has been shown broken away and indicated in dot and dash lines.

Fig. 9 is an alternative arrangement involving the employment of interengaging means on the edges of adjacent panels, whereby the runways can be aligned for card transfer without necessarily involving the employment of a transfer fixture.

Fig. 10 is a section on the line X—X of Fig. 9.

Fig. 11 is a plan view illustrating a modified arrangement in which detachable runways can be engaged in aligned end to end relationship for card transfer from one runway to the other.

Fig. 12 is an end view corresponding to Fig. 11.

Fig. 13 is a fragmentary plan view showing, mainly in dotted lines, the latch mechanism of Fig. 11.

Fig. 14 is a fragmentary plan view illustrating means on the adjacent ends of two cooperating detachable runways whereby they may be directly interengaged in closely disposed end to end aligned relationship.

Fig. 15 is a cross-section on the line XV—XV of Fig. 14.

Fig. 16 is again a fragmentary plan view illustrating alternative means for directly engaging two detachable runways in closely disposed end to end relationship.

Fig. 17 is a section on the line XVII—XVII of Fig. 16.

Referring now to the construction shown with reference to Figs. 1 to 8 inclusive of the drawings, the cards **21** are slidably engaged on the runways **22** and **23** in their partially overlapping relationship as described in the aforesaid prior patents and application, the runways **22** and **23** being mounted on the panels **24**. The flexible card tongues **25** and **26** (see Figs. 6, 7 and 8) are flexed to engage under the flanges **27** and **28** of the runways, leaving the surface of the remainder of the card supported flat on the upper faces of the flanges. The cards can extend right across the panel as indicated in dot and dash lines in Fig. 1, in which case it may be preferable to provide two sets of die cut tongues on each card for engagement with the respective runways **22** and **23**. Also, in that event, it is desirable to provide side elevator strips **29** near the lateral margins of the panel to assist in maintaining the cards perfectly flat. The cards are engaged on the runways in their nested relationship, and the depth of the exposed strip is accurately defined by reason of the fact that, in nesting below the card immediately above it, the bottom edge of the lower card engages the straight horizontal portions **30** of the die cuts (see Fig. 8). Thus, if the cards are all of equal depth, the exposed strips will all be equal, but if the exposed strip is required to be deeper, for example, where a multiple line item, a heading or an illustration is to be included with the written matter, an appropriately deeper strip is employed. The exposed strips are each intended to receive the written matter which can be applied with an ordinary typewriter.

A completed block of nested cards can be compacted and securely located by top and bottom card stops respectively indicated at **31** and **31'** in Fig. 1. It will be noted from Fig. 1 that the center section of each runway between the flanges **27** and **28** includes a flat portion **32** spaced from the face of the card panel and transverse slots **33** are provided therein. From Fig. 3, taken in conjunction with Figs. 1 and 2, it will be noted that the top card stop **31** comprises a transverse cross member **34** providing an inverted U-shape card support member from which there extends downwardly a stem portion **35** joggled near its end to produce an offset portion **36** to engage any selected one of the transverse slots **33**. Intermediate the cross member **34** and the offset end portion **36** a tongue is pressed out from the stem **35** to project perpendicularly through a selected slot **33** and thus provide a distance piece **37** which not only cooperates with the offset end portion for secure location of the end stop as a whole, but also, by engagement with the face of the card panel, serves as an elevator for the end card. In that way, by elevating the top card, the end stop **31** compensates for lack of card build up below the edge of the top card and serves to maintain all the exposed strips in substantially the same plane. The bottom card stops **31'** (Fig. 1) are inverted with respect to the top card stops, but operate in the same way.

The runways may be spotwelded and/or riveted to the card panels so as to be permanently secured thereto, or in some cases, as will later be understood with reference to the constructions shown in Figs. 11 to 17 inclusive, the runways can be detachably engaged on the panels.

The panels with the cards built up on them can serve as index panels and can be photographed for producing printed copies, for example, by any convenient photolithographic process.

So far the description deals with a technique known in the art but in the utilization of the already known means for the compilation of, for example, parts manuals, telephone directories and other publications in which the record presented by the cards is apt to require changing from time to time, it will be appreciated that the insertion of extra cards in any assembled block of cards will necessitate a corresponding number of cards being removed from the bottom of one panel, otherwise, the intended capacity of the panel may be exceeded. Furthermore, if the proper sequence of a collective set of panels is to be preserved the cards removed from the bottom of one panel have to be transferred to the top of the next panel of the sequence. Hitherto when such changes were made, the cards were taken off one panel and then individually engaged on another, which was not only a tedious operation requiring to be done with great care if inaccuracies were to be avoided, but, what was perhaps more important, constant handling and manipulation of the cards tended to distort or mutilate them so that, when photographically reproduced, the final result was not as satisfactory as it should have been.

To facilitate the transfer of cards from one panel to another there is provided, according to the present invention, a transfer fixture which is indicated generally in Figs. 1 and 2, by the reference numeral **38**. The transfer fixture includes the flat panel portion **39** and side walls **40** at the base of which rubber support members **41** are

provided at spaced intervals. The device can thus be used on a desk or table without scratching the surface. Transverse strengthening members, of which one is seen at **42** in Fig. 2, may be spotwelded or otherwise secured to the underside of the panel **39** to increase its rigidity and maintain its flatness. The transfer panel is adapted to receive two card mounting panels in end to end relationship, the top edge of one panel abutting the lower edge of the other. For accurate location of the panels the center studs **43** and alignment pegs **44** respectively cooperate with slot formations of the panels **24**. Thus each of the studs **43** has an enlarged head **45** and an intermediate neck portion **46**, see Fig. 5, corresponding in depth to the thickness of the panel **24**. The ends of the panels are notched as indicated at **47** to permit the adjacent edges of the panels to assume a closely spaced relationship when installed, and the enlarged heads **45** operate to hold the inner ends of the panels and runways flat against the face of the transfer fixture. For alignment of the runways the pegs **44** cooperate with the gauge slots **48** provided in the top and bottom edges of the panels and the length of the gauge slots **48** determines the spacing of the adjacent panel edges. Since the inner ends of the panels are held down by the head portions **45** of the center studs **43** and alignment of the runways is achieved by accurate positioning of the cooperating alignment pegs **44** and gauge slots **48**, and also because the ends of the runways project slightly beyond the ends of the panels, transfer of cards from one aligned runway or set of runways to the other can be achieved simply by sliding the card or cards bodily without necessitating any manipulation of the cards or their lugs other than purely direct sliding transfer.

Once installed on the transfer fixture the panels can be locked against endwise separation by any convenient lock means. For example, in Figs. 1 and 2 construction plunger locks **56** are provided near the upper and lower ends of the transfer panel **39** for cooperation with the respective upper and lower ends of the upper and lower card panels. The reference numeral **57** indicates a cut away portion provided at each end of the panel **39** to give access to the card panels **24** so that, having depressed the plunger **56** against the light pressure of the spring **58** operating against the collar **59** on the plunger, the operator can grip the edge of the panel **24** exposed at the cut away portion **57** between his finger and thumb to disengage the slots from the center studs **43**, and the panel **24** can then be lifted straight off.

In the form of the invention seen in Figs. 1, 2 and 3 the runways are secured to the panels by rivets indicated by the reference numeral **49**, see particularly Fig. 3, and it will be appreciated that the card panels have their notches **47** and gauge slots **48**, and the panel dimensions finished to a high degree of accuracy; care is also taken in manufacture to achieve correct positioning of the runways on the panels. Likewise the center studs **43** and the alignment pegs **44** and the lock plunger **56** are also accurately positioned.

Provided the requisite degree of accuracy is maintained in production and assembly and in installation of the card panels on the transfer fixture, the runways can be mated sufficiently closely to get a negligible gap at the point of transfer between aligned runways. If, however, any attempt be made to ensure that the adjacent ends of the respective runways abut when the card panels are placed on the transfer fixture, there is a possibility that their ends will actually engage and distort. However slight that distortion might be, it is liable to introduce an irregularity barring smooth transfer of a card from the runways on one panel to those on the other. Too large a gap is equally objectionable because the card tongues are fairly flexible and tend easily to catch in any appreciable space left between the runway ends.

To avoid the necessity for high precision manufacture it may be preferred, in many embodiments of the invention, so to dimension the runways lengthwise that, when the card panels are mounted on the transfer fixture, a gap is left between the ends of the aligned runways, and to avoid the cards or their fixing tongues getting caught in the gap as in transfer they pass across it, blister formations **60** and **61**, see particularly Figs. 3, 6, 7 and 8, are preferably provided near the ends of the runway flanges **27** and **28**. It will be noted that of the two blister formations at each end of each flange, one projects upwardly and the other downwardly, as is clearly shown with reference to Figs. 6 and 7. By such means it is ensured that as a card is transferred from one set of runways to the other across the gap between their ends, the tongues are deflected downwardly, whereas the surrounding die cut parts of the cards are deflected upwardly. The blister formations are so placed that the increased separation as between the rear face of the card and the upper face of its die cut tongues is substantially preserved throughout the passage of the tongues across the gap, and there is thus no danger of any part of the tongues **25** or the surrounding die cuts of the cards fouling the ends of the runways. Similarly, in order to prevent the ends of the cards fouling the gap in transfer between the aligned side elevator strips, the ends of the elevator strips are bent downwardly as indicated at **62** in Figs. 1, 2 and 4.

It will be noted that in Fig. 1, the left-hand card panel **24**, has bottom card stops **31'** and no top card stops whereas the right-hand card panel has top card stops **31** and no bottom card stops. When the panels have been built up, however, each block of cards on its respective panel is compacted endwise and securely located by both top and bottom stops. It is only when the card panels **24** are applied to the transfer fixture that the appropriate card stops are removed to enable the cards to be transferred from one set of runways to the other, and when transfer has been completed the removed card stops are replaced.

The card panels are identical and it is essential that that should be so because that which at one time may, as viewed in Fig. 1, be at the right-hand position on the transfer fixture, may at some other time be at the left-hand position and vice versa. It should also be stated that the lines of printed matter on the exposed strips of the cards extend across the panels from side to side thereof, and normally an operator using the transfer fixture works from the bottom end with the longer dimension of the fixture extending away from him. From the point of view of illustration, however, it has been expedient to show the fixture side uppermost in Fig. 1, but it should be understood that what in Fig. 1 is the left-hand panel can be regarded as the bottom panel and the right-hand one is normally the upper panel.

In the modification shown with reference to Figs. 9 and 10, the lower edge of one card panel

can be connected directly to the top edge of any other panel so that transfer of cards from the runways of one panel to those of the other can be effected without necessarily employing a transfer fixture. To that end each panel is provided, for example, at its lower edge with a slotted plate member 63, the slot 64 of which is engaged by cooperating projection 65 of a plate member 66 attached to the upper edge of each panel. The panels are formed identically and the blister formations on the runways are, preferably maintained. The interconnected card panels can be placed upon any available flat surface for card transfer operations. If the panels are sufficiently rigid the slots 64 and cooperating projections 65 can be provided within the thickness of the panels and the added plate formations 63 and 66 may be omitted.

In the modification illustrated with reference to Figs. 11, 12 and 13, there is shown a further alternative arrangement which lends itself particularly well to equipment in which the cards are mounted on a single runway. In this form the runways 67 can be detachably mounted on panels or other carriers and thus can be detached from their panels and mounted in the required endwise aligned relationship directly on the transfer fixture 68. The center studs 69 have enlarged heads spaced from the surface of the panel face 70 of the transfer fixture and operate in conjunction with the trapezoidal shaped notches 71 of the runways 67 to hold the ends of the runways down against the face of the fixture. The studs 69 thus operate in the same manner as the studs 43 seen in Figs. 1, 4 and 5 and to assist in alignment of the runways the pegs 73 cooperate with the keyhole slots 74 of the runways which are normally provided for detachably securing the runways to their respective card mounting panels for normal use.

Sliding latches 75 are provided one at each end of the transfer fixture. The latches are guided in their sliding movement by the elongated guide slots 76 and it will be noted that the nose portion of each latch is undercut so that when in the latching position, as seen in Fig. 11, the latch operates not only to hold the notches 71 engaged below the heads of the studs 69 but also to hold the outer ends of the runways flush against the face of the transfer fixture.

Details of the lever actuated latch mechanism are best seen with reference to Fig. 13 read in conjunction with Fig. 12. Thus it will be seen that the latch mechanism is supported on the plate 77 secured to the underside of the panel 70. The latch actuating lever 78 is riveted to the plate 77 by the rivet 79. A rivet 80 connects the inner end of the latch actuating lever 78 to a link 81 from which the latch 75 projects through the guide slot 76 being connected to the link by the rivet 82. The rivets 79, 80 and 82, though secure, permit fairly free relative movement of the lever 78, link 81 and latch 75. As shown in Fig. 13 the latch 75 is in the disengaged position, and for engagement over the end of a runway the lever 78 is swung clockwise about the rivet 79; the link 81 thus swings bodily inwardly moving the latch 75 correspondingly inwardly along its guide slot 76 into the engaged position as seen in Fig. 11.

The free end of the latch actuating lever 78 at all times projects beyond the end of the panel 70 and is thus readily accessible to the operator. The tension spring 83 operates between the plate 77 and the inner end of the link 81 to swing the link clockwise about its rivet connection 80 with the latch actuating lever in the Fig. 13 position, whereby to ensure that in the unlatched position of the lever 78 the latch 75 will remain at the outer limit of its travel as determined by the guide slot 76, thus leaving clearance between the latch and the cooperating edge of the end of the runway adequate to ensure easy installation of the runway.

It is to be understood that the type of latch shown in the Figs. 11 to 13 construction can if desired be used in place of the plunger type of latch seen in Figs. 1 and 2 and vice versa. In any event the lever actuated type of latch with its undercut nose portion may in many cases be preferable since it operates to hold the outer end of the panel or runway, as the case may be, flat against the face of the transfer fixture.

Similarly though in the Fig. 11 two trapezoidal notches 71 are shown at the ends of the runways, the number of notches employed may be varied, thus with narrower runways a single notch may be provided, and in general more than two notches would be provided at each end in the case of wider runways. The notches are also useful in that they can cooperate with dimple formations of the card mounting panels to facilitate location of the runways in their normal use.

A modified form shown with reference to Figs. 14 and 15 deals with a further embodiment of the invention whereby, instead of applying the individual runways to a transfer fixture, as described with reference to the construction shown in the Figs. 11, 12 and 13, the runways themselves can be engaged in their end to end aligned relationship for card transfer operations. To that end the bottom end of the runway 84 is provided with a tongue 85 having a reduced end portion 86 for engagement with the slot 87 formed in the recessed center portion 88 of the cooperating runway 89. It will be noted that the tongue 85 lies wholly within the recessed center portion 88 of the runway 89 being bent outwardly to lie on the face of said recessed portion and being bent backwardly again as indicated at 90, Fig. 15, to provide secure means of engagement with the slot 87. It will be appreciated that the runways 84 and 89 are identical each having the tongue 85 at its lower end and the slot 87 near its upper end, which slot conveniently may also serve for engaging a top card stop corresponding to that indicated by the reference numeral 30 in Fig. 1. Obviously it is not necessarily of material importance for the tongue 85 to be provided at the bottom of each runway for it may in fact be provided at the top of each runway, in which case the cooperating slot 87 would then be provided near the bottom of each runway, the important point being the maintenance of identity as between the individual runways so as to ensure that the top of each runway can be connected to the bottom of any other runway.

Figs. 16 and 17 show a further alternative means for connecting two identical runways together in the required end to end relationship of alignment. In this case the runway ends are identical each being formed with a hole 91 for engagement with spaced studs 92 on a bridge piece 93. The bridge piece preferably engages the back of the runway with the studs projecting into the recessed center portion.

It is important to note that in the case of the construction shown in Figs. 14 and 15, and that shown in Figs. 16 and 17, that the tongue 85 and

the studs 92, respectively, engage the recessed center portion of the runways between the laterally directed side flanges, for in that way the side flanges are left unobstructed and the connecting means thus cannot interfere with easy transfer of the cards from one runway to the other.

It will be noted that in Fig. 1, the runways 22 and 23 are shown provided with keyhole slots corresponding to those indicated by the reference numeral 74 in Fig. 11, but in Fig. 1 they serve no useful purpose as in that case the runways are riveted, spotwelded or otherwise secured to the card panels. There may be cases, however, in which the runways 22 and 23 are required to be removably mounted on the card panels, and for that reason the runway keyhole slots are available but, in any event, it is convenient to form all the runways identical so that without modification they can be adapted for use either in the removable or the fixed manner.

Although in Fig. 1, two standard width runways are employed on each panel, it is possible to use a single runway of width corresponding to the overall width of the two spaced standard runways. In the case of very wide panels intermediate elevators may be provided between runways and the side elevators 29, and in the case of narrow panels or fixtures, for example, as described with reference to Fig. 11 side elevators may be omitted altogether.

It will be appreciated that in general where the runways are directly joined in their end to end aligned relationship as shown in Figs. 14 to 17, there should normally be no difficulty in getting uninterrupted transfer of cards from one runway to the other, and the dimple formations though perhaps still preferable may be omitted. It is also to be understood that practically any deformation of the ends of the runway flanges which will operate to increase locally the clearance between the back of the cards and their attachment lugs across the point of transfer from one runway to the other, may be substituted for the dimple formations.

In some cases transfer panels may be designed to accommodate three or more panels or runways in the aligned relationship.

The invention claimed is:

1. In combination, index panels having runway means extending from top to bottom of said panels for slidably carrying cards of the class described on said runway means, a transfer fixture having a flat upper face, stud means intermediate the ends of said fixture upstanding from said face said stud means each comprising a shank portion terminating in an enlarged head spaced from said face and overhanging said shank portion, peg means upstanding from said face and spaced from said stud means, notch means provided in said panels for registering cooperation under the heads of said stud means to hold adjacent ends of panels engaged on said fixture flat against said face with the ends of said runway means thus disposed in the same plane and in close end to end relationship, slot means provided in said panels for registering cooperating with said peg means and positioned to align the runway means of one panel with the runway means of an adjacent installed panel, and latch means on said fixture cooperative with the outer ends of said panels for locating said panels against endwise separation.

2. In combination, a plurality of runways for slidably mounting cards of the class described, a transfer fixture having a flat upper face, stud means intermediate the ends of said fixture upstanding from said face each comprising a shank portion terminating in an enlarged head spaced from said face and overhanging said shank portion, peg means upstanding from said face and spaced from said studs means, notch means at the ends of said runways for registering cooperation with said shank portions under the head portions of said stud means to hold adjacent ends of installed runways flat against said face with their ends disposed in the same plane and in closely disposed end to end relationship, and slot means in said runways for registering cooperation with said peg means and positioned to align adjacent installed runways, and latch means on said fixture cooperative with the ends of said runways remote from said stud means for locating said runways against endwise separation from said stud means.

3. Means as set forth in claim 2 having said latch means each formed with an undercut operative face cooperative with the runways engaged thereby to hold said runways against the face of said fixture.

4. Card transfer means comprising a plurality of panels each mounting a card mounting runway defining marginal edges directed laterally outwardly in spaced relationship with respect to the surface of said panel for engagement between the back of a card and rearwardly distorted inwardly directed lugs pressed back therefrom, a card transfer fixture, cooperating means on said fixture and said panel for demountably engaging said panels on said fixture with the respective runways accurately positioned in a closely disposed end to end aligned relationship, and means on said marginal portions of each runway adjacent the closely disposed end portions to deflect downwardly the tabs engaged under said marginal edges and upwardly tab adjacent portions of said card engaging over said marginal edges, whereby to prevent said deflected portions engaging the ends of the aligned runways as a card is slidably transferred from one to another of said runways.

5. Card transfer means as set forth in claim 4 wherein the means for engaging said panels on said fixture comprise pin and slot connecting means cooperative between said panel and fixture, and releasable latch means operative to secure said panels with the cooperating runways in the desired closely disposed aligned end to end relationship.

6. Card transfer means comprising a plurality of panels each mounting a card mounting runway having a central portion connected to the face of said panel and marginal portions one at each side of said central portion spaced from the surface of said panel for engagement between the back of a card and rearwardly distorted inwardly directed lug means pressed out from said cards, a card transfer fixture, cooperating means on said fixture and said panel for demountably engaging said panel on said fixture with the respective runways accurately positioned in closely disposed end to end aligned relationship, and means on said marginal portions of each runway adjacent the closely disposed end portions to deflect downwardly the lug means engaged under said marginal edges and upwardly tab adjacent portions of said card engaging over said marginal portions, whereby to prevent said deflected portions engaging the

ends of the aligned runways as a card is slidably transferred from one to another of said runways.

7. Card transfer means comprising a plurality of panels each mounting at least one card mounting runway defining marginal edges directed laterally outwardly in spaced relationship with respect to the surface of said panel for engagement between the back of a card and rearwardly distorted inwardly directed lugs pressed back from said card whereby said card is engaged slidably on said runway, a card transfer fixture, cooperating means on said fixture and said panel for demountably engaging said panel on said fixture with the respective runways accurately positioned in closely disposed end to end aligned relationship, and dimple means distorting the surface of said marginal edges both upwardly and downwardly adjacent the closely disposed ends of said runways whereby clearance between the back of a card with respect to its lugs is increased to prevent the runway edge embracing portions of a card engaging the mating ends of aligned runways, thereby to facilitate uninterrupted sliding transfer of a card from one runway to the other aligned with it.

8. In a card mounting runway having a base portion adapted for attachment to a panel and marginal edges directed laterally outwards in a panel above that of said base portion for engagement between the backs of cards and card attachment lugs pressed back from said cards for locating said cards slidably on said runways with the cards supported thereon with said lugs engaging under said edges; the provision of means locally increasing the effective thickness of said edges at points near each end thereof, whereby the normal edge embracing clearance between the back of a card and its lugs is increased as a card is slidden off the end of the runway, thereby to facilitate transfer of a card from one runway to another where two runways are located in closely disposed end to end aligned relationship.

9. A card mounting runway as set forth in claim 8, in which the local thickening of the edges is achieved by the provision of protuberances, one directed laterally upwardly and another directed downwardly, at points near each end of each edge.

10. In a card mounting runway having a base portion and marginal edges directed laterally outwards in a plane above that of said base portion for engagement between the backs of cards and card attachment lugs pressed back from said cards for locating said cards slidably on said runways with the cards supported thereon with said lugs engaging under said edges; the provision of means locally increasing the effective thickness of said edges at points near each end thereof, and attaching means engaging the base portions of a pair of said runways and retaining said runways in aligned end to end relation whereby the normal edge embraced clearance between the back of a card and its lugs is increased as a card is slid off the end of a runway, thereby to facilitate transfer of a card from one runway to another where a pair of said runways are held by said attaching means in closely disposed and said aligned end to end relationship.

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