

June 29, 1965

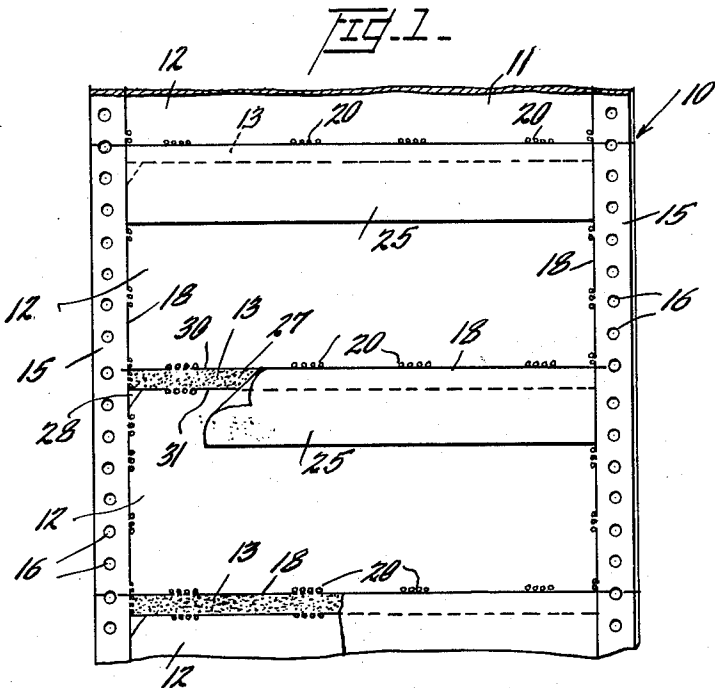
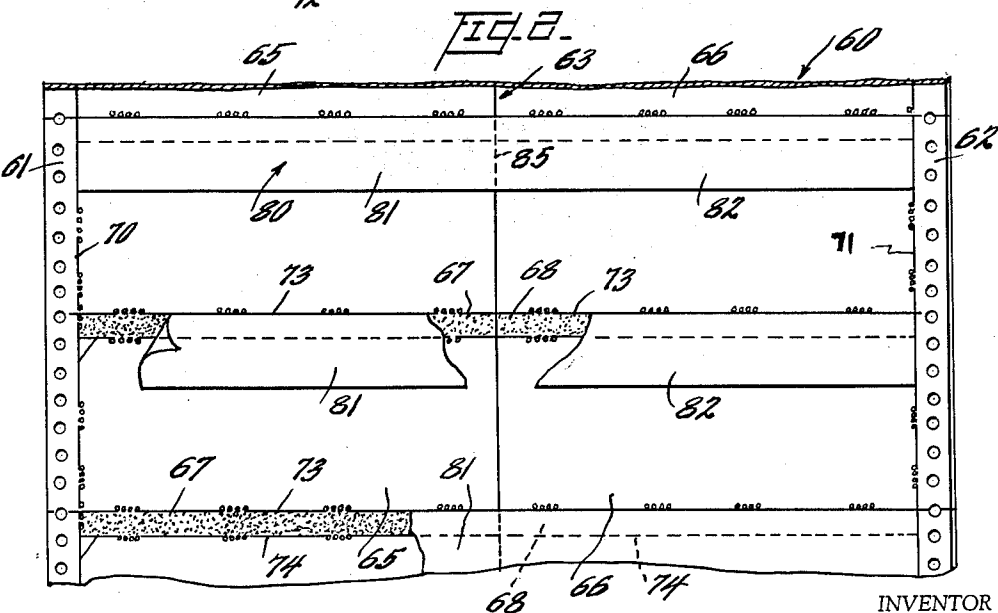
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CONTINUOUS TAB CARDS AND VOUCHERS

Filed April 5, 1962

2 Sheets-Sheet 1



INVENTOR

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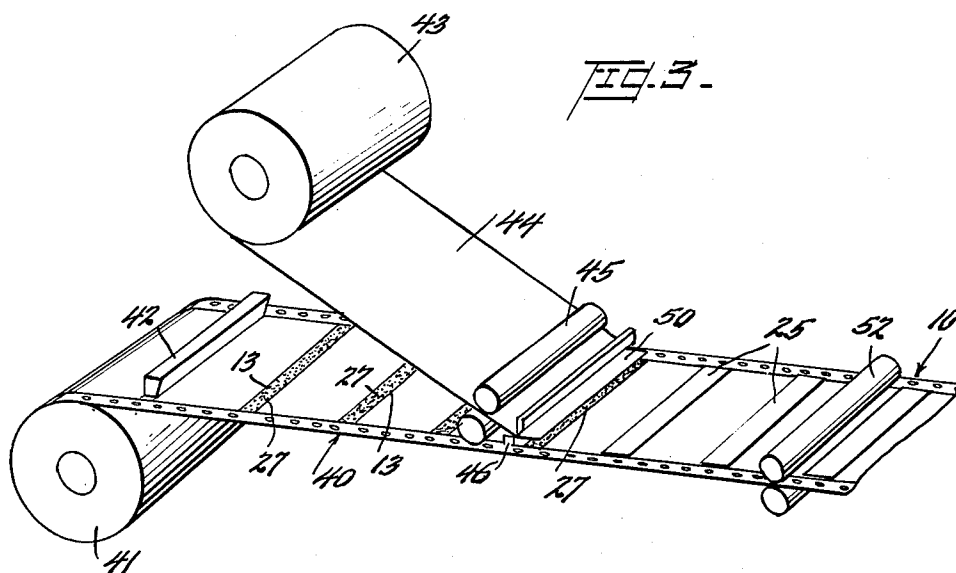
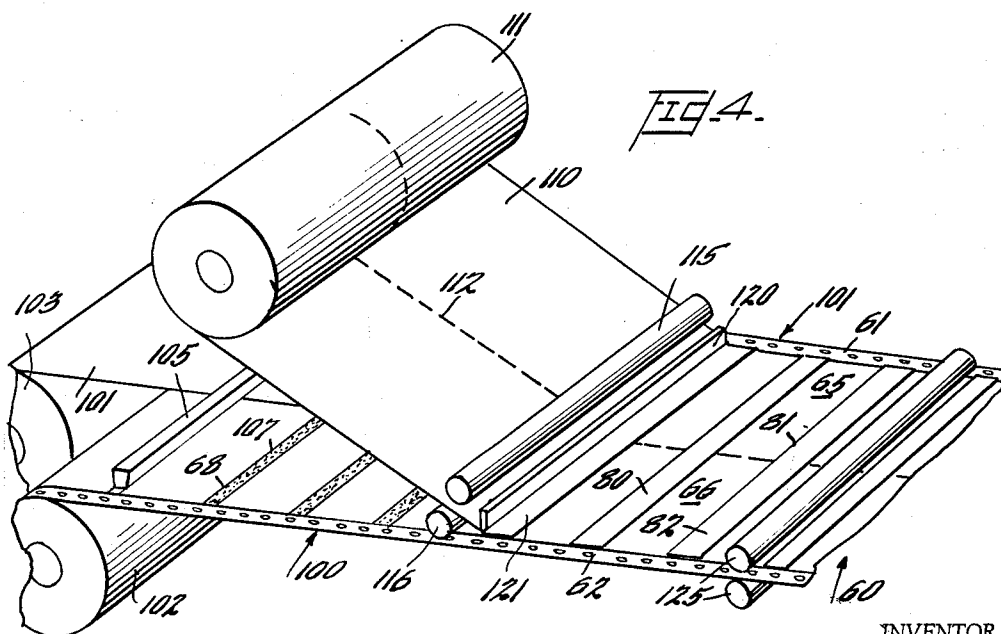
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CONTINUOUS TAB CARDS AND VOUCHERS

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1 Claim. (Cl. 281—2)

This invention relates to continuous tabulating cards, commonly called tab cards in the industry, which are adapted to be processed through high-speed printers, and the invention has for its general object the provision of novel and improved webs of continuous cards of pre-punched IBM style but modified in ingenious ways, both for constructional advantages and for the addition of auxiliary features.

Of the many types of tab cards now in use a great percentage comprise negotiable paper such as checks and other transferable items, and it is convenient in connection with such instruments to have detachable voucher forms or stubs associated therewith. Other examples of primary and supplemental cards, sheets, and stubs, will undoubtedly occur to those experienced in this art.

The invention, in its preferred embodiments, contemplates the provision of novel tab cards and attached vouchers, and of continuous webs of such cards and vouchers for passage through high-speed printers in their preparation, the cards and their individual vouchers being readily separable from the web assembly after its completion.

Preferably, the voucher or stub portion of the assembly is smaller in area than the card to which it is detachably secured, and is printed on bond paper which is much less expensive than card stock. The voucher overlaps a portion of the card and the combined unit is very compact and convenient for a customer to handle. The overlapping voucher actually serves to protect a considerable portion of the card from smudging or soiling.

The tab card continuous web is provided with perforated feed margins and between each successive card in the web are narrow discardable areas of the web. The margins of each card where it adjoins the side feed margins and the intervening discardable strips are so perforated for detachment from these discardable portions that the resulting marginal portion of a card presents sharp straight edges for accurate positioning in automatic sorting and handling machines. Any tufts or rough severance edges are purposely recessed within the margin by means known in the art.

One novel feature of the invention is the attachment of the voucher strips to the throw-away chips constituting the intervening areas of the web between the adjacent cards. The vouchers for most purposes should be of about the same width as the cards or somewhat narrower.

In one embodiment of the invention a continuous web is formed in double card width and a medially perforated voucher strip or band is secured to the throw-away chips between the successive pairs of cards and comprises the sole means of securing the cards together laterally.

Other objects and features of novelty include novel methods of forming the continuous card webs and will be apparent from the following specification when read in connection with the accompanying drawings in which certain embodiments of the invention are illustrated by way of example.

In the drawings:

FIGURE 1 is a view in perspective of a portion of a continuous web of combined tab cards and voucher strips, the web being of single card width;

FIGURE 2 is a similar view of a double width tab card web with the voucher strip indicated;

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FIGURE 3 is a schematic view in perspective illustrating one process of fabricating the single width web and voucher strip combination shown in FIGURE 1; and

FIGURE 4 is a similar view of means for forming the double web of FIGURE 2.

In FIGURE 1 of the drawings there is illustrated more or less diagrammatically a single card width web showing the construction thereof. The web is given the general designation 10 and comprises an intermediate section 11 which includes the successive card areas 12 and intervening transverse strips 13 which are ultimately discarded and are thus termed throw-away chips.

Along the margins of the web 10 there are formed the feed strips 15 which are provided with pin feed perforations 16 in a well-known manner.

As is common in the art, provisions are made to sever the card 12 proper from both the feed strips 15 and the intervening chips 13 so that the resulting edge perimeters of the card present only sharp, straight line contact with whatever guide they may be placed against. Thus, the cards and the strips 15 and 13 are severed completely throughout much of their contacting borders as at 18, for example, and at spaced intervals along these lines of severance there are cut into the card areas 12 within the outer boundaries of the perimeter of the card the series of small perforations 20. As well known in the art, when the areas thus connected are torn apart, any protruding tufts of burst paper fibers lie well within the perimeter of the card and do not present any obstructions or difficulties in lining the straight edge of the card up with any necessary guide surface. No claim is made to this specific means of detachably connecting the described areas.

According to a basic feature of the invention, auxiliary tabs, sheets or leaves are associated with each of the cards and these may be in the form of the voucher strips 25 which are preferably of the same width as the card areas 12 although they may be narrower if desired, but should not be so wide as to interfere with the function of the feed strips 15, 16. These vouchers may carry printed matter or any other kind of indicia constituting secondary information, such as receipts, acknowledgments, file records, etc., supplementing that carried by the cards 12 proper.

The uppermost voucher 25 in FIGURE 1 is shown with its upper edge adhesively secured to the underlying uppermost throw-away chip 13 and the voucher extends down any necessary distance in overlying relationship to its card 12. The dimension of the voucher in the longitudinal direction of movement of the web may be varied considerably in accordance with the need.

The second voucher 25 downwardly from the top of the web section of FIGURE 1 is shown broken and curled away from its position of securement to the chip 13 and indicates the area of application of the adhesive to the chip as suggested at 27.

For certain conventional purposes, the upper left-hand corners of the cards are cut away as indicated at 28.

For the purpose of reference to the use of the cards, the two lines of severance of the cards 12 and the chips 13 are separately indicated at 30 and 31. Line 30 is the line of severance between two combined card and voucher units, whereas the line 31 becomes the ultimate line of severance when it is desired to detach the voucher 25 from the card 12, the chip 13, of course, going along with the voucher to its ultimate destination.

One method of forming the web 10 shown in FIGURE 1 is suggested diagrammatically in FIGURE 3 of the drawings where the primary web 40 is unrolled from the prepared roll 41, this web having already been pre-punched and provided with the lines of severance before being stored in the roll 41. As the preliminary web 40 is unwound, means suggested at 42 are employed to apply a

transverse strip of adhesive to each of the chip areas 13, the adhesive being suggested at 27 as in the other figure of drawing.

At the same time there is fed from a roll 43 a web 44 preferably of bond paper or a paper material of less thickness and weight than the card stock comprising the basic web 40. The web 44 carrying any preliminary indicia or rulings upon its surface is fed by means of the rolls 45 toward convergence with the basic web 40 and shear blades 46 cut off the leading sections of the web 44 as indicated at 50, these sections comprising the vouchers 25 of the completed card and voucher web. Immediately upon severance, the strips 50 are brought into contact with the adhesive 27 on the chips 13 and pass forwardly through the feed rolls 52 as integral parts of the combined web 10. Feed rolls 52 may also serve the purpose of increasing the adhesion of the vouchers to the adhesive coated chips.

Another embodiment of the invention is illustrated in FIGURE 2 of the drawings where the continuous card and voucher web is indicated generally by the numeral 60. Between marginal feed strips 61 and 62 there is provided in the finished web the double card width intermediate area 63, this area being constituted chiefly by the individual cards 65 and 66 lying side by side, but not connected at the center line of the web through any interconnection between the webs of card stock themselves. However, in forming the web, care must be taken to keep the cards 65 and 66 and also the respective intervening chip areas 67 and 68 in transverse alignment or registry.

As in the previous example, severance lines 70 and 71 are established between the perforated marginal feed strips 61 and 62 and the laterally outer margins of the cards 65 and 66 and similarly constructed lines of severance 73 are provided between the tail edges of the cards, as they proceed in an upward direction as viewed in FIGURE 2, and the intervening chips 67 and 68. Other severance lines 74 are established between the chips 67 and 68 and the forward or leading margins of the cards 65 and 66 and these constitute the final severance means for separating the chips from their associated cards, the chips of course bearing voucher strips as in the previously described embodiment.

In this particular embodiment, however, the double voucher strips 80 comprising the half strips 81 and 82 extend across the width of both cards 65 and 66 substantially from one feed strip to the other. The separate voucher portions 81 and 82 of the voucher strips 80, however, are connected by the line of perforations 85 and these double voucher strips 80 comprise the sole means for connecting the individual rows of cards which respectively contain the card 65 and the cards 66, during their progress through the forming and printing apparatus.

Ultimately the vouchers 81 will be associated with the particular cards 65 which they overlie and similarly, the vouchers 82 will accompany the particular card 66 with which it is associated, this after the voucher portions of the original strip 80 have been severed along the line 85.

The construction of the web in this embodiment will be more clearly understood by reference to FIGURE 4 of the drawings which illustrates the method by which the web may be assembled. In this arrangement the card-containing original webs 100 and 101 are separately formed and wound upon the rolls 102 and 103. However, in this case feed strips 61 and 62 are formed only on the laterally outer edges of the individual preliminary webs 100 and 101. The two webs are fed side by side, care being taken to have the individual cards 65 and 66 and their chip areas 67 and 68 in accurate transverse registry.

A glue-applying device indicated diagrammatically at 105 serves to apply adhesive 107 to the chip areas to which the voucher slips are attached. The voucher strip web 110 wound upon the roll 111 is preferably provided with a central severance line 112 and is fed by means of the feed rolls 115 and 116 to a shear device 120 which severs

the leading end portion 121 of the web 110 which becomes the double width voucher and connecting strip 80.

The web is fed forwardly by means of the feed rolls 125 which also serve to complete the adhesion of the strips 80 to the preliminary webs 100 and 101 and thus provide a unitary double width card and voucher web as indicated at 60 in FIGURES 2 and 4.

It is apparent that if desired, the ultimate card and voucher web may be made of triple, quadruple, or even additional widths but in all cases with a connecting device comprised of the voucher-bearing transverse strips as exemplified by the strip 80 of the illustrated embodiment.

It is understood that various changes and modifications may be made in the embodiments illustrated and described herein without departing from the scope of the invention as determined by the subjoined claim.

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

A web of continuous form stationery of card stock formed with lines of slits and perforations outlining a longitudinal series of pairs of interior break-out tabulating cards, the cards of each pair arranged side by side and extending transversely across the web, each pair completely surrounded by side and end strips, said side strips being continuous along the web and provided with longitudinally spaced pin-feed perforations, the left-hand side strip associated with the left side of the left-hand tabular card being separated therefrom by a series of aligned cut-out vertical slits but detachably connected at intervals therealong by tear perforations inset into the margin of the tab card and disposed between adjacent slits; the right-hand side strip associated with the right side of the right-hand card being separated therefrom by a similar series of aligned vertical slits but joined by similar inset tear perforations between the slits, whereby straight-edge outer margins will be provided at the opposite remote ends of the pairs of cards for proper tabular card machining, said end strips extending across the upper and lower ends of the respective cards of the pairs, and separated therefrom by a series of slits and intervening inset tear perforations for straight-edge separation of the cards, the web itself comprising a pair of longitudinally extending halves which are substantially "mirror images" of each other, each including respectively the right-hand and left-hand cards of the pairs, and their adjoining side and end strips, the end strips adjacent the respective right-hand and left-hand cards of each pair having ends abutting along the center line of the web, voucher sheets adapted to receive indicia relating to the indicia to be carried by the respective adjacent tabulating cards; each voucher sheet being of a width not greater than the total width of the respective adjacent abutting end strips, having one transverse edge portion adhesively secured to said end strips, and having a portion overlying the adjacent pair of cards upon one side of the intervening end strips; severance perforations in each voucher sheet along the longitudinal line between the unattached rows of cards and end strips, said voucher sheets being the sole means connecting the two half portions of the web, and the adjoining edges of the cards of each pair being unconnected and straight-edged for tabulating card machining.

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