Aug. 22, 1944. G. L. ANDERSON ET AL 2,356,495

CARD REGISTER

Filed Dec. 10, 1942 3 Sheets-Sheet 1

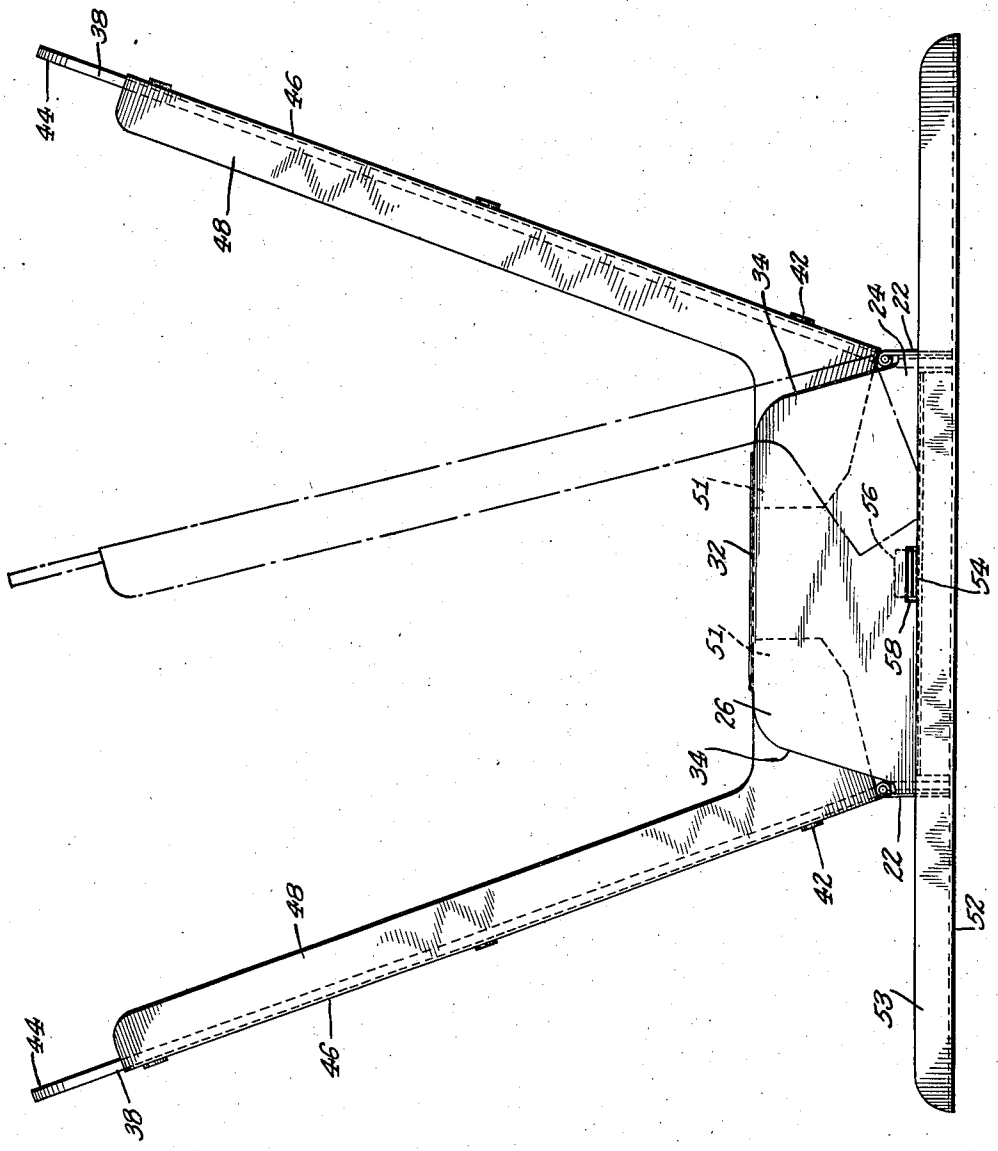


FIG. 1.

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Filed Dec. 10, 1942 3 Sheets-Sheet 2

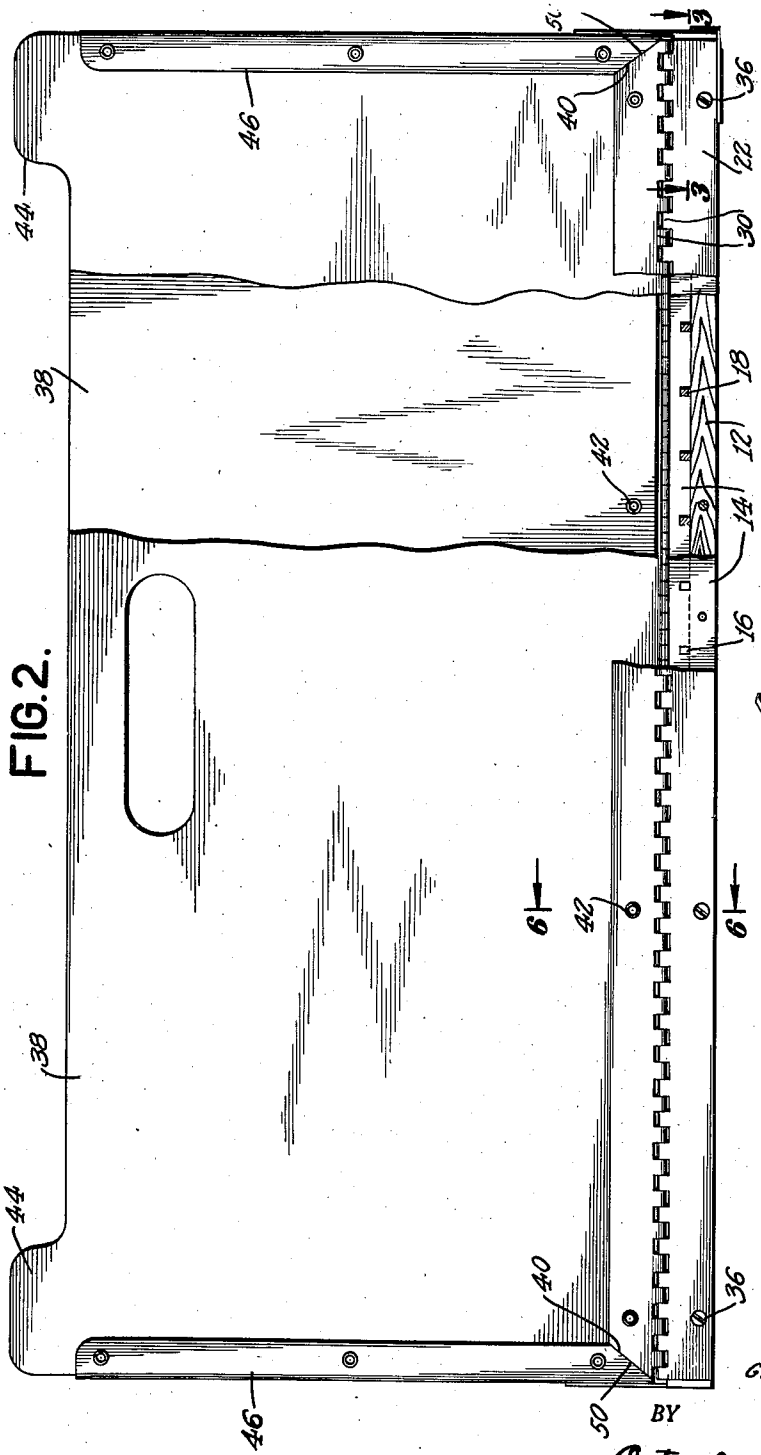


FIG. 2.

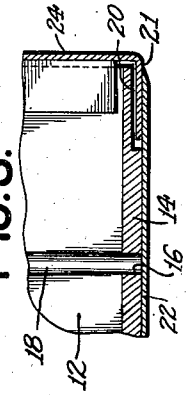


FIG. 3.

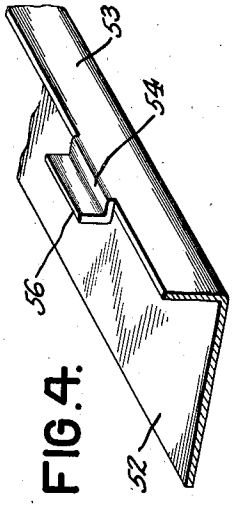


FIG. 4.

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Filed Dec. 10, 1942 3 Sheets-Sheet 3

FIG.5.

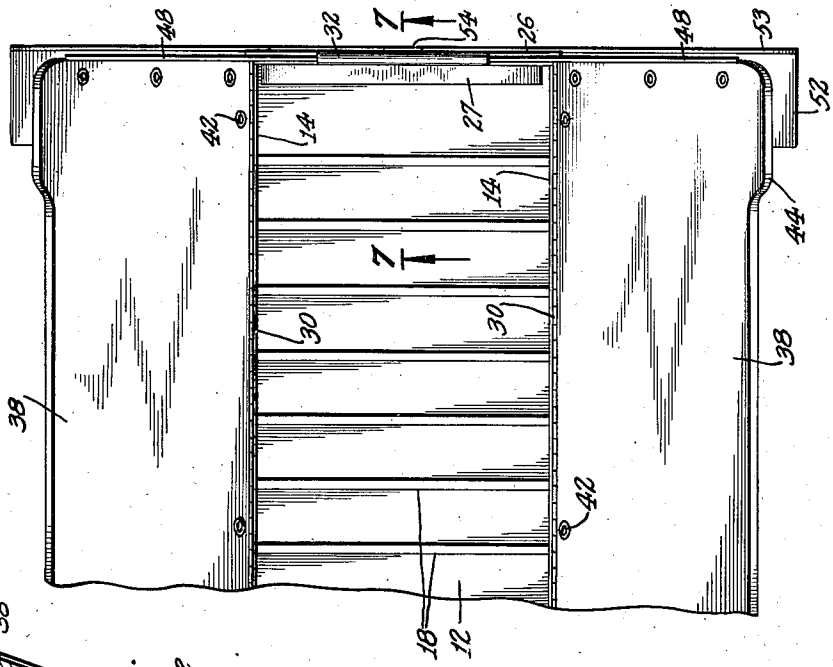


FIG.6.

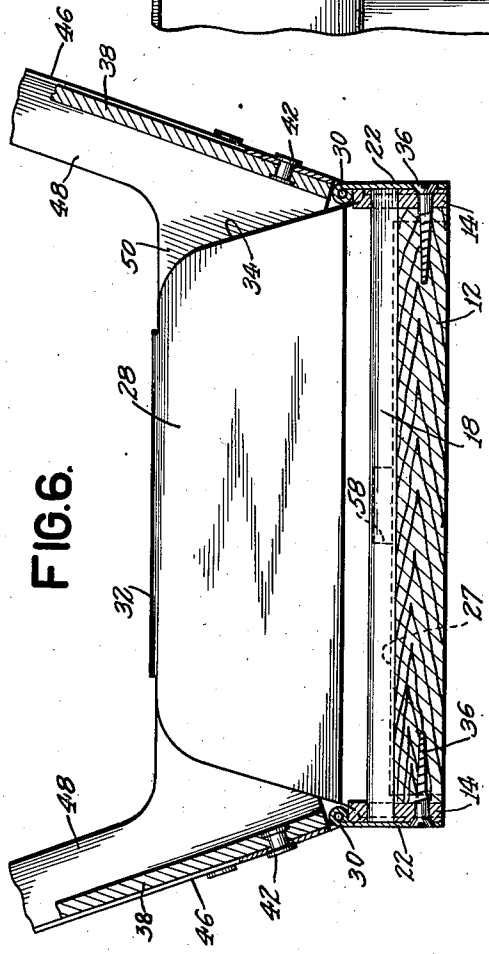
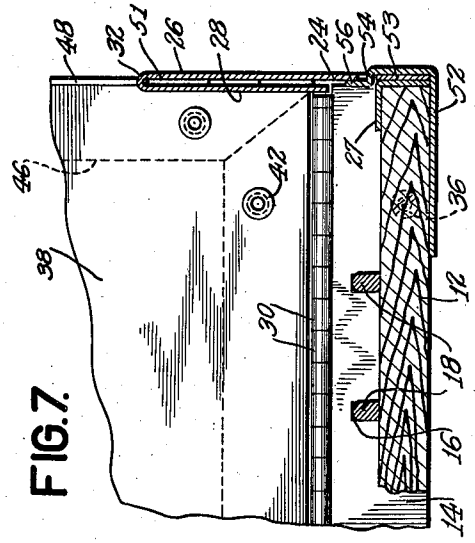


FIG.7.



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UNITED STATES PATENT OFFICE

2,356,495

CARD REGISTER

Gilbert L. Anderson, Flushing, and Frank C. Ryan, Yonkers, N. Y.; vested in the Alien Property Custodian

Application December 10, 1942, Serial No. 468,596

4 Claims. (Cl. 129—16)

This invention relates generally to card indexes or card registers of the kind in which the index cards or sheets have certain structural characteristics adapted to cooperate with portions of a container or holder for the cards to permit the positioning of the cards in relative offset relation whereby portions of all such cards will be visible. More particularly, the invention relates to containers for the cards whereby such cards may be readily arranged and handled. Accounting and filing systems of this character are disclosed and claimed in United States Patents No. 1,713,945 granted May 21, 1929; No. 1,975,566 granted October 2, 1934; and No. 2,192,178 granted March 5, 1940.

It has been proposed to employ slotted or apertured cards cooperating with supporting or positioning bars and the like whereby the cards are offset either vertically or horizontally with respect to one another and in its simplest form, this arrangement involved slotting the cards along the lower edges thereof for horizontal offsetting as well as vertical offsetting.

One object of the invention is the provision of portable carriers or trays each receiving a plurality of index cards and which may be severally disposed in a cabinet in a compact arrangement while at the same time side wall portions of the portable trays are capable of angular displacement to afford inclined supporting surfaces for the cards in ready reading position.

Another object of the invention is a portable tray the parts of which may be readily assembled in mass production.

It is also an object of the invention to provide against a tray tipping over when resting on a plane surface.

A further object of the invention is a readily removable stabilizing device for the trays.

The invention also embodies constructions which are practical from the standpoint of ease and practicability of manufacture and convenience and durability in use.

These and other objects of the invention and the means for their attainment will be more apparent from the following detailed description, taken in connection with the accompanying drawings illustrating various embodiments by which the invention may be realized and in which:

Figure 1 is a view in end elevation showing a portable tray of this invention in which the various features are incorporated, the side walls being shown in open position in full lines, one of the side walls being shown in closed position in broken lines, and a stabilizing device being in position;

Figure 2 is a view in side elevation of the portable tray of Figure 1, parts being removed to show details of construction;

Figure 3 is a detail view taken in the plane indicated by the line 3—3 of Figure 2;

Figure 4 is a view in elevation showing stabilizing means to prevent the tray tipping over when placed on a table or the like;

Figure 5 is a fragmentary view in plan showing one end of the portable tray of this invention;

Figure 6 is a transverse, vertical, sectional view taken in the plane indicated by the line 6—6 of Figure 2 and looking in the direction of the arrows; and

Figure 7 is a fragmentary view showing, in section, a detail of the tray and taken in the plane indicated by the line 7—7 of Figure 5.

The portable tray of this invention comprises a rectangular base of which the bottom 12 (Figure 6) is preferably of wood or other fibrous or organic material. Along each side of the base member 12 is a side strip 14 of wood or other non-metallic material and conveniently secured thereto, as by an adhesive. These side members 14 are of a height greater than the thickness of the base 12 so as to extend a distance sufficiently thereabove to be perforated as at 16 at equally spaced intervals along the length thereof for the reception of positioning members shown as the bars 18. Each end of a side strip 14 is rabbeted on its inner side, as shown at 20 in Figure 3, for a distance sufficient to receive elements 21 of a metallic base frame member next to be described.

The base frame member comprises metallic hingle carrying side walls 22 joined by end walls 24, the extremities 21 of which are turned at right angles to be received in the aforesaid recesses 20 and between the side strips 14 and the side walls 22 to which they are secured as by spot welding. If desired, the end walls 24 may be provided with angle irons on the inner sides thereof, one side 27 of which extends inwardly over the top of the non-metallic base member 12 to facilitate the positioning of the parts in assembly and to add rigidity to the tray as a whole.

Each end wall 24 has, conveniently integral therewith, an upwardly extending front wall portion 26, see Figure 7, and a reversely and downwardly bent rear portion 28 shown as extending downwardly to about the horizontal plane of the hinges 30 and spaced from the front portion.

The reverse bend 32 is shorter than the width of the base 12.

The ends 34, Figure 1, of the end members 24 may be inclined as stops and supports for the movable side members at their innermost positions. The metallic structure 22, 24, as a whole, is secured as by screws 36 passing through the frame side walls 22 and the side members 14 and entering the base member 12 in order to secure the parts together as an integral whole.

Hingedly mounted upon the stationary side walls 22 of the metallic member are movable side walls 38. These movable side walls are pivotally mounted along their longitudinal lower edges as by the butt hinge connections 30 extending substantially the length of the side walls 22 and their extremities are cut off on a bias, as at 40, Figure 2. Thus, one wing of each of the hinge members 30 is formed by and constitutes the stationary side wall 22 secured to the base and the other wing is secured to the movable side wall members 38 as by rivets 42. The movable side wall members are conveniently formed of a non-metallic material, such as fibreboard, having upwardly extending tab portions 44 which retain the adjacent edges slightly spaced and permit movement of the side walls inwardly past the vertical through an angle of about 20°.

The ends of the side members are secured, as by rivets, to one flange 46 of angle members 46, 48. The lower end of flange 46 is bevelled, as at 50, Figure 2, and is shown as joining the hinge member at the angularly related portion 40 to which it may be welded. The flanges 46 of angle members 46, 48 are formed with inwardly extending end plate extensions or arms 51 which extend within the spaces formed by the juxtaposed end portions 26, 28 which flanges, in the position shown in full lines in Figure 1, engage the turned-over portions 32 of the end plates to limit the outward movement of the movable sides and, in the position shown in broken lines, engage the bottom of the tray to limit the inward movement of the sides.

To prevent a tray from tipping over when removed from a cabinet and standing, say, on a desk so that the index cards can be conveniently examined, the stabilizing base member illustrated in Figures 1, 4 and 5 is provided. This stabilizing member is shown as comprised of a transversely extending member 52, angle shaped in cross section, which is relatively thin but rigid and of a length greater than the width of the portable tray to extend a sufficient distance on opposite sides thereof to stabilize the tray, as illustrated in Figure 1. One side of the angle member is adapted to be disposed beneath the bottom at one end and to rest on the surface on which the tray is supported, while the side 53 at right angles thereto is formed with an inwardly directed tongue 54, 56 having an upwardly directed end 56 which may be passed through a rectangular slot 58 formed in at least one end 24 of the metallic frame on the tray base. The horizontally extending portion 54 extends over the base of the tray. Because of the inwardly and upwardly directed portions of the latching tongue 54, 56, the tray and stabilizing member are held together when the tray is resting upon a supporting surface but when the tray is lifted from that supporting surface, as when it is to be returned to a cabinet, the stabilizing member, of itself, readily drops out of the slot 58 and remains behind on the supporting surface while the tray is carried to its position in the cabinet. Only one such stabilizing member is required although if desired each end of the tray may be formed with a slot to receive the tongue of a stabilizing member.

The purpose and operation of the several features of the invention have been described in conjunction with the description of the several parts and no further description of the invention is deemed necessary. Suffice it to say that suitable trays for card indices have been provided which are readily stored in restricted spaces in a cabinet and yet are provided with stabilizing devices which prevent their being tipped over when removed from the cabinet and placed on a table or the like for examination of the cards. These trays may be conveniently manufactured at low cost, and with few operations, of readily available material. The parts are interchangeable and reversible, thus facilitating assembly.

It will also be seen that a stabilizing member has been provided for a portable tray which extends beyond the sides thereof a sufficient distance to prevent the tray from tipping over. By means of self-latching devices, the tray is securely held to this stabilizing member when it rests upon the supporting surface and yet is capable of being readily released without the intervention of the hand when it is to be returned to a cabinet.

Various modifications will occur to those skilled in the art in the composition, configuration and disposition of the component elements going to make up the invention as a whole, as well as in the selection of specific features for particular purposes, and no limitation is intended by the phraseology of the foregoing description or illustrations in the accompanying drawings except as indicated in the appended claims.

What is claimed is:

1. In card indexing devices, in combination, an elongated base of fibrous material, side strips of non-metallic material secured, respectively, to the longer sides of the base and extending thereabove, slots formed in the respective side members above the upper surface of the base member, positioning members disposed in the slots and in parallel relationship one to another for the reception and disposition of slots defined by tabs formed along the lower edges of cards, a rectangular metallic frame member telescoped over the base member and the side strips and secured thereto, the extremities of the ends of the frame member being inwardly bent and telescoped within the said side strips and said side strips being recessed at their ends to receive the inwardly bent extremities on the ends of the frame member, the end members of said metallic frame member extending upwardly above the base member and said extensions being reversely bent into parallel relationship with the upwardly extending portions of the end members, movable side walls hingedly connected with the sides of the frame member, angle members secured to the ends of the side walls and formed with inwardly directed arms disposed within the reversely bent portions of the metallic end members to limit inward and outward movement of the side walls, at least one of said end members being formed with at least one transversely extending slot and at least one stabilizing member one side of which is formed with an inwardly and then upwardly directed tongue to enter a slot, a horizontal portion of said stabilizing member extending beneath the base of the tray and outwardly of the sides thereof to prevent tipping of the tray.

2. In card indexing devices, in combination, an elongated base of fibrous material, side strips of

non-metallic material secured, respectively, to the longer sides of the base and extending thereabove, slots formed in the respective side members above the upper surface of the base member, positioning members disposed in the slots and in parallel relationship one to another for the reception and disposition of slots defined by tabs formed along the lower edges of cards, a rectangular metallic frame member telescoped over the base member and the side strips and secured thereto, the extremities of the ends of the frame member being inwardly bent and telescoped within the said side strips and said side strips being recessed at their ends to receive the inwardly bent extremities on the ends of the frame member, the end members of said metallic frame member extending upwardly above the base member and said extensions being reversely bent into parallel relationship with the upwardly extending portions of the end members, movable side walls hingedly connected with the sides of the frame member, angle members secured to the ends of the side walls and formed with inwardly directed arms disposed within the reversely bent portions of the metallic end members to limit inward and outward movement of the side walls, one of said end members being formed with a transversely extending rectangular slot and a stabilizing member comprising an angle member one side of which is formed with an inwardly directed tongue and an upwardly directed tongue portion to enter the slot, the horizontal portion of said last named angle member extending below the base of the tray and outwardly of the sides thereof to prevent tipping of the tray.

3. In card indexing devices, in combination, an elongated base of fibrous material, side strips of non-metallic material secured, respectively, to the longer sides of the base and extending thereabove, slots formed in the respective side members above the upper surface of the base member, positioning members disposed in the slots and in parallel relationship one to another for the reception and disposition of slots defined by tabs formed along the lower edges of cards, a rectangular metallic frame member telescoped over the base member and the side strips and secured thereto, the extremities of the ends of the frame member being inwardly bent and telescoped within the said side strips and said side strips being recessed at their ends to receive the inwardly bent extremities on the ends of the frame member, the end members of said metallic frame member extending upwardly above the base member and said extremities being reversely bent into parallel relationship with the upwardly extending portions of the end members, movable side walls hingedly connected with the sides of the frame member, angle members secured to the ends of the side walls and formed with inwardly directed arms disposed within the reversely bent portions of the metallic end members to limit inward and outward movement of the side walls, said end members being each formed with a transversely extending rectangular slot and stabilizing members each comprising an angle member one side of which is formed with a tongue to enter the corresponding slot, the horizontal portion of each angle member extending below the base of the tray and outwardly of the sides thereof to prevent tipping of the tray.

4. In card indexing devices, in combination, an elongated base of non-metallic material, side strips secured to the respective longer sides of the base and extending thereabove, positioning members supported by the side strips in parallel relationship for the reception and disposition of cards formed along their lower edges with tabs defining slots for reception over the positioning members, a rectangular metallic frame telescoped over the base member and the side strips and secured thereto and whereof the extremities of the ends of the frame member are inwardly turned, said side strips being recessed at opposite ends to receive the inwardly turned extremities, the end members of said metallic frame member extending upwardly above the base member and said extensions being reversely bent to parallel relationship with the upwardly extending portions of the end members, movable side walls respectively hingedly connected with the side members of the frame member and cooperating hinge members secured to the movable side walls.

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