

Dec. 21, 1948.

J. J. NASH
REFECTORY TABLE

2,456,835

Filed July 31, 1944

3 Sheets-Sheet 1

FIG. 1.

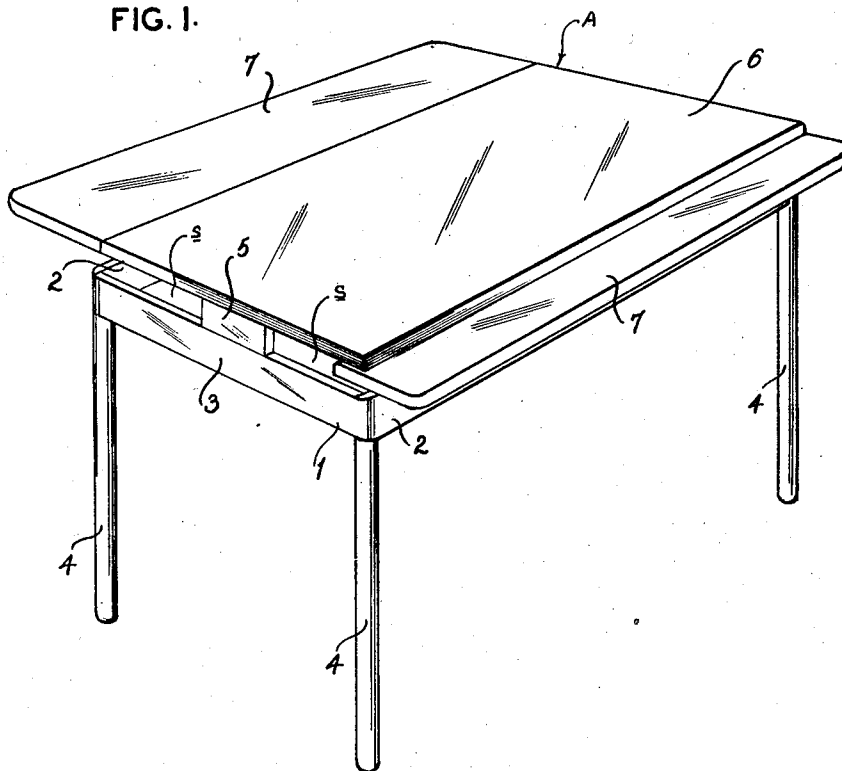
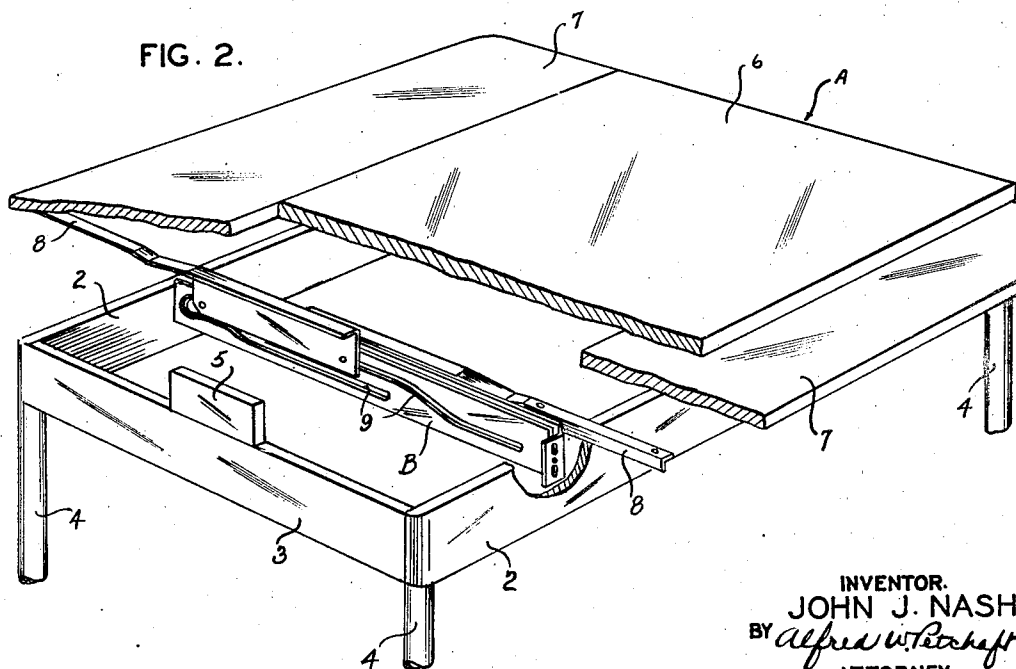


FIG. 2.



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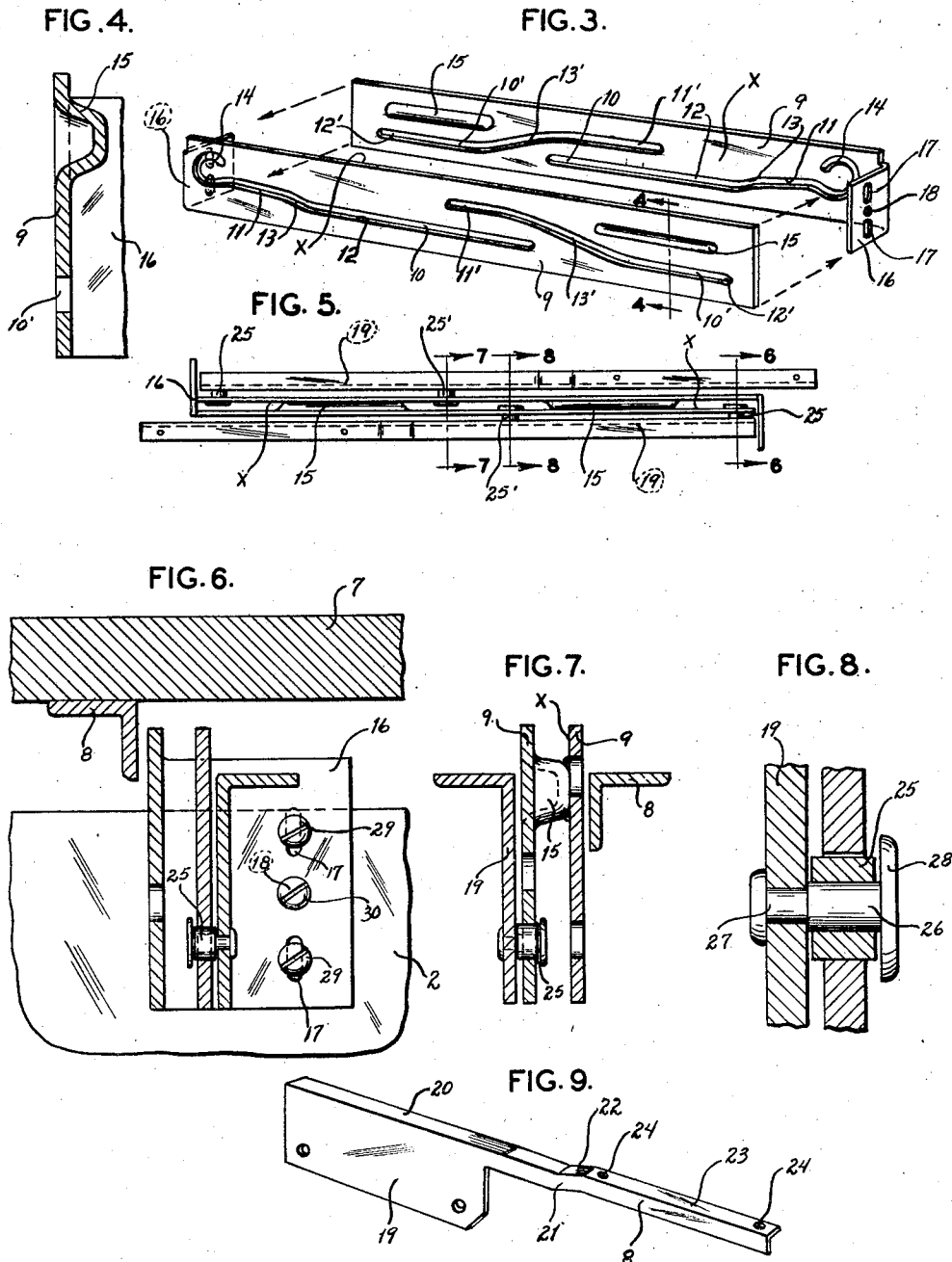
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REFECTORY TABLE

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3 Sheets-Sheet 2



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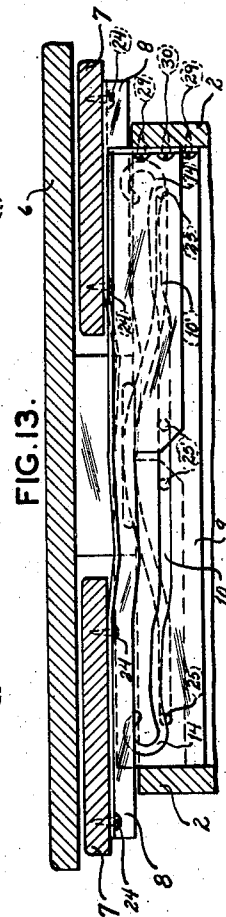
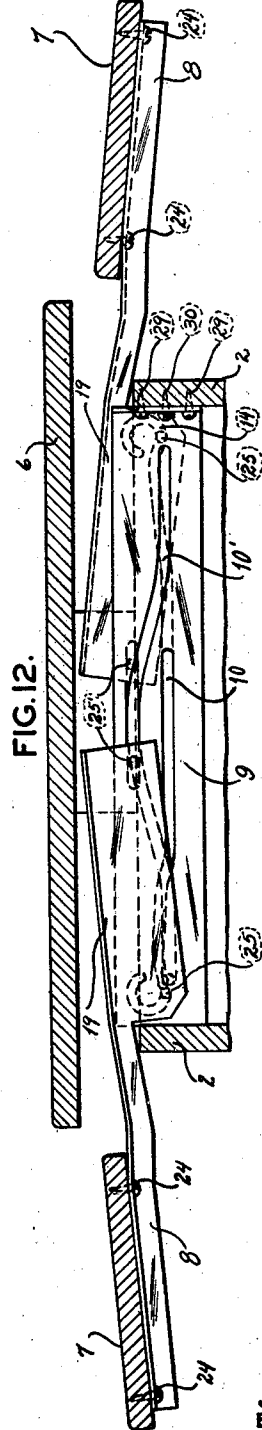
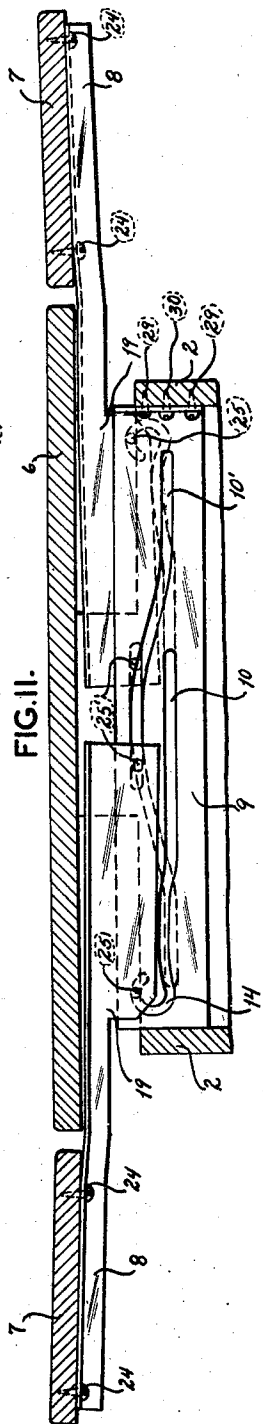
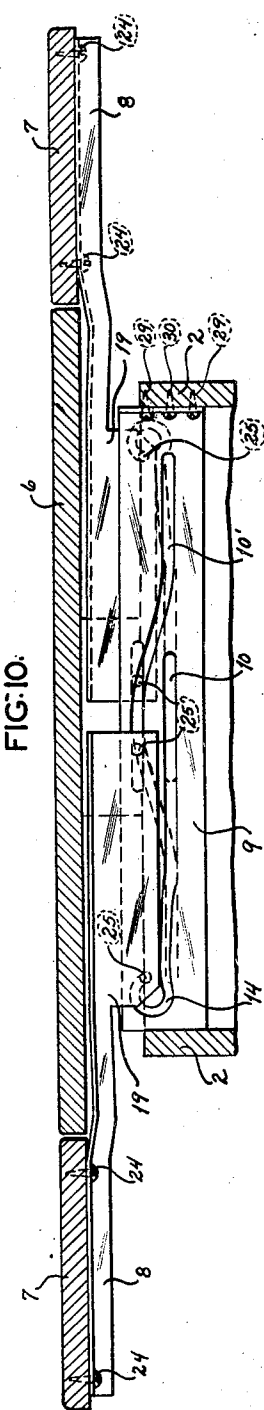
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2,456,835

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3 Sheets-Sheet 3



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UNITED STATES PATENT OFFICE

2,456,835

REFECTORY TABLE

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Application July 31, 1944, Serial No. 547,457

2 Claims. (Cl. 311-56)

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The invention relates in general to refectory tables and, more particularly, to a slide mechanism whereby one or more leaves of a refectory table may be pulled out from beneath a main table top or panel and positioned to form an extension of the same.

The primary object of the present invention is to provide a table of the type stated which includes a simple, durable track and slide construction capable of securely and firmly supporting the extension leaf.

Another object of the present invention is to provide a refectory table having a slide adapted to secure the leaf in extended position without latches or other holding means which must be manipulated to release the leaf when it is to be moved from its extended position.

Another object is to provide a track and support assembly which is rugged, long-wearing, and economical, and may be fabricated by relatively simple production methods for convenient installation in the table frame.

And with the above and other objects in view, my invention resides in the novel features of form, construction, arrangement, and combination of parts presently described and pointed out in the claims.

In the accompanying drawings (three sheets) —

Figure 1 is a perspective view of a refectory table embodying the invention;

Figure 2 is also a perspective view of the refectory table, partly broken away and in section, showing in more detail the slide construction;

Figure 3 is an exploded view of the slide, showing the manner in which it is uniquely made up of two identical stampings which interfit when reversed;

Figure 4 is a sectional view taken along the line 4-4 of Figure 3;

Figure 5 is a top plan view of the assembled slide;

Figures 6, 7, and 8 are detail vertical sections taken on the corresponding section lines of Figure 5;

Figure 9 is a detail side view of the track-engaging end portion of one of the leaf supports; and

Figures 10, 11, 12, and 13 are vertical sectional views of the table with the extension leaves moved to different positions as will be referred to below.

Referring now in more detail and by reference characters to the drawings, A designates a preferred form of refectory table embodying the present invention and comprising a rectangular

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table frame 1 having spaced horizontal side-rails 2 mortised or otherwise conventionally secured at their ends to cross-connecting end-rails 3, and suitably mounted at each of the four corners of the frame 1 are vertical table legs 4. Secured upon the upper or edgewise faces of the end-rails 3, midway between the side-rails 2, are spacer blocks 5 and a central, table-top forming panel 6 is securely attached upon the upper faces thereof. It will be noted in this connection that there are slot-like spaces 8 thus provided between the under face of the panel 6 and the upper edges of the rails 2, 3, for receiving sliding leaves 7. Furthermore, the blocks 5 are somewhat thicker than the leaves 7, so that when the latter are nested in close fitting relation beneath the panel 6, there will be sufficient clearance between the under face of the leaves 7 and the upper edges of the rails 2, 3, to permit free movement of leaf-supporting arms 8, which form a part of slide elements B, as hereinafter more fully described. It is sufficient here to point out that the mechanical action of the slide elements B is uniquely so arranged that this clearance need only be slightly greater than the vertical thickness of the arm 8, which latter dimension, of course, depends upon the structural strength of the material used and the size of the load to be supported. Consequently the deep clearance slots, usually cut into the side rails of conventional refectory tables, become unnecessary, with the result that the side rails 2 are much stronger, and the table A is accordingly much more rugged, than those hitherto provided.

The slide elements B comprise two identical track members 9, each preferably stamped from a relatively heavy gauge sheet metal and provided with two track slots 10, 10', (see Figure 3) respectively having upper horizontal runs 11, 11', and lower horizontal runs 12, 12', connected by diagonal runs 13, 13'. The upper run of track slot 10 terminates in an upwardly and inwardly and downwardly curved detent section 14. While being stamped or formed, each track member 9 is provided with a pressed-up, flat-topped spacing shoulder 15 and an inwardly bent mounting flange 16, the latter having two vertically spaced elongated apertures 17 and a small round aperture 18 located therebetween. As above stated, the track members 9 are identical, but, when assembled, are reversed end for end, as shown in Figure 3, so that the spacing shoulders 15 respectively abut against the solid metal faces lying between the detent section 14 of the slot 10 and the forward

end of the upper run 11' of the track slot 10', as indicated at x in Figure 3.

The leaf-supporting arms 8 are also stamped or otherwise suitably formed from heavy gauge sheet metal and integrally provided at the rear or butt end with a relatively wide vertical plate 19. The arms 8 are preferably, though not necessarily, formed in the manner of angle-iron with a horizontal flange 20 and a vertical web 21 and are slightly offset, as at 22, in the provision of a forward section 23 having screw holes 24 for securement to one of the extension leaves 7.

In assembling the slide elements B, an arm 8 is laid against the outer face of a track member 9 with the plate 19 overlying the lower horizontal runs 12, 12', of the track slots 10, 10', and rollers 25, 25', sized to work in the slots 10, 10', are inserted therein and rotatably secured to the plate 19 by short studs 26, each having a diametrically reduced tail portion 27 inserted through, and upset against the opposite face of, the plate 19. The rollers 25, 25', have an axial width slightly greater than the thickness of the plate 19 and each stud 26 is provided at its free end with an enlarged head 28, which is substantially larger than the width of the track slots 10, 10', so that the arm 8 is hence retained upon the track member 9 for lengthwise shifting movement along a path determined by the movement of the rollers 25, 25', in the track slots 10, 10'.

Finally, two track members 9, thus equipped with leaf-supporting arms 8, are assembled in reversed end-to-end relation, as shown in Figure 5, with the spacing shoulders 15 in respective abutment against the face-portions x and secured by spot-welding, riveting, or in any other suitable manner in the provision of a unitary slide element B. It will, if course, be evident that the overall length of the slide element B is such as to fit snugly between the side-rails 2, so that the outwardly presented faces of the mounting flanges 16 will abut against the inner vertical faces of the side-rails 2. Obviously the dimensions of the slide elements may be varied depending upon the size of the table being constructed.

Two such slide elements B are mounted within the table frame 1 and initially secured adjacent the upper edges of the side-rails 2 by screws 29 driven through the elongated apertures 17. Thereupon the several arms 8 are pulled out into extended position and the leaves 7 screwed or otherwise suitably secured thereon. Then the slide elements B are tapped gently with a hammer or by means of any other suitable tool adjusted slightly upwardly or downwardly, as the case may be, to "level" the leaves 7, that is to say, bring the upper faces of the leaves 7 and the panel 6 into co-planar alignment. This can be readily done since the apertures 17 are elongated and permit a reasonable degree of vertical adjustability so long as the screws 29 are not driven down too tightly. After the adjustment has been completed, the slide elements B are permanently secured in adjusted position by driving a single snug-fitting screw 30 through the circular aperture 18.

By reference to Figures 10 to 13, inclusive, it will be seen that when the leaf 7 is in extended position for use as an extension of the panel 6 in the formation of an enlarged table top, the arm 8 is supported in an elevated and extended position with its rollers 25, 25', seated respectively in the upper runs 11', 11', of the track slots 10, 10',

10'. The downwardly inclined terminal of the detent section 14, in which roller 25 is seated, in effect, locks the leaf 7 in position.

To lower and retract the leaf 7, it is manually pulled upwardly, overcoming the locking effect and thence outwardly, to the position shown in Figure 11, such tilting being permitted by the vertical offset 22 in the arm 8. Then the leaf 7 is permitted to drop, the roller stud 25 riding around the semicircular portion of the detent section 14 while the roller 25' acts as a pivot (see Figure 11). Finally, the leaf 7 is shoved inwardly, the movement of the rollers 25, 25', along the track slots 10, 10', leveling the leaf 7 and causing it to come to rest in close-fitting nested position beneath the panel 6, as shown in Figure 13.

The leaves 7 may be returned to the fully extended position shown in Figure 11 by reversing the movements above described and either leaf 7 may be retracted or projected independently of the other leaf or may be moved from one position to the other simultaneously without interference.

As has been above pointed out, the slide elements B may be quickly and economically fabricated as a complete unit by simple production methods and may be readily assembled in the table frame by the mounting flanges 1, thereby facilitating manufacture of the table. Furthermore, since the slide elements B are made of metal, the resulting table will be extremely rugged and long-wearing and the leaves 7 will never shift out of proper alignment due to excessive wear as is normally the case in refectory tables which have previously been manufactured. Finally, the unique mechanical movement of the arms 8 is such that great compactness and economy of space is achieved and the leaves 7 are securely held in extended position without accessory locking devices, but nevertheless can be quickly and simply shifted from extended to nested position.

It should be understood that changes and modifications in the form, construction, arrangement, and combination of the several parts of the table may be made and substituted for those herein shown and described without departing from the nature and principle of my invention.

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

1. In a refectory table, a slide frame consisting of two identical L-shaped stampings each having a relatively long rectangular plate section and a relatively short flange section disposed at right angles to the plate section, said stampings being adapted to fit in end-for-end reversed relation with their plate sections in spaced parallel position and with the flange section of one stamping extending across and projecting laterally beyond the end of the plate section of the other stamping, said stampings being, in such relation, secured rigidly together, each of said stampings being provided with a pair of complementarily shaped track forming slots having lower portions substantially aligned horizontally with each other and then being inclined upwardly, one end of one slot extending above the adjacent end portion of the other slot and the other end of the latter-mentioned slot terminating in an upwardly and rearwardly extending return bend, and slide arms shiftably mounted on said stampings and having rollers for movement in said slots.

2. In a refectory table, a slide frame consisting of two identical L-shaped stampings each having

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a relatively long rectangular plate section and a relatively short flange section disposed at right angles to the plate section, said stampings being adapted to fit in end-for-end reversed relation with their plate sections in spaced parallel position and with the flange sections of one stamping extending across and projecting laterally beyond the end of the plate section of the other stamping, said projecting portions of the flanges being provided with a pair of longitudinally aligned spaced slots and a medial circular aperture for receiving attachment means by which the slide may be secured to the framework of a table in which it is to be mounted, said stampings being, in such relation, secured rigidly together, each of said stampings being provided with a pair of complementarily shaped track forming slots having lower portions substantially aligned horizontally with each other and then being inclined upwardly, one end of one slot extending above the adjacent end portion of the other slot and the

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other end of the latter-mentioned slot terminating in an upwardly and rearwardly extending return bend, and slide arms shiftably mounted on said stampings and having rollers for movement in said slots.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,273,730	Buric	July 23, 1918
15 1,887,114	Benson	Nov. 8, 1932
1,987,953	Fox	Jan. 15, 1935
2,022,318	Lanum	Nov. 26, 1935
2,108,816	Holland et al.	Feb. 22, 1938
2,119,000	Ashkenas	May 31, 1938
20 2,139,140	Viehmann	Dec. 6, 1938