Aug. 28, 1956 E. GREACEN 2,760,838

FOLDING TABLE LEG PIVOTAL MOUNTING AND LATCH DEVICE

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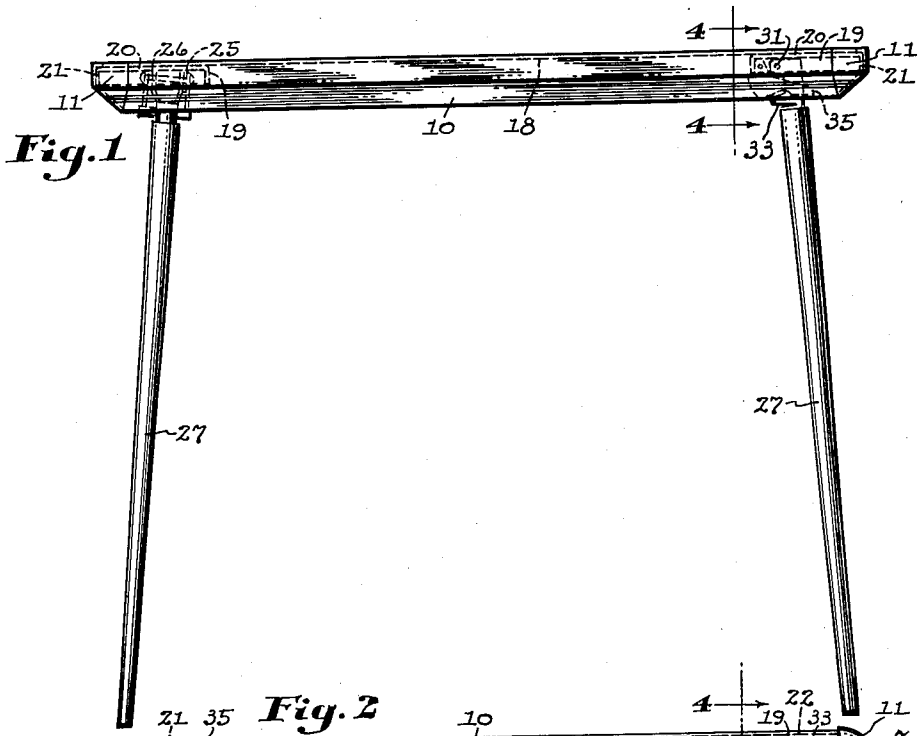



Fig. 1

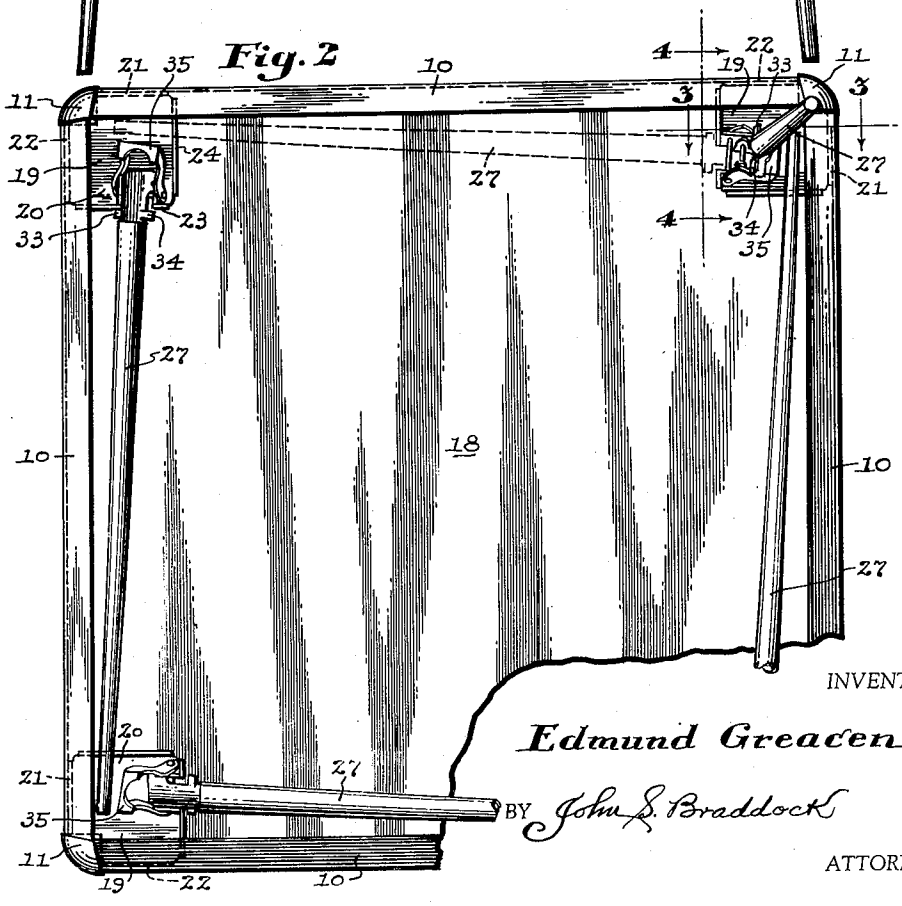



Fig. 2

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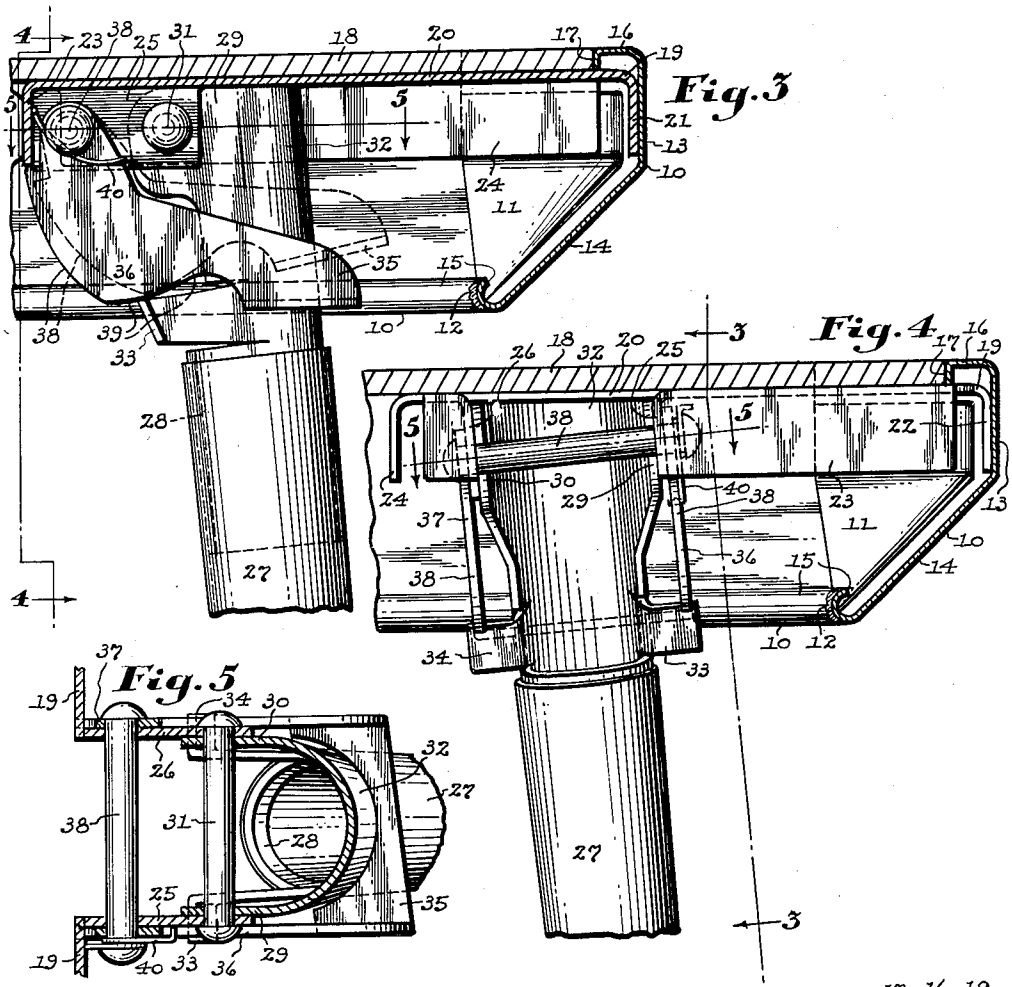


Fig. 3



Fig. 4



Fig. 5

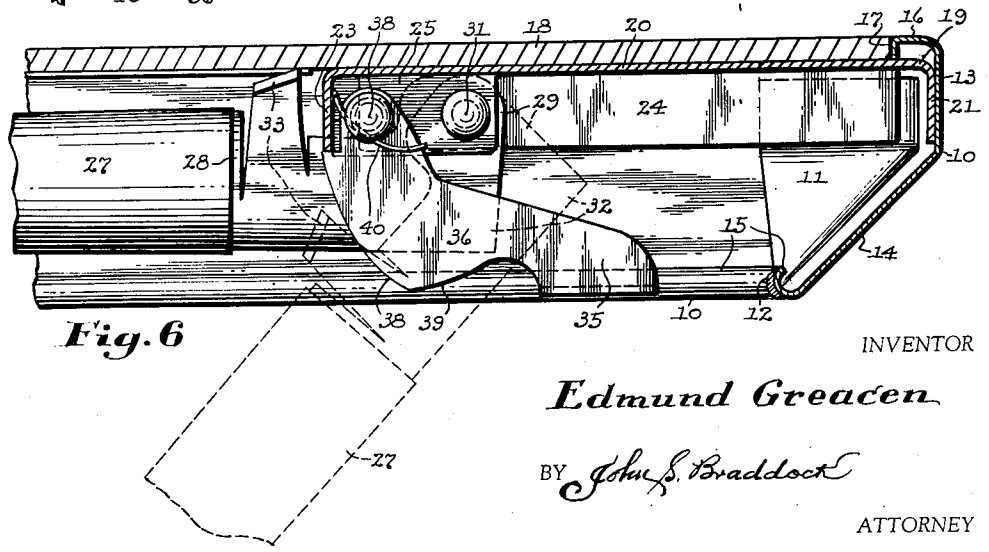


Fig. 6

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# FOLDING TABLE LEG PIVOTAL MOUNTING AND LATCH DEVICE

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3 Claims. (Cl. 311—99)

The present invention relates to folding tables and more particularly to so-called card tables primarily intended for household use.

The primary objects of the invention are to provide a folding card table in which the four legs are independently pivotally mounted for movement between collapsed and extended positions; to provide a device for releasably and securely locking each table leg in an extended position in which the leg slopes outwardly and downwardly with respect to each of the two adjacent sides of the table; thus to present a pleasing appearance and also to add to the sturdiness of the table; and to provide such a construction which is rugged and relatively simple and economical in manufacture and especially easy to operate.

An illustrative embodiment of the invention is shown in the accompanying drawings, wherein:

Figure 1 is a side elevational view of the folding table in open or extended position;

Figure 2 is a fragmentary bottom plan view of the same with three of its legs in closed or collapsed positions and its fourth leg shown in extended position in full lines and in collapsed position in dotted lines;

Figure 3 is an enlarged fragmentary vertical sectional view of a corner of the table top and the leg mounting devices secured thereto, the line of section being indicated by lines 3—3 of Figures 2 and 4, and the table leg there shown being in extended position;

Figure 4 is a fragmentary vertical sectional view of the same taken on lines 4—4 of Figures 1, 2 and 3;

Figure 5 is a fragmentary sectional view of parts thereof taken on line 5—5 of Figures 3 and 4; and

Figure 6 is a fragmentary vertical sectional view similar to Figure 3 and showing the table leg in partially collapsed position in dotted lines and in fully collapsed position in full lines.

Referring now in detail to these drawings wherein like parts are designated by the same numerals in the several views, the folding table there shown generally comprises a frame or rim having four straight sections of molding **10** connected by corner pieces **11** and desirably welded together at their bottom corners as at **12**. As best illustrated in Figures 3, 4 and 6, the molding sections **10** have vertical portions **13**, downwardly inwardly sloping portions **14** terminating in upwardly curled portions **15**, and portions **16** extending inwardly from the upper edges of the vertical portions **13** and thence downwardly to form retaining flanges **17** for the table top **18**.

Brackets **19** are secured in the corners formed by the meeting adjacent molding sections **10**, these brackets each having a flat body **20** mounted horizontally beneath a corner of the table top **18** and in support thereof, and depending attaching flanges **21**, **22** secured as by means of spot-welding to the vertical portions **13** of the molding sections **10**. Other depending flanges **23**, **24** add rigidity to the brackets **19**.

The brackets **19** have portions struck downwardly from the flat body thereof to form spaced depending side walls **25**, **26**. The legs of the table are formed of downwardly



tapering metal tubing sections **27** each having an extension **28** fitted into its upper end and comprising the upper end portion of the leg which is formed to inwardly opening U-shaped cross-section with the inner side flanges **28**, **30** thereof pivotally connected to the side walls **25**, **26** respectively of bracket **19** by means of a pintle **31**. The axis of the pintle **31** slopes inwardly-downwardly from one of the adjacent sides of the table top as best seen in Figure 4, so that the leg when extended slopes outwardly-downwardly with respect to that side of the table top, at a predetermined angle. The outer bight portion **32** of the cross-sectionally U-shaped upper end of each leg is adapted to abut the bracket's flat body **20** to limit movement of the leg to its extreme extended position, and the upper end edge of the leg is sloped so that in the extreme extended position of the leg it slopes downwardly-outwardly with respect to the other adjacent side of the table top at approximately the same predetermined angle as best seen in Figure 3. Thus the extended table presents a pleasing and symmetrical appearance notwithstanding the fact that the legs are so set that each in succession folds along a different side edge of the table when the latter is collapsed.

The upper end of each leg is provided also with a pair of oppositely laterally extending fingers **33**, **34** below the pivotal connections of the leg to the bracket **19**. A latch member **35** has side arms **36**, **37** which are secured to the bracket's depending side walls **25**, **26** inwardly of said side walls' pivotal connections to the table leg, by means of a pintle **38**. The inner and lower edges of the latch's side arms **36** and **37** are provided with cam surfaces **38** and with intersecting latching surfaces **39**. During the unfolding movement of the table leg the cam surfaces **38** are engaged by the table leg's fingers **33**, **34** thus displacing the latch member **35** to its position indicated in dotted lines in Figure 3, and thereafter the fingers **33**, **34** engage behind the latching surfaces **39** on the side arms **36** and **37** to securely lock the leg in its extreme extended position. A spring **40** circumscribing one end of the pintle **38** has one end in engagement with the flange **23** of bracket **19** and has its other end in engagement with an outer edge of the latch's side arm **36**, whereby the latch is normally urged toward its locking position.

When it is desired to collapse the table, each latch member **35** in succession is manually pressed from its full line position to its dotted line position indicated in Figure 3, thus freeing the fingers **33**, **34** from their engagement behind the latching surfaces **39** of the latch's side arms **36**, **37** and thus permitting the table legs to be folded in succession so that the table is collapsed for storage.

It will thus be seen that the invention provides a folding table which is neat in appearance, simple but sturdy in construction and easily operated, and while but one specific embodiment of the invention has been herein shown and described it will be understood that numerous details may be altered or omitted without departing from the spirit of the invention as the same is defined by the following claims.

I claim:

1. In a folding table, a device for pivotally mounting a table leg for movement between collapsed and extended positions and for releasably locking said leg in extended position comprising: a bracket having a flat body mounted horizontally beneath a corner of the table top and having spaced side walls depending from said body, the upper end of the table leg being formed to inwardly opening U-shaped cross-section with the inner side flanges thereof pivotally connected to the bracket's side walls respectively and with the outer bight portion thereof adapted to abut the bracket's flat body to limit movement of the leg to its extreme extended position, and said leg hav-

ing laterally extending fingers at its opposite sides below its pivotal connections to the bracket's side walls; and a latch member having side arms pivotally mounted on the bracket's depending side walls inwardly of the pivotal connections between said side walls and the upper end of the table leg, said side arms having cam surfaces which are engaged by said fingers during unfolding movement of the leg thus to displace the latch member and having also latching surfaces behind which said fingers engage to lock said leg in its extreme extended position with the bight portion of the leg's upper end abutting the flat body of the bracket.

2. A device according to claim 1 characterized by having spring means normally urging the latch member toward its locking position.

3. A device according to claim 1 characterized by having the axis of the table leg's pivotal mounting on the bracket sloping inwardly-downwardly from one of the adjacent sides of the table top so that the leg when



extended slopes outwardly-downwardly with respect to said side at a predetermined angle, and further characterized by having the upper end edge of the table leg sloped so as to abut the bracket's flat body and limit the leg's movement to an extended position in which it slopes outwardly-downwardly with respect to the other adjacent side of the table top at approximately the same predetermined angle.

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