July 29, 1958 M. B. GRAWL 2,845,110

CONVERTIBLE TABLE-BENCH ASSEMBLY

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Fig. 1

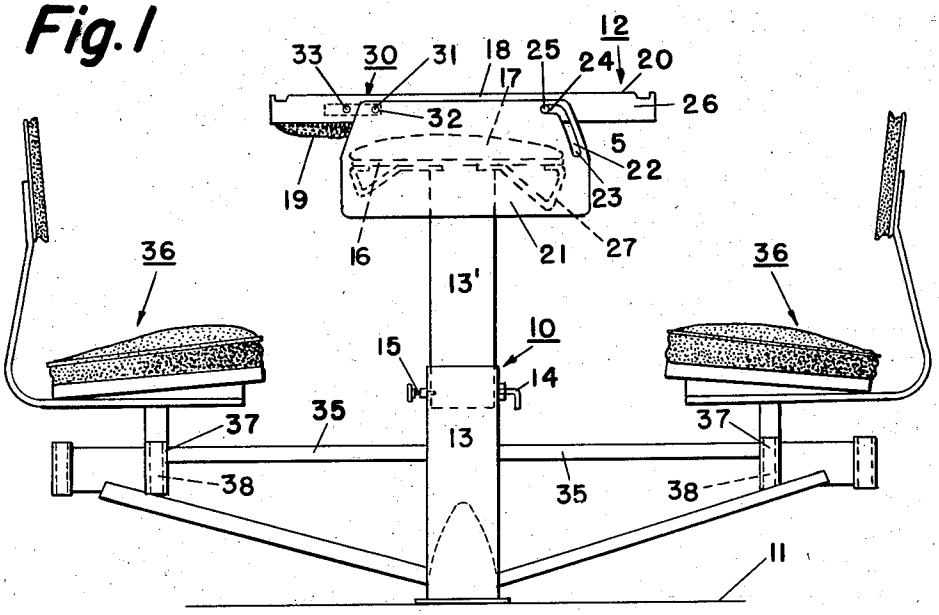
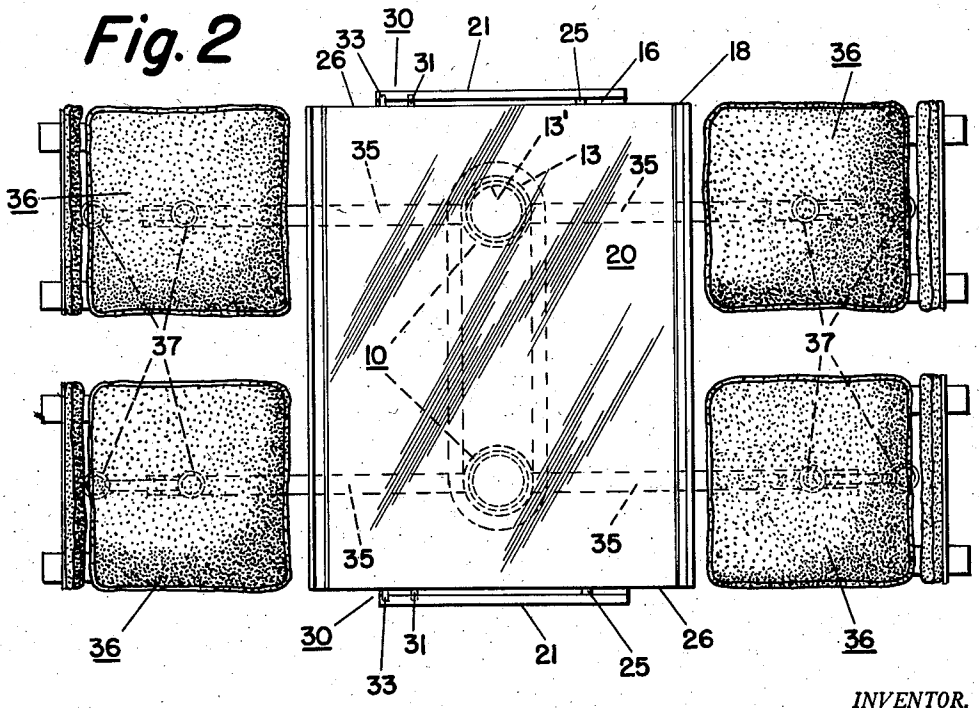


Fig. 2



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Fig. 3

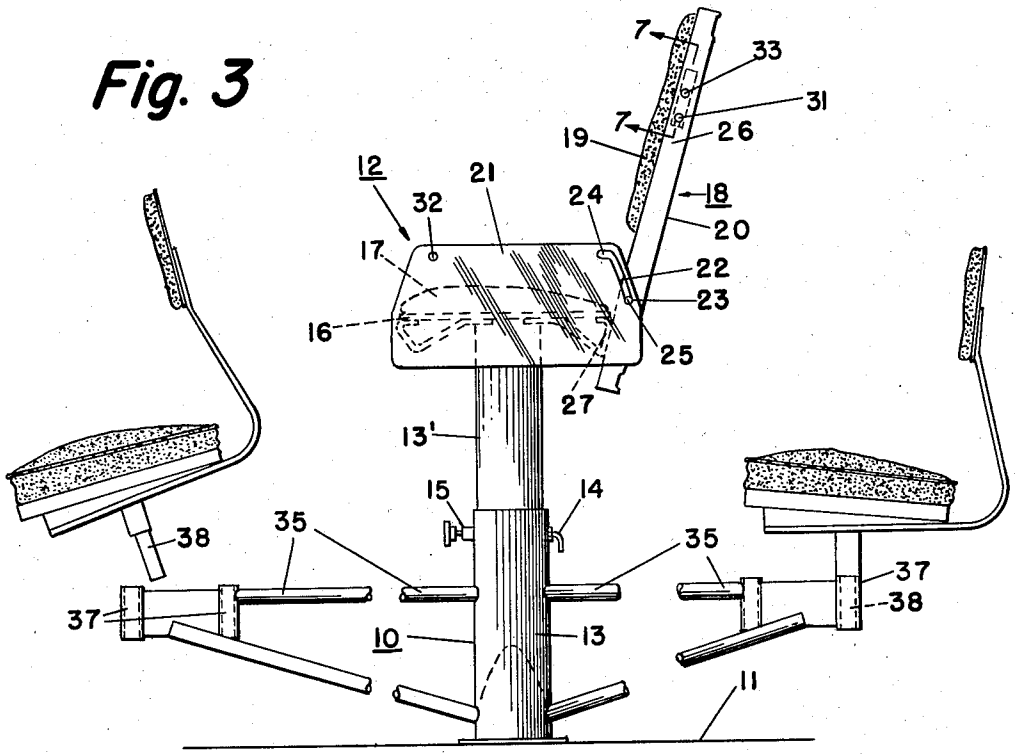
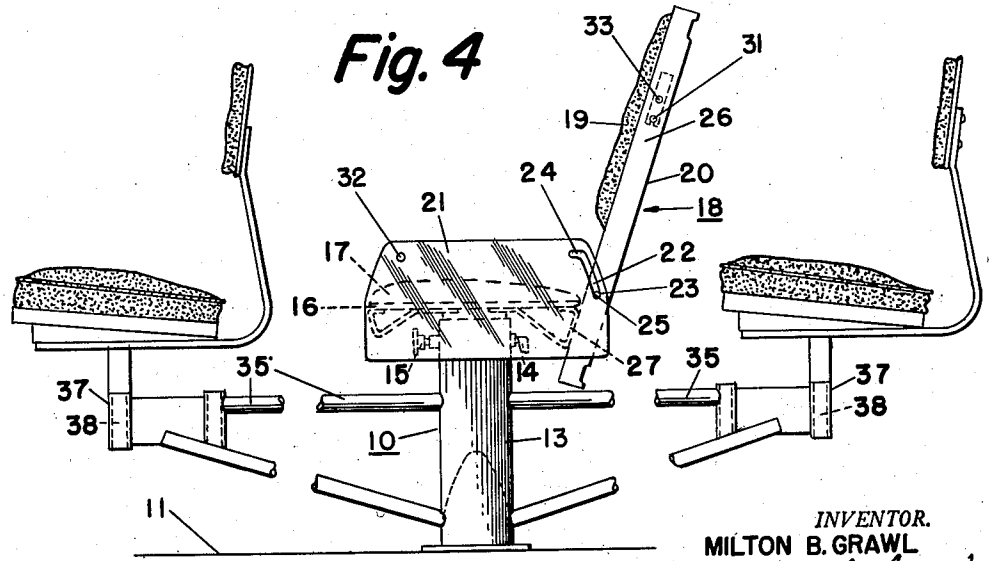


Fig. 4



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Fig. 5

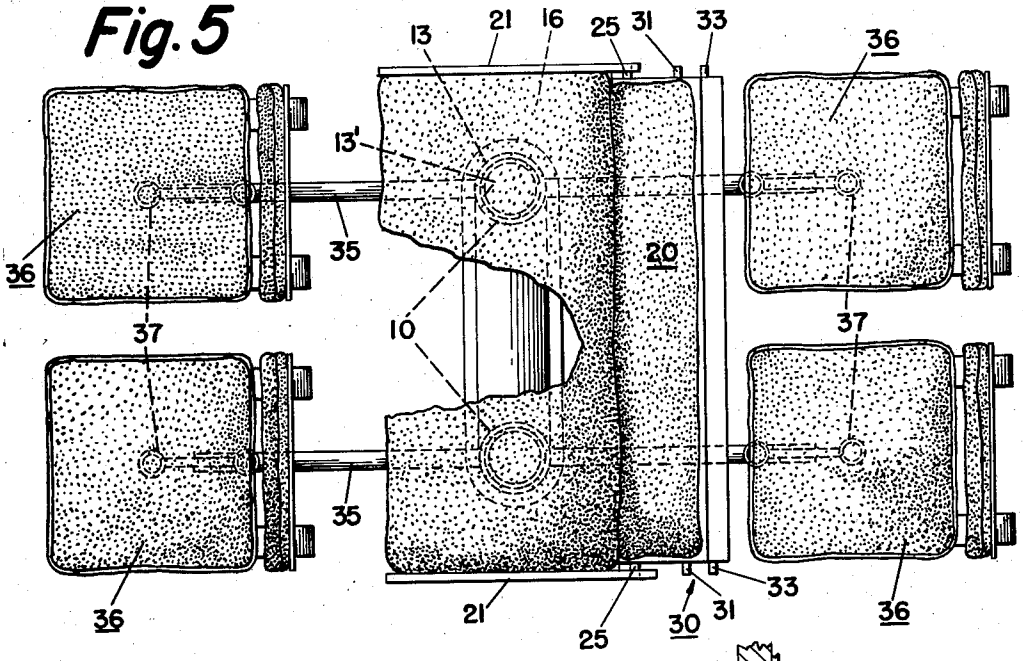


Fig. 6

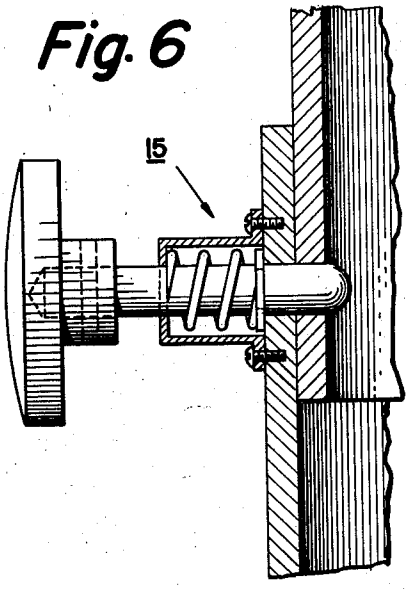
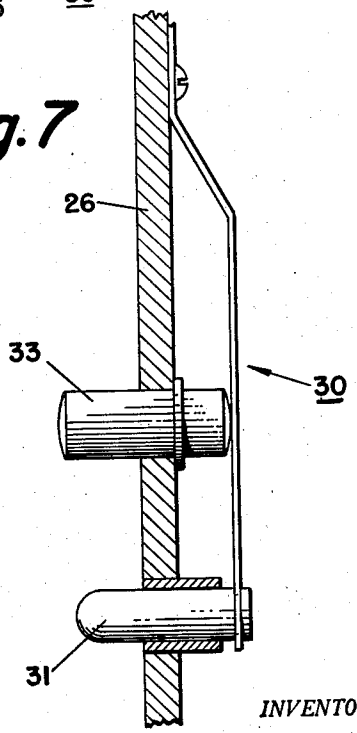


Fig. 7



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United States Patent Office 2,845,110 Patented July 29, 1958

2,845,110

CONVERTIBLE TABLE-BENCH ASSEMBLY

Milton Birch Grawl, Glen Mills, Pa.

Application February 9, 1956, Serial No. 564,593

1 Claim. (Cl. 155—43)

(Granted under Title 35, U. S. Code (1952), sec. 266)

The invention described herein may be manufactured and used by or for the Government of the United States of America for governmental purposes without the payment of any royalties thereon or therefor.

This invention relates to an article of furniture which is convertible for use as a table or bench and it is adapted for use with other benches or chairs which it supports.

The article of furniture of the present invention has general utility but is adapted particularly for ship installation where floor areas are required for use as dining quarters or as assembly rooms for social functions. The table bench combination is designed to serve the dual function, of a table when it is in one of its adjusted positions, and as a bench when in its other adjusted position. In either position of use it is arranged for supporting other chairs or benches to provide a dining room unit or an assembly room unit.

An object of the invention is to provide a convertible article of furniture of the type described which can be converted into either of its alternate forms quickly and with facility.

Another object is to provide such a convertible article of furniture which in its table position provides a serviceable and strong structure, and when adjusted to its bench position provides a rigid and yet comfortable seat with back rest.

A further object is to provide such convertible article of furniture which is simple in construction, can be manufactured at relatively low cost, is durable and is not likely to get out of order or require repairs.

Other objects and advantages of the invention will hereinafter become more fully apparent from the following description of the annexed drawings, wherein:

Fig. 1 is a view in elevation of the article of furniture in use as a table and an assembly of suitable chairs;

Fig. 2 is a top plan view showing the assembly of Fig. 1;

Fig. 3 is a view similar to Fig. 1 with the article of furniture converted to the form of a bench;

Fig. 4 is a view similar to Fig. 3 with the article of furniture adjusted for use as a bench; and

Fig. 5 is a top plan view of the assembly of Fig. 4;

Figs. 6 and 7 show details of the invention.

Referring to the drawings, a stanchion or standard **10** is secured to a surface such as a ship's deck **11** and supports at its upper end the table-bench assembly indicated generally at **12**. The member **10** is arranged to adjust the assembly **12** vertically and to this end is preferably formed of telescoping members **13** and **13'** which are locked in their selected upper or lower position by releasable locking means **14** and **15**. The locking means, as shown in Fig. 6, provides a pin which is received in an aperture in the telescoping element **13'** while the other provides a screw extension which is arranged to pressure contact the element, **13'** and these means cooperate to maintain the standard rigid after it is adjusted upwardly

or downwardly. As shown the standard **10** is formed with two sets of telescoping members **13** and **13'**.

The assembly **12** is made up of a fixed frame **16** forming a seating surface which is preferably provided with an upholstered cushion **17**, and a movable frame **18** having one face adapted to function as a back rest which is provided with an upholstered cushion **19** and its other face arranged to function as a table top **20**.

The fixed frame **16** is provided with an upstanding flange **21** at each of its ends and each flange is provided with a slot **22** in its rear end portion. Each slot extends between the top and bottom edges of the flange and is provided with spaced locking portions such as lower or rear locking portion **23** and an upper or front locking portion **24**.

The movable frame **18** is provided in its lower portion with lugs **25** which extend laterally from each of its sides **26**. The lugs are received in the slots **22** which permit movement of the lugs between the locking portions of the slots for adjustment of the movable frame **18** relative to the fixed frame **16**. The fixed frame **16** is additionally provided with stops **27** disposed adjacent and below its rear edge to limit the movement of the frame **18** when it is adjusted to its bench position.

In Fig. 1 and Fig. 2 the article of furniture is shown in its position for use as a table and the telescoping members **13'** of the standard are adjusted upwardly and locked in the upper position by the releasable locking means **14** and **15**. The back rest cushion **19** of the movable frame **18** is disposed in face to face relation with the cushion **17** of seat **16** of the fixed frame and the table top surface **20** faces upwardly in position for use. In this position the lugs **25** of the movable frame are received in the upper or front locking portion **24** of slot **22**. The table top may, as shown, be provided with suitable molding strips for decorative or utilitarian purposes.

An additional means is provided to lock the movable support **18** in the position of Fig. 1 and comprises a latch **30** shown in Fig. 7 of the well-known spring type which has one end fixed to the inner face of a side **26**. Each latch **30** has a lug **31** fixed thereto which is received in an aperture **32** in the upstanding flange **21** and a push button **33** for releasing the lug **31** from the aperture **32** is disposed on the side **26**.

In Fig. 3 the movable frame **18** is adjusted from its table position of Fig. 1 to form a bench having a back rest, and the lugs **25** extending from the sides **26** of the movable frame are positioned in the lower or rear locking portion **23** of the slot and in this position the lower end portion of the movable member abuts the stops **27** carried by the fixed frame. In order to make the adjustment of the movable frame from the position shown in Fig. 1 to that shown in Fig. 3, the push button **33** of the spring latch is pushed inwardly thereby releasing the lug **31** from the slot **32** and permitting the movable frame **18** to be raised.

In Fig. 4, the assembly of frame members **16** and **18** is adjusted downwardly from the position shown in Fig. 3, by the manipulation of the adjusting members **14** and **15**, to lower the telescoping members **13'** so that the assembly can function in its lower position as a bench.

As shown in Figs. 2 and 5, horizontal supports generally indicated at **35** extend outwardly from each of the standards and are for the purpose of receiving chairs which are shown at **36**. The chairs **36** form with the combination bench and table, a unit which is adapted for accommodating a small group for dining purposes or a larger group for lecture or entertainment purposes. The supports **35** are provided with sockets **37** which are similar in design and are for the purpose of receiving the shafts **38** of the chairs for adjusting the chair spacing

in accordance with the particular use of the combination bench and table assembly.

Obviously many modifications and variations of the present invention are possible in the light of the above teachings. It is therefore to be understood that within the scope of the appended claim the invention may be practiced otherwise than as specifically described.

What is claimed is:

An article of furniture for use as a table or a bench which comprises a stanchion fixedly supporting at its upper end a generally rectangular seat having front, rear and opposed side edges, a first fixed plate extending transversely of one side edge of the seat and forming a first vertical flange above the seat, a second fixed plate extending transversely of the other side edge of the seat and forming a second vertical flange above the seat, each of said flanges providing a front vertical edge portion adjacent the front edge of the seat and a rear vertical edge portion adjacent and beyond the rear edge of the seat, a slot in each of said rear vertical edge portions, each slot being generally vertical and terminating in an upper generally horizontal locking area, a rectangular table top having front, rear and opposed side edges, said opposed side edges of the table top being spaced apart to be received between and in closely adjacent relation with said flanges, each of said opposed side edges of the table top having a lug extending laterally therefrom, one of

said lugs being received in one of said slots and the other lug being received in the other of said slots when the article of furniture is assembled, said lugs being movable into the upper locking area of the slots to position the table top in horizontal position with its lower face in closely adjacent relation with the upper face of the seat and said lugs being movable downwardly of the slots when the table top is tilted from its horizontal position to provide a back rest for the seat, abutment means on the lower face of the seat and adjacent its rear edge to maintain the table top in its tilted position and said stanchion being adjustable upwardly or downwardly to accommodate the article of furniture for use as a table or as a bench.

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