

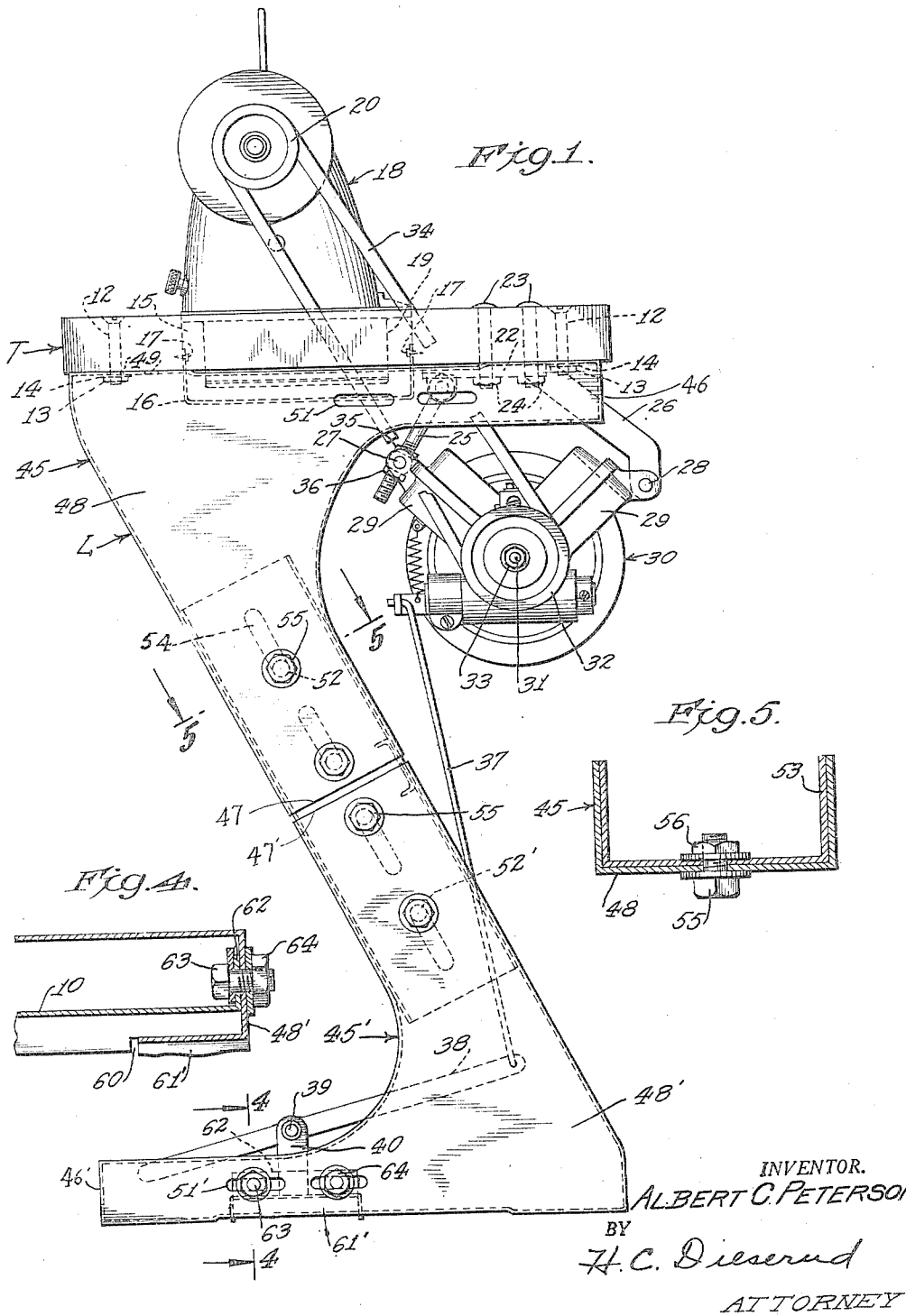
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WORKTABLE SUPPORTING STRUCTURE

2,496,230

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2 Sheets-Sheet 1



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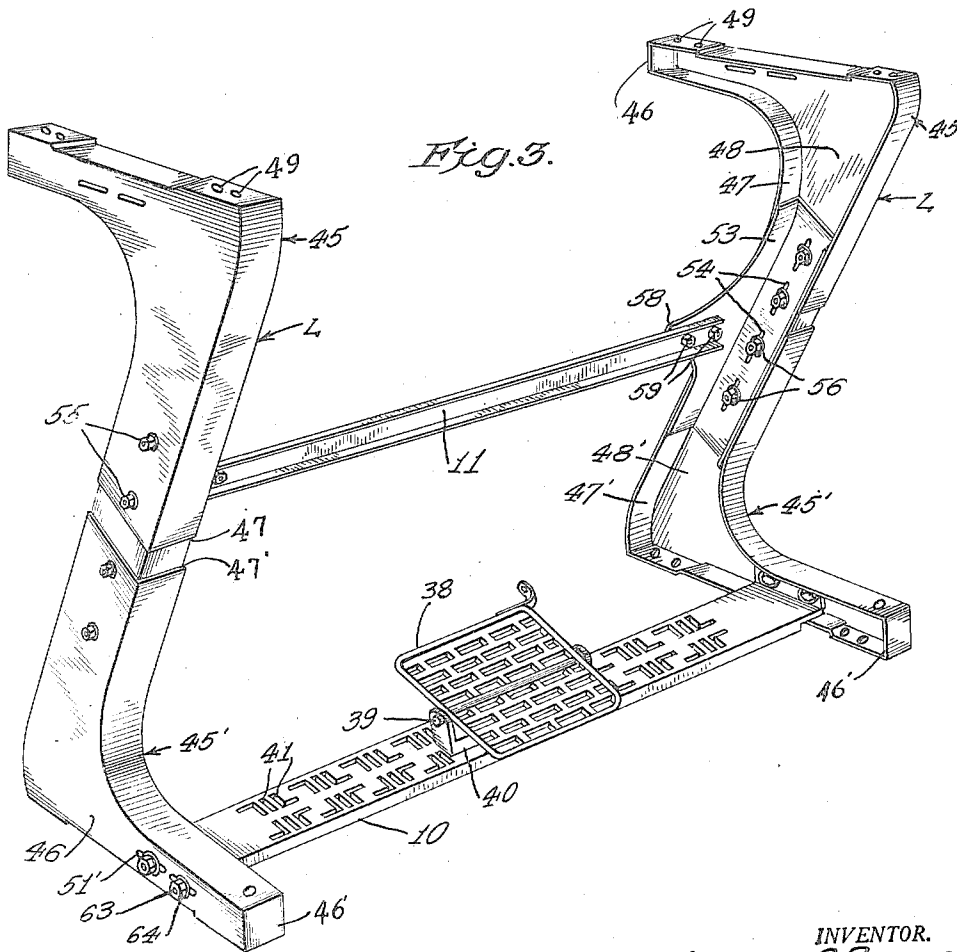
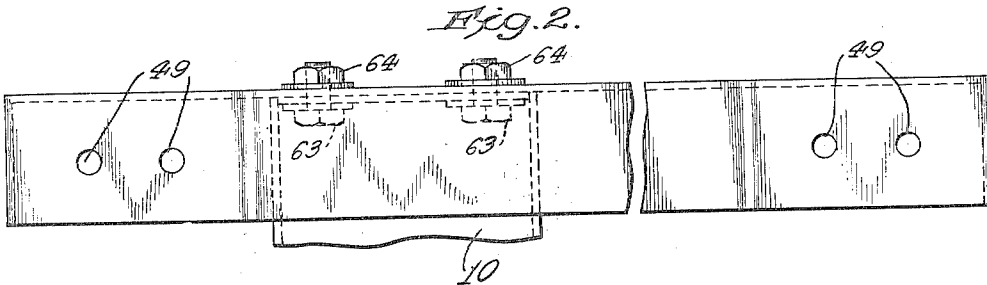
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# UNITED STATES PATENT OFFICE

2,496,230

## WORKTABLE SUPPORTING STRUCTURE

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4 Claims. (Cl. 311—12)

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This invention relates to an improved work table supporting structure and in one of its more specific aspects to such a supporting structure which is adapted to be advantageously employed with sewing machines.

One of the important objects of this invention is to provide a work table supporting structure characterized by its light weight, simple design, sturdy construction and attractive appearance.

Another object of the present invention is to provide a work table supporting structure that may be easily and quickly assembled and subsequently dismantled and that may be readily moved from one location to another.

The invention has for another object the provision of a structure of the character indicated that comprises a plurality of certain basic parts which may be identical and interchangeable and which are therefore capable of being fabricated on a low cost mass production basis.

Another object of this invention is to provide an upwardly extensible work table support that is capable of being readily adjusted in overall height.

A further object of the invention is to provide a support for a sewing machine table so constructed and arranged as to permit of ready access to a power transmitting unit and other equipment associated with a sewing machine and disposed below the under surface of the table.

A still further object of the invention is to provide a work table leg in the form of an upright generally Z-shaped unit possessing requisite strength and being adjustable in overall height.

The foregoing, as well as other objects, together with the advantages attainable by the practice of this invention, will be readily comprehended by those skilled in the art by reference to the following detailed description taken in conjunction with the annexed drawings which respectively describe and illustrate a preferred embodiment of the invention.

In the drawings:

Figure 1 is an end elevation view of a work table supporting structure in accordance with the invention and carrying a sewing machine and a power transmitting unit therefor;

Figure 2 is an enlarged bottom view of one of the leg members of the support shown in Figure 1;

Figure 3 is a view in perspective of the assembled supporting structure or stand of the invention;

Figure 4 is an enlarged detail view in section taken along line 4—4 of Figure 1; and

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Figure 5 is a view in enlargement taken along line 5—5 of Figure 1.

Referring now to the drawings wherein like reference characters designate corresponding parts throughout the several views, and more particularly to Figures 1 and 3 thereof, I have shown a pair of upright, generally Z-shaped legs L that are maintained in parallel spaced relation by a channel treadle bar 10 and a channel brace 11 and that carry a sewing machine table top T which is secured thereto by means of bolts 12, nuts 13 and washers 14. Table top T may, if desired, be of the type disclosed in Fite et al. Patent 2,419,064, dated April 15, 1947, for "Sewing machine table boards," and is provided with a through opening 15 having an oil drip pan 16 which is secured to the table top by screws 17.

A sewing machine frame, generally indicated by numeral 18 and having its base 19 disposed within opening 15, is provided with the usual combined handwheel and pulley 20 at one end. A plate 22 is positioned contiguous the under surface of table top T by means of bolts 23 and nuts 24. Projecting downwardly of plate 22 are a pivotally mounted bolt 25 and a rigid bracket 26 which are respectively pivotally connected at 27 and 28 to frame portions 29 of a power transmitting unit 30. This includes a rotary drive shaft 31 having a drive pulley 32 secured thereto by a nut 33. Rotational movement of drive shaft 31 and drive pulley 32 is transmitted to combined handwheel and pulley 20 through the medium of an open V-belt 34 that extends through a belt slot (not shown), in the table top. The tension in belt 34 may be readily varied in any known manner, such as by adjusting the relative position of pivot 27 along pivot bolt 25 by the manipulation of nuts 35 and 36. It will be observed that by virtue of the Z configuration of leg L, ready access is had to various parts, including bolts 35 and 36 for adjusting the tension in belt 34, and nut 33 for replacing or repairing drive pulley 32 from the end of the table. In fact, the entire power transmitting unit is made accessible for repair and regulation. A control rod 37 is pivotally secured in the usual manner at opposite ends to power transmitter 30 and a treadle 38 that is tiltable about a shaft 39 which is carried by a U-bracket 40 adjustably secured to the web of channel treadle bar 10 through slots 41 by bolts (not shown).

Each leg L includes an upper member 45 and a lower member 45' which are preferably identical and which are relatively adjustable as will be more fully explained hereinafter. It is rec-

ommended that member 45 be formed of pressed steel to obtain the illustrated channel-like unit, closed at one end 46, open at its other end 47 and having a generally V-shaped web 48. The upper horizontal portion of member 45 is provided with openings 49 for the reception of the top attaching bolts 12. Web portion 48 is provided with a pair of elongated slots 51 and a pair of openings 52. The corresponding parts of member 45' are designated by corresponding primed numerals.

As is best shown in Figures 1 and 3, members 45 and 45' are arranged in relatively inverted relation with their open ends 47 and 47', respectively, facing each other. Extending through open ends 47 and 47' and telescopically positioned with respect to members 45 and 45' is a channel connector 53 having its outer web surface disposed in abutting relation to the inner surface of webs 48 and 48'. The web of channel connector 53 is provided with a plurality of elongated slots 54 so arranged as to register with openings 52 and 52' in webs 48 and 48' for connecting members 45 and 45' to channel 53 and for varying the overall height of leg L through the coaction of bolts 55 and nuts 56. One side of the channel of each connector 53 carries an extension 58 (Figure 3) for connection by means of bolts 59 to the opposite ends of channel brace 11 through suitable apertures (not shown).

As a modification of the foregoing construction, the channel connectors 53 may, if desired, be secured in fixed and firm relation, as by welding to either the upper members 45 or the lower members 45'. This provides a somewhat steadier construction. Adequate adjustability as to height may be obtained by the bolt and slot connections between the connectors and the other of the members 45 and 45'.

As is best shown in Figure 4, each end of channel treadle bar 10 is cut out to form a notch 60 that accommodates an upwardly offset portion 61' in the lower portion of member 45' and is formed with an upturned flange 62 appropriately apertured to receive bolts 63 which extend through slots 51' in the side faces of the members 45' and carry retaining nuts 64. This arrangement results in a sturdy, rigid construction and permits of horizontal adjustment, i. e., from front to back, of channel treadle bar 10 with respect to the legs L. The offset portions 61' of the lower members 45' and the corresponding offsets of the upper members 45 eliminate the full, flat surface engagement of the bottom and top surfaces of the members with the floor and with the table top T, respectively.

Thus, it will be seen that the construction herein shown and described is well adapted to accomplish the objects of the present invention. It will be understood, however, that the invention may be embodied otherwise than here shown, and that in the form illustrated certain changes in construction may be made. Therefore, I do not wish to be limited precisely to the construction herein shown except as may be required by the appended claims.

I claim:

1. Apparatus of the character described comprising a pair of substantially identical channel-

like members, each of said members having a generally V-shaped web and at least one open end, and a channel extending through the open end of each member and having its outer web surface disposed in abutting relation to the inner web surface of each member, means for adjustably connecting said channel to each of said members longitudinal of said channel, said members and channel being constructed and arranged to form a rigid upright generally Z-shaped hollow support.

2. In apparatus of the character described, a pair of supports, each support comprising a pair of substantially identical channel-like members, each of said members having a generally V-shaped web and at least one open end, and a channel extending through the open end of each member and having its outer web surface disposed in abutting relation to the inner web surface of each member, means for adjustably connecting said channel to each of said members longitudinal of said channel, said members and channel being constructed and arranged to form a rigid upright generally Z-shaped hollow unit, and means for maintaining said supports in predetermined substantially parallel spaced relation.

3. A work table comprising a pair of upwardly extensible, channel-like supports of upright generally Z-shaped end configuration, one end of each support being closed and the other end thereof being open, said supports being spaced apart horizontally with their open ends facing each other, and means secured to both supports for maintaining the same in said spaced apart relation.

4. In apparatus for supporting a table top above a floor, a pair of substantially horizontally spaced, upwardly extensible, channel-like supports of upright generally Z-shaped configuration, one end of each support being closed and the other end thereof being open, said supports being arranged with their open ends facing each other, the upper and lower surfaces of said supports being substantially planar and apertured for attachment therethrough to the under surface of the table top and the surface of the floor, respectively.

ALBERT C. PETERSON.

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