The present invention relates generally to the field of carpentry accessories, and more particularly to a new and novel combination tool chest and work bench that can be moved from place to place as required.

As is well known, a carpenter requires a large number of individual hand tools to properly perform the various types of work he will encounter on a job site. However, the carpenter cannot in most instances leave a chest of tools on a job site overnight without running the hazards of having the chest and tools stolen. As a result, a carpenter is forced to carry his chest of tools from his automobile or truck onto the job site in the morning, as well as carry away from the job when he is through working for the day. Upon occasion, the distance from the job site to his parked automobile may be quite considerable, whereby the carpenter has a tendency to minimize the weight of his chest of tools to be carried, and will normally carry only those tools he believes he will need during the day. Frequently, the type of work he believes he will be doing changes during the day, and he finds himself without certain tools that are either highly desirable or necessary for use in properly performing this work.

A primary object of the present invention is to provide a combination tool chest and work bench that is sufficiently compact as to enable one to carry it in an automobile, can be disposed in either a horizontal or a vertical position to minimize the space occupied thereby, is of extremely simple structure, can be fabricated from standard, commercially available materials, and is inexpensive to produce whereby it can be retailed at a sufficiently low price as to encourage its widespread use.

Another object of the invention is to furnish a combination storage chest and bench that not only minimizes the physical effort required in transporting tools between a workman's automobile and a job site, but also may be utilized on the job site as a portable and temporary work bench to facilitate the performance of work encountered, with the bench portion of the combination device being at a convenient height to permit work to be readily carried out with ease and within a minimum of time.

A still further object of the invention is to provide a combination tool chest and work bench in which certain definite tools that can be easily damaged unless properly handled, such as a saw, level, or carpenter's square, are removedly maintained within the confines of the tool chest and so positioned therein that they will not be damaged, even though the tool chest may be subjected to an abrupt shock or relatively heavy blow.

Yet another object of the invention is to provide a combination work bench and tool chest having a second supporting or bench surface which to temporarily rest hand tools, which bench surface is protected by the cover of the chest when in a closed position.

These and other objects and advantages of the invention will become apparent from the following description of a preferred form thereof, and from the accompanying drawings illustrating the form, in which like reference numerals designate like elements in the several views.

FIGURE 1 is a side elevational view of the combination tool chest and work bench shown tilted forwardly to minimize the space it occupies; FIGURE 2 is a side elevational view of the chest and bench with a portion thereof broken away to illustrate the interior thereof; FIGURE 3 is a fragmentary, vertical cross-sectional view of the invention taken on line 3--3 of FIGURE 2; FIGURE 4 is a fragmentary, vertical cross-sectional view of the device taken on line 4--4 of FIGURE 2; FIGURE 5 is a fragmentary, vertical cross-sectional view of the combination tool chest and work bench taken on line 5--5 of FIGURE 2, and FIGURE 6 is a perspective view of the cover of the invention with a portion thereof cut away to show the internal structure thereof.

Referring now to the drawing for the general arrangement of the invention, it will be seen to include a rear end piece 10 and a forwardly disposed end piece 12 which are connected by two identical side walls 14. End piece 12, as may best be seen in FIGURE 2, is substantially shorter than end piece 10.

A first horizontal sheet 16 is affixed to the interior surface of the end pieces and side walls, as also shown in FIGURE 2, and is located a substantial distance above a second horizontal sheet 18 that serves as a shelf and is also connected to the interior surfaces of the end pieces and side walls. The two side walls 14 have elongate, longitudinally extending openings 20 of relatively large area formed therein which are in transverse alignment. The purpose of these openings 20 is to permit easy insertion of tools within the confines of the end pieces 10 and 12 and side walls 14 to rest on second sheet 18 when not in use.

The forward lower portion of the side walls 14 are preferably cut away to define upwardly and forwardly inclined edges 22. A rectangular cover 24 is provided which is illustrated in FIGURE 6. When it is lying in a horizontal position and resting upon the upper surface of the end walls 10 and 12 and side walls 14, cover 24 serves as a supporting surface for tools, or in other words, provides a work bench. The structure of cover 24 can, of course, be in any one of a variety of designs and made from a choice of materials, but in practice it has been found desirable to fabricate it from plywood, preferably 3/8” thick, which is sufficiently rigid to afford a firm working surface when the cover is being used for work bench purposes.

To further strengthen the cover 24, two side strips 26 are affixed to the under side thereof. The ends of strips 26 are connected by cross pieces 28 that are screwed or otherwise affixed to the under surface of the cover. Side strips 26 and cross pieces 28 are so oriented and affixed to the under surface of cover 24 that the outer edges of the side strips and cross pieces are in vertical alignment with the vertical exterior surfaces of the end pieces 10 and 12 and side walls 14. In order that a carpenter's clamp or vise may be affixed to the cover 24 when it is disposed in a horizontal position to serve as a work bench, the cover is so made that portions 30 extend longitudinally beyond the cross pieces 28. Two additional strips 32 are provided which abut against the exterior surfaces of the cross pieces 28 and are affixed to the end under surface of cover 24 by screws 34, or other conventional fastening means.

From the standpoint of manufacturing economy, it is desirable that the dimensions of cover 24 be so selected that it can be cut from plywood sections of a standard, commercially available size with sufficient material being left from the plywood section to provide sufficient material from which to fabricate the side strips 26, cross pieces 28, and strips 32. A cover fabricated in this manner and as shown in FIGURE 6, is not only of extreme durability, but will provide adequate protection for the tools situated within the upper confines of the invention, but will pro-
vide a rigid surface that will adequately support material on which a carpenter is working, as well as a mounting for such tools as vises or the like that the carpenter may elect to use.

Two identical wheels 36 are provided which preferably include rubber tires 38 to minimize the effort required in rolling the invention across rough terrain such as is frequently found on a job site. Wheels 36 are located on the exterior of a conventionally positioned lower forward portion of the side walls 14, as best shown in FIGURE 2.

A transversely disposed shaft 39 extends through openings (not shown) formed in the side walls 14, with the wheels 36 being rotatably supported on the outwardly projecting portions of the shaft. By the use of washers 40 and cotter pins 42, the wheels 36 are removably supported on the ends of shaft 39.

The cover 24 (FIGURES 2 and 5) is connected to the upper portions of one of the side walls 14 by hinges 44. The hinges 44 are connected by fastening means 46, such as bolts, screws, or the like, to the cover 24 and side wall 14, and are preferably of such design that they cannot be loosened from the exterior of the chest to permit the cover 24 to be separated therefrom for unauthorized access to the interior thereof and removal of tools therefrom.

A hasp is provided, one portion of which is affixed to a longitudinal side edge of cover 24, with another portion of the hasp being connected to the exterior upper central portion of one of the side walls 14, as may best be seen in FIGURE 1. The hasp 48 may be so disposed that it is held in an interlocking position to maintain the cover 24 in a closed position on the chest when a padlock or other locking means (not shown) is extended through the hasp.

A centrally disposed opening 50 is formed in the rear wall 10, below the first sheet 16. The first sheet 16, by a screw 52 or other fastening means, supports an angular bracket 54 that has a horizontally disposed, tubular body 56 extending rearwardly therefrom which is in alignment with the opening 50. The interior surface of the body 56 is tapped and is adapted to be removably engaged by threads 58 formed on the forward end portion of an elongate handle 60. Handle 60 preferably includes a relatively short straight section 62 on which the threads 58 are formed. The rear of section 62 develops into an upwardly and rearwardly extending section 63, the upper end of which develops into a hand grip 64 that is grasped when the invention is being rolled from place to place.

When the invention is located on a job site, or when it is being transported in an automobile where there is limited space, the handle 60 can be removed from the tubular body 56, and either stored inside the chest or positioned along side thereof until needed to move and guide the invention to a desired location. For convenience in moving the invention a short distance when the handle 60 is removed therefrom, a second handle 66 of the type used on ends of trunks, is provided which is affixed to the upper exterior surface of the end piece 10 by screws 68, or the like. Two laterally spaced legs 69 extend downwardly from the rear portion of second sheet 18. Legs 69 are of such height that the cover 24 is in a horizontal position when closed, and the device is disposed as shown in FIGURE 2. When in this horizontal position cover 24 provides a workbench surface.

A tool commonly used by every carpenter is a level, and a level 70 of conventional design is shown in FIGURES 2 and 5. Two level supports 72 are provided on the interior surface of one of the side walls 14 as shown. Each of the level supports 72 includes a member of 2-shaped cross section having one leg 74 affixed to the interior upper portion of one of the side walls 14, a horizontally disposed web 76 that extends outwardly from the upper end of leg 74, with the web in turn developing into a second upwardly extending leg 78 on the outer end there-
ing member on the forward end thereof, which engaging and engageable members are capable of removably engaging when said tube is extended forwardly through said opening, with said tube being sufficiently long as to have a portion thereof projecting rearwardly from said rear end piece when said engaging and engageable members are in engagement, and the length of said tube is such as to permit storage thereof in said chest when not being used as said handle.

3. A portable combination tool chest and work bench as defined in claim 1 wherein said cover is formed from plywood, and a plywood frame is affixed to one surface of said cover with said frame resting on said upper edges of said side walls and said end pieces when said cover is in a position to close said chest, and two transverse strips of plywood are affixed to the surface of said cover adjacent the ends of said frame, which strips thicken said cover and strengthen the end portions thereof to the extent that clamps, vises, and other tools can be removably affixed to said thickened ends when said cover, side walls and end pieces are being used as said work bench.

4. A portable combination tool chest and work bench as defined in claim 1 wherein said means for rotatably supporting said wheels comprises a transverse shaft that extends through laterally aligned openings formed in said side walls adjacent said upwardly and forwardly extending edges.

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