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Hanson

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[54] **COLLAPSIBLE SAWHORSE**

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[52] **U.S. Cl.** **182/181,** 182/224

[51] **Int. Cl.** **F16m 11/00**

[58] **Field of Search** 182/153, 181–185, 182/224, 152, 119

[56] **References Cited**

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[57] **ABSTRACT**

A pair of planar upstanding end members interconnected at their upper ends by means of a pair of generally parallel longitudinal members each individually secured between the end members or sections with the latter defining depending legs for supporting the longitudinal members extending therebetween in elevated position above a support surface upon which the end sections have their lower ends supported. An elongated top board overlies the spaced parallel longitudinal members connecting the end section and includes opposite end downwardly opening clips releasably frictionally engaged with the corresponding end portions of the longitudinal members for support of the top board in position overlying the longitudinal members and against accidental displacement relative thereto.

5 Claims, 8 Drawing Figures

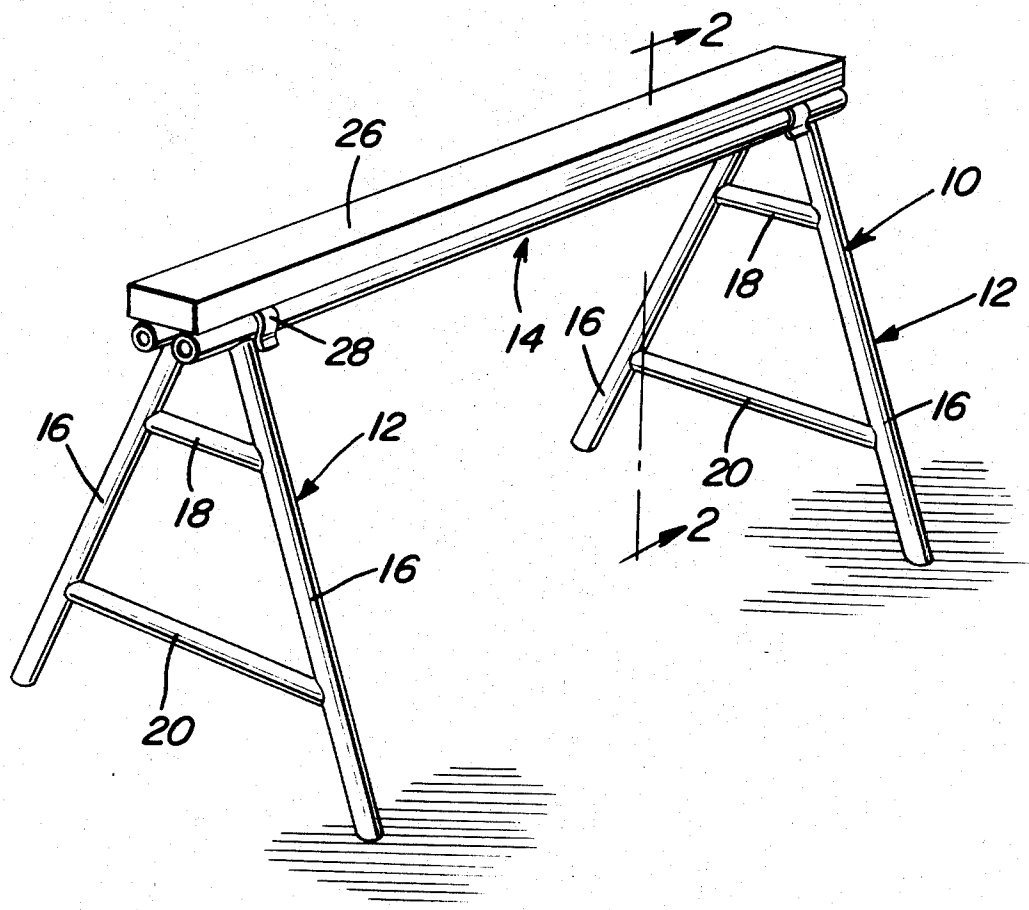


Fig. 1

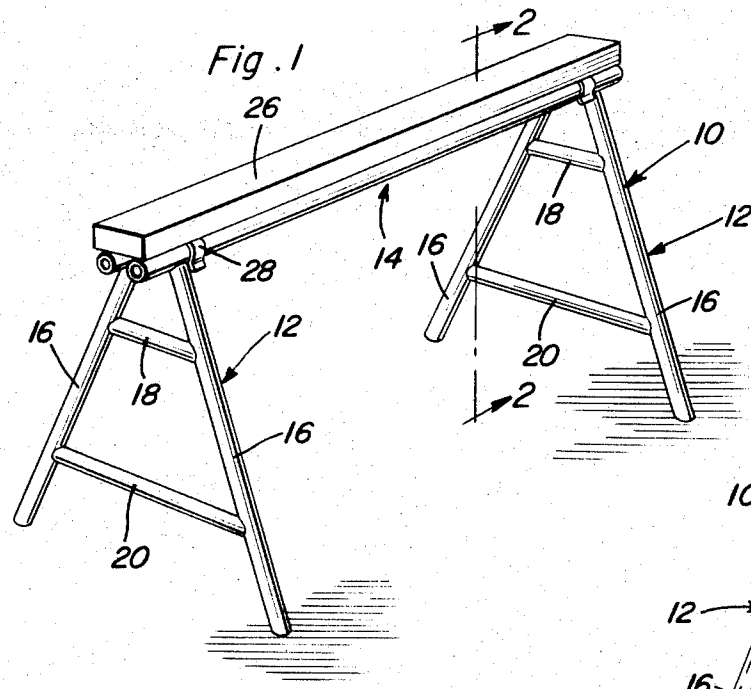


Fig. 2

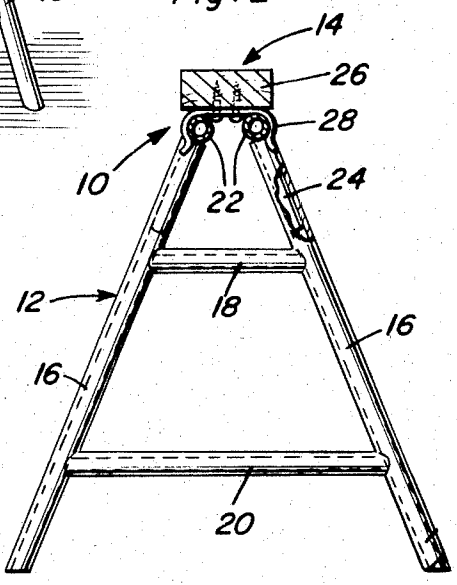


Fig. 3

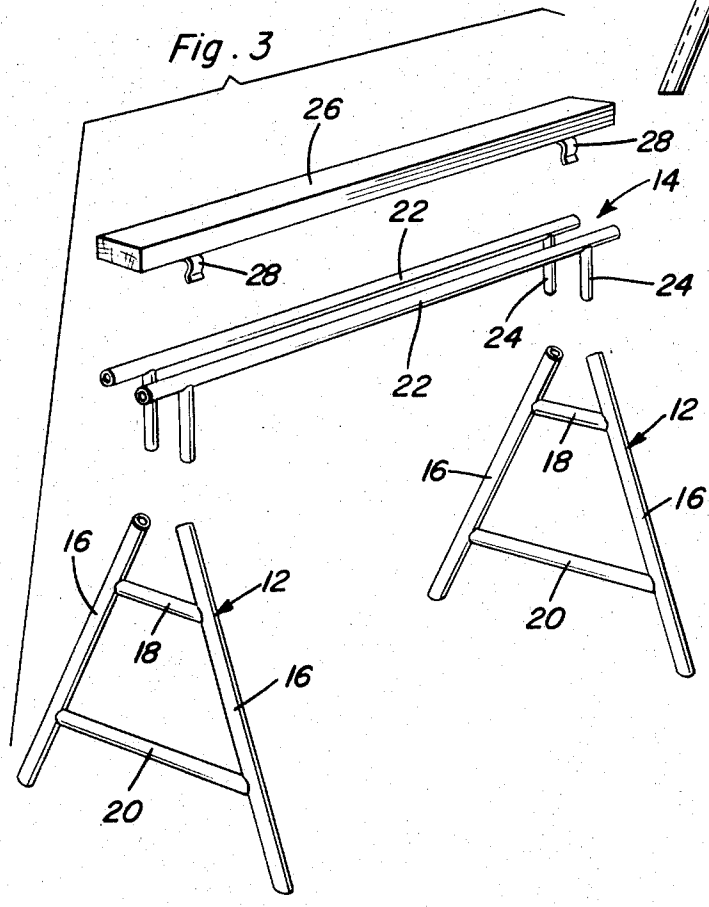


Fig. 4

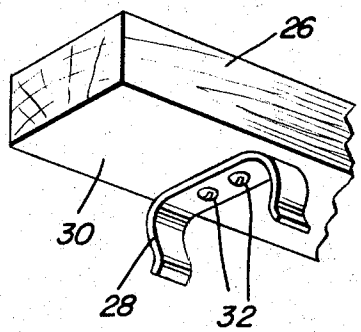


Fig. 5

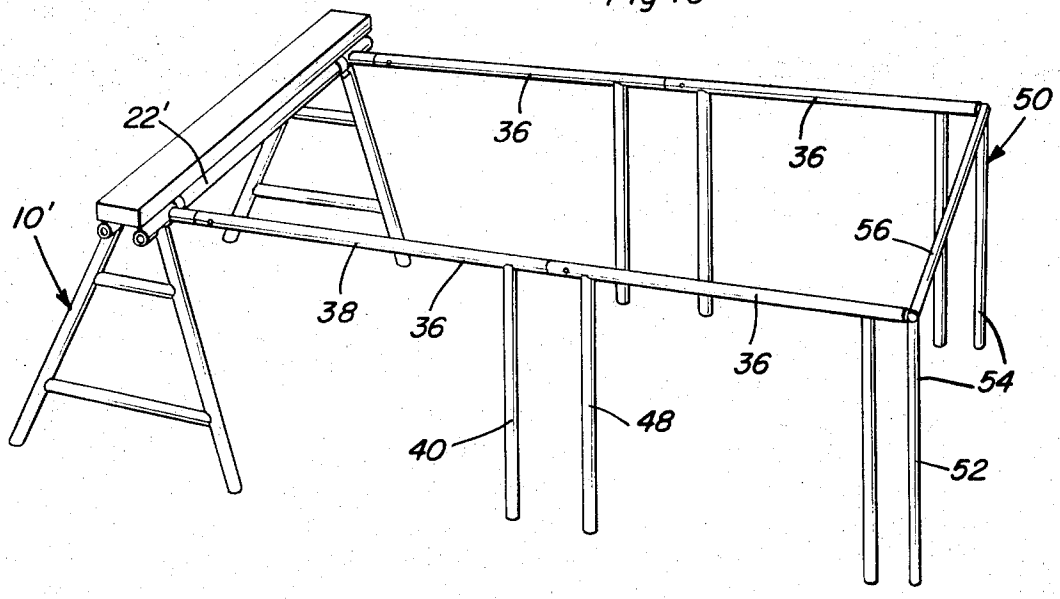


Fig. 6

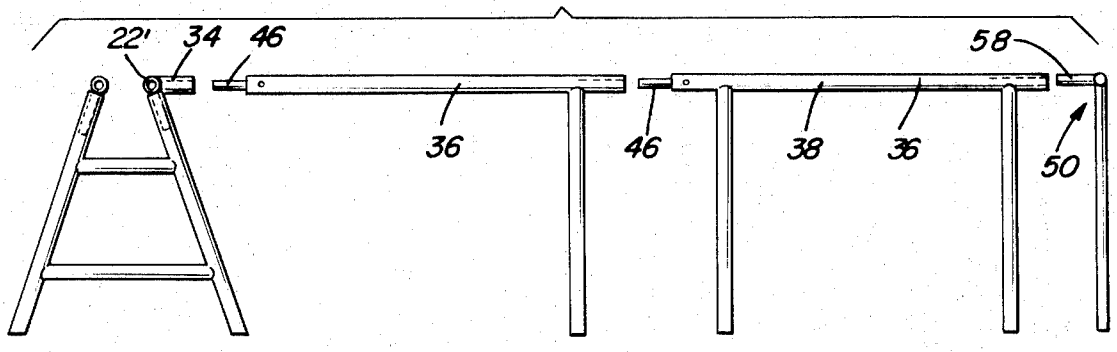


Fig. 7

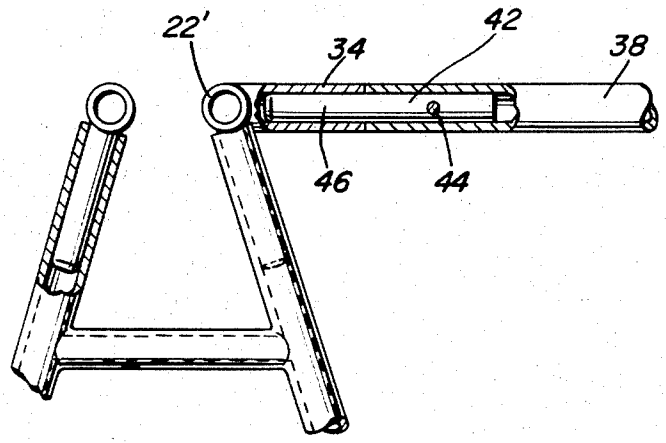
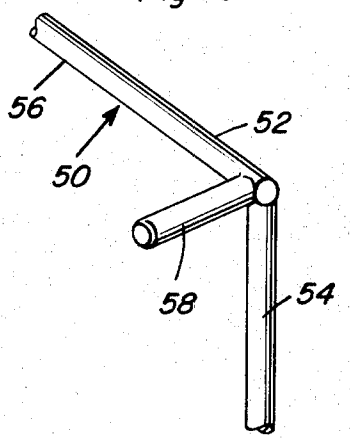


Fig. 8



COLLAPSIBLE SAWHORSE

The collapsible sawhorse of the instant invention has been designed to provide a sawhorse construction that may be readily disassembled and stored in compact condition. In addition, the collapsible sawhorse may be packaged in unassembled condition and thus marketed in a more efficient manner.

While several forms of brackets are presently being marketed to enable persons to construct a sawhorse merely by utilizing five sections of lumber such as 2 × 4's and a pair of brackets in order to erect a reasonably efficient sawhorse. However, inasmuch as these commercially available brackets only define multiple sockets into which the adjacent ends of the 2 × 4's are telescoped, the resultant sawhorses are not as strong nor do they have the load-carrying capacity of more conventional sawhorses whose 2 × 4 members are permanently interconnected.

It is accordingly the main object of this invention to provide a readily knock-down sawhorse assembly that may be stored as well as marketed in a compact condition and yet which will have strength and load-carrying capacity in excess of conventional permanent type sawhorses.

Yet another object of this invention, in accordance with the preceding object, is to provide a sawhorse construction whose various components are constructed of metal whereby a reasonably strong and durable sawhorse may be provided with a minimum of weight.

A still further object of this invention is to provide a sawhorse construction in accordance with the immediately preceding object and including a removable top board for positioning over the upper longitudinal section of the sawhorse so as to thereby provide a wooden work surface which may be accidentally engaged by a saw without damaging the latter.

A final object of this invention to be specifically enumerated herein is to provide a collapsible sawhorse construction in accordance with the preceding objects which will conform to conventional forms of manufacture, be of simple construction and easy to erect disassemble so as to provide a device that will be economically feasible, long lasting and relatively trouble free.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIG. 1 is a perspective view of the sawhorse of the instant invention in assembled condition;

FIG. 2 is an enlarged transverse vertical sectional view taken substantially upon the plane indicated by the section line 2—2 of FIG. 1;

FIG. 3 is an exploded perspective view of the sawhorse construction;

FIG. 4 is a fragmentary enlarged underside perspective view of one end of the top board of the sawhorse illustrating the manner in which the associated spring clip is attached to the top board;

FIG. 5 is a perspective view of a slightly modified form of sawhorse incorporating a lateral extension of staging assembly;

FIG. 6 is an exploded end elevational view of the assemblage illustrated in FIG. 5;

FIG. 7 is a fragmentary end elevational view of one end of the sawhorse construction illustrated in FIG. 5 with the top board thereof removed and parts of the adjacent interfitting components of the sawhorse broken away and illustrated in vertical section; and

FIG. 8 is a fragmentary perspective view of the free end brace assembly of the extension illustrated in FIG. 5.

Referring now more specifically to the drawings the numeral **10** generally designates the sawhorse of the instant invention which includes a pair of upstanding opposite end frames referred to in general by the reference numeral **12** and a longitudinally extending upper bridge assembly referred to in general by the reference numeral **14** extending and secured between the end frames **12**.

Each of the end frames **12** includes a pair of oppositely inclined upwardly convergent side members **16** interconnected intermediate their upper and lower ends by means of upper and lower horizontal braces **18** and **20**. The side members **16** are tubular and the horizontal braces **18** and **20** may be formed in a similar manner and secured between the side members **16** in any convenient manner such as by welding.

The upper brace assembly **14** comprises a pair of longitudinal members **22** including depending opposite end relatively short legs **24**. The legs **24** are of a diameter to be snugly telescoped within the upper ends of the corresponding side members **16** and accordingly, it may be seen that the longitudinal members **22** may be secured between the end frames **12** in a manner to define a relatively strong but lightweight sawhorse. However, inasmuch as the longitudinal members **22** are constructed of metal, a top board **26** such as 2 × 4 is provided and has depending downwardly opening spring clips **28** secured to the opposite ends of the undersurface **30** of the top board **26** by means of suitable fasteners **32**. The spring clips **28** are generally C-shaped and it may be seen from FIG. 2 of the drawings that the spring clips **28** may be utilized to frictionally support the top board **26** in position overlying the longitudinal members **22**. Thus, the top board **26** serves to cover the longitudinal members **22** with a suitable member that may be cut into by a saw without damaging the saw. Of course, after the sawhorse **10** has been erected, it may be readily disassembled and stored in a reasonably compact state.

With attention invited now more specifically to FIGS. **5** through **8** of the drawings there may be seen a modified form of sawhorse referred to in general by the reference numeral **10'** and which is identical in construction to the sawhorse **10** except that the opposite ends of one longitudinal member **22'** thereof includes horizontally projecting and endwise outwardly opening socket members **44**. Two pairs of extension sections **36** are provided and each extension section **36** includes a horizontal tubular member **38** provided with a depending vertical tubular leg **40** adjacent but spaced from one end of the tubular member **38**. The end of each tubular member **38** remote from the corresponding leg **40** has an anchor pin **42** secured therein by means of a through fastener **44** and each anchor pin **42** includes an outer end **46** thereof which projects endwise outwardly of the corresponding member **38**. A first pair of extension sections **36** are supported from the longitudinal member **22'** with the outer ends **46** of the pins **42** telescoped in the socket members **34**. The second pair

of extension sections **36** may or may not be provided with additional legs **48** and the outer ends **46** of its pins **42** are telescoped into the free ends of the members **38** of the first pair of extension sections **36**. In addition, an end brace assembly referred in general by the reference numeral **50** is provided and includes a downwardly opening U-shaped frame **52** consisting of a pair of legs **54** interconnected at their upper ends by means of a horizontal bight portion **56** extending and rigidly secured therebetween. The frame **52** is provided with a pair of horizontally projecting pins **58** which are snugly telescopingly receivable in the ends of the second pair of members **38** remote from the sawhorse **10'**. In this manner, the outer end of the extension defined by the four sections **36** is braced and rendered substantially rigid. Of course, the various sections **36** and the end frame **52** may be readily disassembled relative to each other and thus also readily stored in a reasonably compact condition.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.

What is claimed as new is as follows:

1. An elongated sawhorse construction including a pair of upstanding horizontally spaced opposite end leg assemblies, each of said leg assemblies including a pair of rigidly interconnected upwardly convergent opposite side legs whose upper ends are disposed in spaced apart adjacent relation and define upwardly opening sockets, a pair of elongated, horizontal and parallel closely spaced apart longitudinal connecting members extending between the upper ends of corresponding legs of said leg assemblies and including opposite end depending short legs removably downwardly telescoped into the corresponding sockets, and a narrow horizontally elongated cover member, of a material and thickness to be slightly cut by conventional wood saws without damaging the latter or severing the cover, overlying and removably anchored to said connecting members, said connecting members comprising the sole connections between said leg assemblies.

2. The combination of claim **9** including a pair of horizontally elongated generally parallel extension sections disposed outwardly of and at generally right angles to one of said connecting members, depending leg means carried by the outer ends of said extension sections and the inner ends of said extensions and said sawhorse construction including releasably telescopingly engaged male and female socket portions supporting the inner ends of said extensions from opposite ends of said sawhorse construction.

3. The combination of claim **1** wherein the opposite ends of said rigid cover member includes downwardly opening C-shaped clips removably clampingly engaged with the corresponding ends of said parallel members.

4. The combination of claim **1** wherein the opposite ends of at least one of said parallel connecting members include means defining horizontally outwardly opening sockets, and a pair of elongated generally horizontal extension sections including one pair of corresponding ends telescoped into said horizontally outwardly opening sockets and a pair of depending support legs carried by the other pair of corresponding ends thereof.

5. A sawhorse construction including a pair of upstanding horizontally spaced opposite end leg assemblies, elongated, rigid and generally horizontal connecting means extending between and secured to the upper portions of said leg assemblies, the upper ends of said leg assemblies defining upwardly opening sockets, and the opposite ends of said connecting means including downwardly projecting elongated members snugly downwardly telescoped into said sockets, said leg assemblies each including a pair of upstanding and upwardly convergent legs suitably braced relative to each other by means of bracing means secured therebetween intermediate their upper and lower ends, the upper ends of said legs being spaced apart, each of said leg upper ends defining one of said sockets, the opposite ends of at least one of said parallel connecting members including means defining horizontally outwardly opening sockets, and a pair of elongated generally horizontal extension sections including one pair of corresponding ends telescoped into said horizontally outwardly opening sockets and a pair of depending support legs carried by the other pair of corresponding ends thereof, an outer end connecting assembly for said extension sections comprising a horizontally elongated brace extending between and removably connected to said other pair of corresponding ends of said extension sections, the opposite ends of said brace including rigid depending support legs.

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