This invention relates to a sawmill frame, and it particularly relates to a sawmill frame of the mobile or portable type.

Although portable sawmills have previously been made, all the frames of such prior types had various disadvantages as, for example, a tendency to twist or become misaligned during operation. Furthermore, these prior types were generally not sufficiently strong and steady so that many jacks or blocks were necessary to steady them. On the other hand, if such devices were constructed in a manner to make them steadier, they were so clumsy and complicated that they were difficult to handle and were almost prohibitively expensive.

It is, therefore, one object of the present invention to provide a sawmill frame, which is truly portable and which is yet strong and sturdy.

Another object of the present invention is to provide a portable sawmill frame which will not twist or easily become misaligned during use.

Another object of the present invention is to provide a portable sawmill frame which can be compacted when not in use and extended when in use.

Other objects of this invention are to provide an improved portable sawmill frame, of the character described, that is easily and economically produced, which is sturdy in construction, and which is highly efficient in operation.

With the above and related objects in view, this invention consists in the details of construction and combination of parts, as will be more fully understood from the following description, when read in conjunction with the accompanying drawings, in which:

Fig. 1 is a perspective view of a device embodying the present invention, the device being shown in extended position.

Fig. 2 is a top plan view of the device of Fig. 1.

Fig. 3 is a side elevational view of the device of Fig. 1.

Fig. 4 is a sectional view taken on line 4—4 of Fig. 2.

Referring now in greater detail to the drawing wherein similar reference characters refer to similar parts, there is shown a main sawmill frame 10 comprising a pair of parallel, spaced, steel channel or angle bars 12 along the upper edge of which are welded rails 14 on which the sawmill mechanism is operated, the rails 14 also serving to strengthen and reinforce the channel or angle bars 12. Extending laterally between the channel or angle bars 12 are a plurality of tubular, cross-bars 16. These tubular cross-bars are securely connected at each end to the channel or angle bars 12 as by welding or the like.

A husk frame for mounting the saw assembly is indicated at 18. This husk frame, too, is constructed of steel channel or angle bars and is connected to the main frame as by welding or the like. An axle 20 is mounted cross-wise of the frame and extends from under the main frame to under the husk frame. Wheels 22 and 24 are mounted at opposite ends of the axle.

At one end of the frame 10 there is provided an extension 26 comprising two parallel angle bars 28, each being mounted on a hinge arm 30. Each hinge arm 30 is pivotted to the inner side of its respective main frame angle bar 12 or 14, as by means of a stud or rivet 32. The hinge arms 30 are arcuate in order to fit over the end-most tubular cross-bar 16 when the extension is in its fully extended position, as shown in Fig. 4. The end-most tubular cross-bar 16 acts as a brace or support for the hinge arms 30. Each hinge arm 30 is, furthermore, provided with a longitudinal rib 34 which acts as a strengthening means. Each of the hinge arms 30 is rigidly connected at its opposite end to its respective angle bar 28, as by welding or the like.

Pivotingly connected to the inner surface of each angle bar 28, intermediate its ends, is a brace bar 36, the pivotal connection being by means of a stud or rivet 38. At the end of the brace bar opposite its pivotal connection, there is provided an arcuate bar 40. When the extension 26 is folded up to a position overlying the main frame, as seen in dotted outline in Fig. 3, the bars 36 fall into the vertical position by the action of gravity, and the arcuate ends 40 thereon embrace one of the tubular cross-bars 16 to hold the bars 36 in rigid vertical position. A catch or hook 42 is provided on the inner face of each angle bar 28. These hooks act to hold the bars 36 in position when the extension is extended, as in Fig. 4. In order to release the bars 36 from the upwardly opening hooks, it is merely necessary to pivot the extension upwardly and the bars 36 are automatically released. A flange or shoulder 43 is provided at the rear end of each bar 28 to bear against the end of the main frame when the extension is in its extended position.

At the free end of the extension 26 is provided a tubular cross-bar 44 and a diagonal cross-bar 46 of angle construction extends from opposite corners of the extension. These bars 44 and 46 act as stiffening or brace means for the extension.

At the opposite end of the main frame 10 is provided a hitch 48 having a coupling member 50 for hitching the device to a moving means. The hitch 48 is integral with one channel or angle bar of the main frame and is actually the end portion thereof.

Opposite and parallel with hitch 48 is an angle bar 52 which is hinged to the other channel or angle bar 12 of the main frame, as at 54. This member 52 may be pivoted into a position above the main frame when the device is not in use and is being moved.

Two crossed angle bars 56 and 58 act as brace members for the hitch 48 as well as for the pivoted bar 52. These brace bars are rigidly connected, as by welding or the like, to hitch 48 and brace bar 58 has its other end in a position to underlie and support the angle bar 52 when it is extended as in Figs. 1, 2, and 3.

The other brace bar 56 underlies and supports bar 58 and has its other end connected to a lateral support member 60 underlying the end tubular cross-bar 16. A flange or shoulder member 62, similar to those shown at 43, is provided at the lower rear end of bar 52 to bear against the main frame end when bar 52 is in extended position.

In operation, with the power saw assembly, not shown, in position on the platform or husk frame 18, and with the other sawmill apparatus in position on the frame 10, the device is hitched to a moving means and moved to the desired position. The extension 26 and bar 52 are then moved into the folded, inoperative position to their extended positions and the device is ready to operate in the ordinary fashion of a sawmill.
Although this invention has been described in considerable detail, such description is intended as being illustrative rather than limiting, since the invention may be variously embodied, and the scope of the invention is to be determined as claimed.

Having thus set forth and disclosed the nature of this invention, what is claimed is:

A rigid frame for portable sawmills or the like comprising a rectangular chassis, said chassis comprising a pair of parallel channel bars having their channel bights extending in parallel vertical planes and their flange legs extending at right angles to their bights in parallel planes, tubular cross-braces welded to said channel bights, the diameter of said tubular cross-braces being but slightly less than the width of said channel bights, a rigid husk frame secured to the outer side of one of said channel bars intermediate its ends, said husk frame comprising a pair of spaced-apart parallel I-beams extending at right angles from its supporting channel bar, an I-beam welded to the spaced ends of said parallel I-beams, and a second pair of spaced parallel I-beams and second end securing I-beam welded on the upper surface of said first parallel and end securing I-beams and thus extending above the upper flange leg of said chassis channel bars.

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