Oct. 17, 1950 E. L. JOHNSTON 2,526,362

PRESSED LOG CUTTER

Filed Oct. 6, 1947

Fig 4

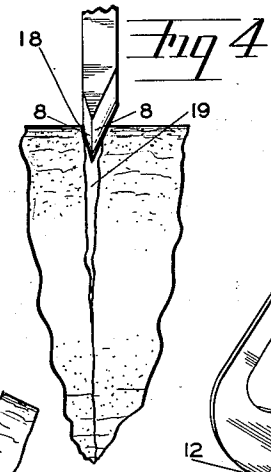


Fig 3

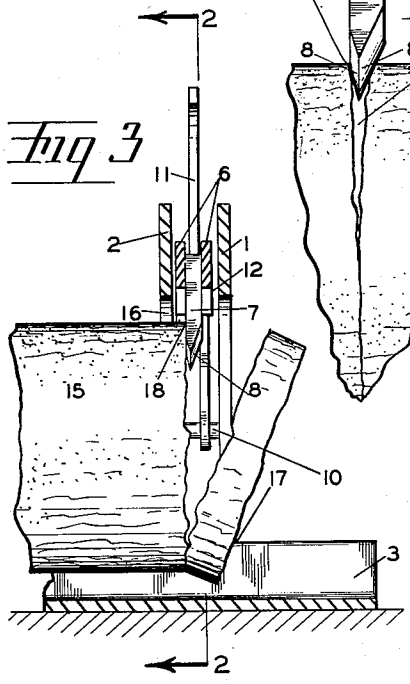


Fig 1

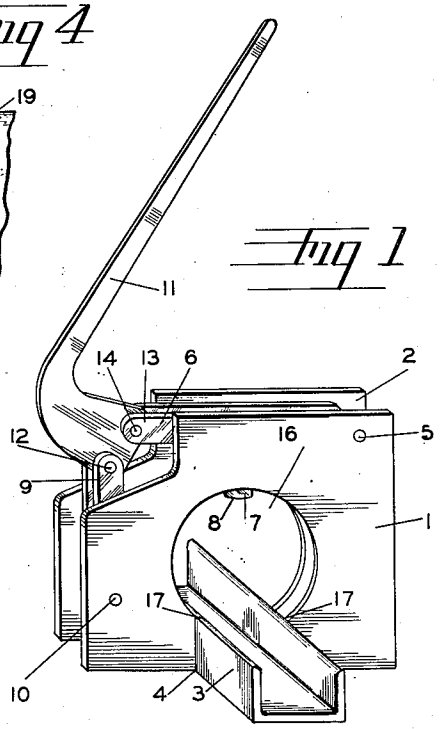
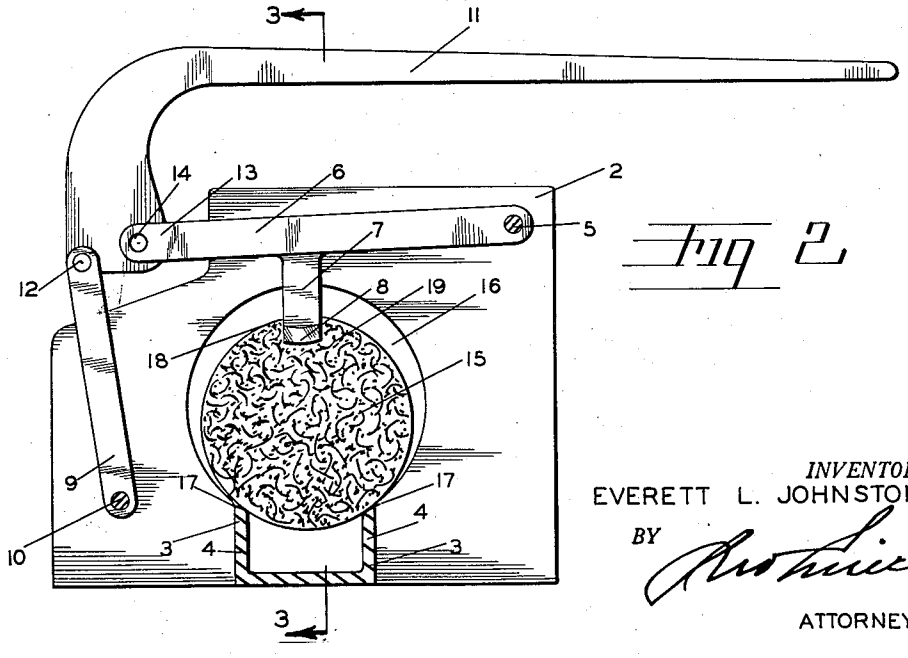


Fig 2



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PRESSED LOG CUTTER

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2 Claims. (Cl. 164—46)

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This invention relates to pressed log cutters and the primary object of the invention is to slice or break off sections or pieces of logs that have been compressed particularly for fuel. These logs are usually cylindrical in shape and they consist of sawdust pressed under high pressures into forms which shape them into cylindrical bodies, ordinarily about eighteen inches long.

In order to burn these logs for fuel, it is desirable to break them into small pieces, and this is very difficult and dangerous if done with an axe or a blade.

My invention consists of providing a device for holding the log securely while breaking the log into small pieces. I have found that it requires a chisel point cutting instrument which pierces the side of the log with comparatively narrow width of chisel, the chisel being tapered at its point breaks off pieces of the log as it is forced down into the same.

By using a comparatively narrow gauge chisel point a minimum amount of pressure is required to force the chisel into the log and as the log is built up of layers of sawdust or the like pressed together, simply starting the break by a point will break the piece off from the log.

These and other incidental objects will be apparent in the drawings, specification and claims.

Referring to the drawings:

Figure 1 is a perspective view of my new and improved pressed log cutting device, illustrating the position of the log in broken line position.

Figure 2 is an end sectional view taken on line 2—2 of Figure 3.

Figure 3 is a sectional view taken on line 3—3 of Figure 2.

Figure 4 is an enlarged detail view illustrating the chisel point splitting the log.

In the drawings:

My new and improved pressed log cutter consists of parallel frames 1 and 2, spaced apart and fixedly secured to the channel member 3 at 4 by any suitable means, as for instance welding. Pivotally mounted between the frames 1 and 2 by the journal pin 5 is a lever 6. This lever has a cutting member 7 extending downwardly therefrom and having a bevel or chisel point 8 formed thereon. A link 9 is pivotally mounted to the journal pin 10 between the frames 1 and 2 at its one end, and has the hand lever 11 pivotally mounted to its upper end at 12. The end 13 of the lever 6 is pivotally connected at 14 to the hand lever 11.

When the hand lever 11 is raised it will raise

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the end 13 of the lever 6 and the cutting member 7 so that the pressed log 15 can be moved thereunder. The pressed log 15 enters through the opening 16 of the frames 1 and 2 and rests on the upper edges of the channel at 17. This provides a solid base upon which the log can rest.

In operation when the lever 11 is lowered by the operator it will lower the lever 6 about its pivot 5, together with the cutting member 7 whose bevel point 8 pierces the log at 18. Due to the fact that these logs are made up in layers of sawdust under high pressure this spreading effect by a narrow cutting blade will break the log apart at 19, best illustrated in Figure 4, with a minimum amount of pressure being applied to the lever 11.

Due to the nature of the construction of the log by pressing sawdust in layers with a binding agent as they are manufactured, it is very difficult to cut the log with a blade extending clear across the same, therefore, my invention resides in the using of a very narrow cutting member 7 so that the same can be made to pierce into the log at which time its bevel point spreads the same apart. This is one of the outstanding features of my new and improved pressed log cutting device.

I do not wish to be limited to the exact mechanical construction as illustrated, as other mechanical equivalents may be substituted still coming within the scope of my claims.

What I claim, as new, is:

1. A cutter of the class described comprising a pair of parallel spaced apart plates formed with aligned openings, an open trough formed with the parallel plates and extending through the aligned openings and beyond said plates to provide a seat for a log to be cut when inserted in the aligned openings, a pair of substantially horizontal levers pivoted near the tops and the sides of the plates and over the aligned openings and between the plates, a cutter supported by and depending from the pair of substantially horizontal levers, a second pair of substantially vertically disposed spaced apart levers pivoted near the bottom of the plates and adjacent the opposite sides of the plates where the horizontal pair of levers are pivoted, and an operating lever to which the free ends of the substantially horizontal and vertical levers are pivoted, whereby when the operating lever is actuated the cutter is forced into a log supported by the trough.

2. A cutter of the class described comprising a pair of vertically disposed, spaced apart plates having aligned openings and a fixed trough ex-

tending through the openings, an operating lever, a substantially horizontal lever pivoted between the plates above the aligned openings, and pivoted at its free end to the operating lever, a cutter depending from said substantially horizontal lever, a substantially vertically disposed lever pivoted between the plates near the bottom thereof, the upper free end of the substantially vertical lever being pivoted to the operating lever, whereby when said operating lever is activated the cutter will engage a log supported in the trough.

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