April 29, 1958 A. FURNIA ET AL 2,832,635

LOG TONGS

Filed June 16, 1955

FIG. 1.

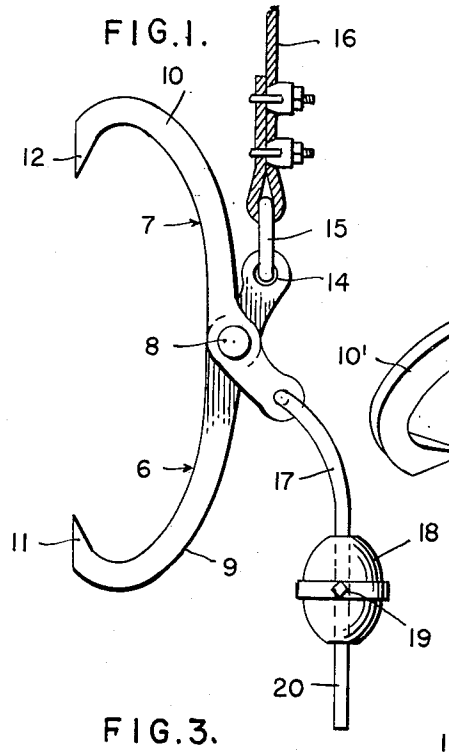


FIG. 4.

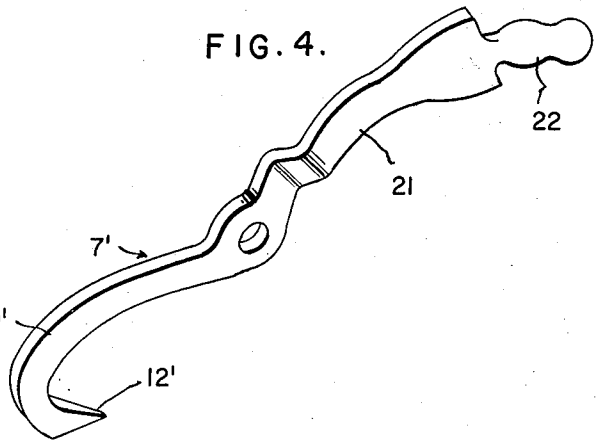


FIG. 2.

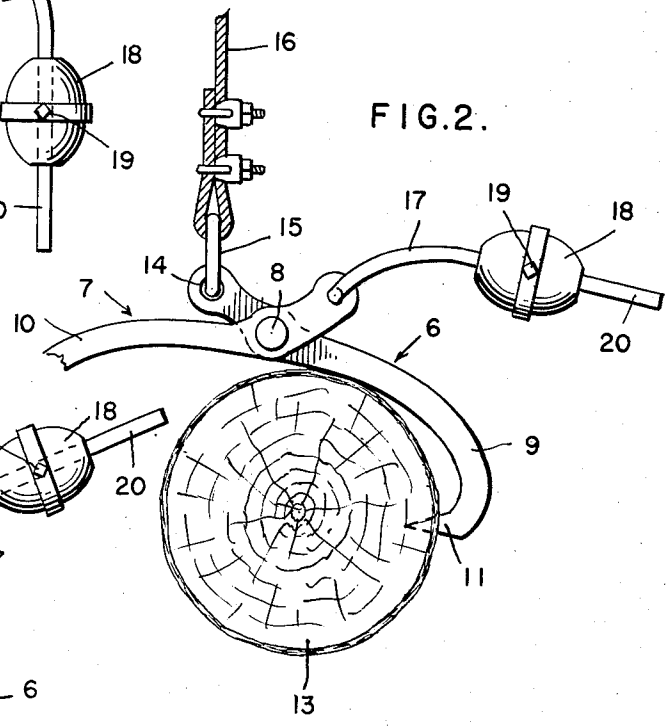
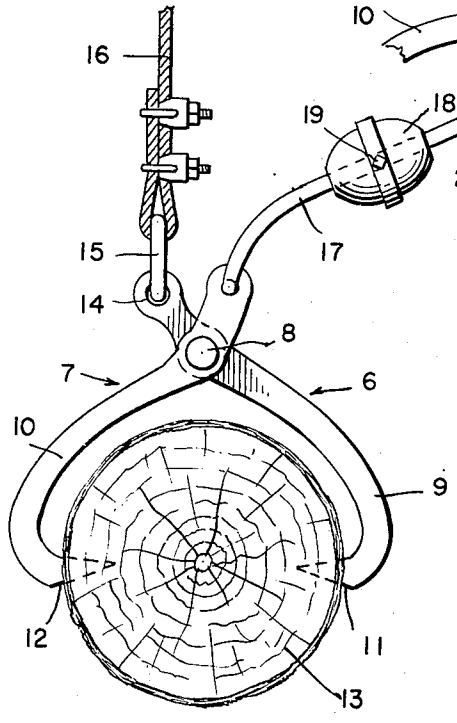


FIG. 3.



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LOG TONGS

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2 Claims. (Cl. 294—110)

This invention relates to improvements in log tongs of the type adapted to be suspended from a powered log loader.

In logging operations, it is conventional practice to lift and transport logs from one place to another by means of a powered log loader equipped with a cable supported pair of tongs adapted for gripping the logs. Log tongs heretofore used have been so constructed that they must be manually engaged with and disengaged from, each log. Thus, in order to effect the relocation operation, the services of three men have been required, the operator of the loader, a "hooker" for manually engaging the tongs with the log, and an "unhooker" for disengaging the tongs from the log after it had been moved to the desired location.

It is the principal object of the present invention to provide log tongs for a log loader, the tongs being so designed and constructed that the services of an "unhooker" are no longer required, the log being automatically released from the tong grip upon being placed down in its new location.

Another object is to provide log tongs of the character described, including pivotally connected tong members, the pivot point of one of said members being located between the center of gravity and jaw of the tong member, for normally maintaining the tongs in open or inoperative position.

Other objects of the invention will be manifest from the following description of the present preferred forms of the invention, taken in connection with the accompanying drawings, wherein:

Fig. 1 is a side elevational view of the log tongs of the present invention illustrating the normal or open position thereof;

Fig. 2 is a side elevational view of the same, showing one tong member grippingly engaging a log;

Fig. 3 is a side elevational view of the log tong of the present invention, showing both tong members engaged with a log; and

Fig. 4 is a perspective view of a modified form of tong member.

Referring now in greater detail to the drawings, there is shown in Figs. 1 to 3, a pair of log tongs comprising crossed tong members 6 and 7 pivotally connected by suitable means 8 at a point adjacent one terminal of tong member 6. Tong members 6 and 7 further include a pair of like jaws 9 and 10 respectively which issue into inwardly extending opposed teeth 11 and 12 adapted to grip log 13.

The terminal of tong member 6 adjacent pivot 8 is provided with an eyelet 14 for the reception of a ring

15 to which is secured a hoisting cable 16 suspended from a powered log loader (not shown).

To the terminal of tong member 7 remote from tooth 12 is affixed a curved arm 17 on which is slidably mounted a weight 18. Longitudinal movement of weight 18 with respect to arm 17 is prevented by a setscrew 19 which holds the weight at any desired point along the arm length. That portion of arm 17 beyond weight 18 is utilized as a handle designated 20 for purposes to be hereinafter more fully set out. It will be noted from a consideration of the drawing that tong member 7 is pivoted to tong member 6 at a point between the center of gravity and the jaw thereof so that the gravitational force of wieght 18 rotates tong member 7 about pivot 8 into the position shown in Fig. 1. A weight of ten pounds has been found sufficient to accomplish this movement.

In use, the log tong of the present invention is normally in the inoperative position shown in Fig. 1 due to the force of weight 18. When it is desired to lift log 13, the "hooker" engages tong member 6 with the log, at which time the log tongs assume the position shown in Fig. 2. The "hooker" then lifts handle 20 to the position shown in Fig. 3 and holds it in place until cable 16 is drawn taut. At this time, teeth 11 and 12 are in gripping engagement with the log and the log may be lifted and moved by the log loader to any desired location.. To automatically release the grip on the log, the log is lowered to a point a few inches above the selected resting place. The log is then dropped the final few inches and the slackening of the cable coupled with the force of weight 18 unhooks the log. Tong member 7 rotates about pivot 8 and the tongs revert to the open position shown in Fig. 1.

In Fig. 4 there is shown a modified form of a log tong member designated 7' including a jaw member 10' and log-engaging tooth 12'. In this form of the invention, instead of employing detachable weight 18, such as shown in Figs. 1 to 3, the tong member is weighted by an offset arm 21 which forms an integral part of the tong member. The free terminal of arm 21 is shaped to form a grip 22 serving the same purpose as handle 20 in that form of the invention shown in Figs. 1 to 3.

While we have herein shown and described preferred embodiments of our invention, it is nevertheless to be understood that various changes may be made therein, within the scope of the appended claims.

What we claim is:

1. In combination with a hoisting cable, log tongs comprising a pair of tongs including jaws, the free terminal of each jaw issuing into a tooth, said tongs being pivoted together at a point intermediate their length, the terminal remote from the tooth of one of said tongs being pendently supported by the hoisting cable, the corresponding terminal of said other tong being weighted to effect rotation of the latter about the point of pivot of the tongs to normally maintain said jaws open.

2. Log tongs as set out in claim 1, wherein the weighted portion of said other tong includes an arm, the outer terminal of which forms a handle for rotating the tong about the pivot point to operative position.

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