No. 877,090. PATENTED JAN. 21, 1908.

W. F. KOCH.

APPLIANCE FOR SAWMILL SET WORKS.

APPLICATION FILED JUNE 20, 1907.

FIG. 1.

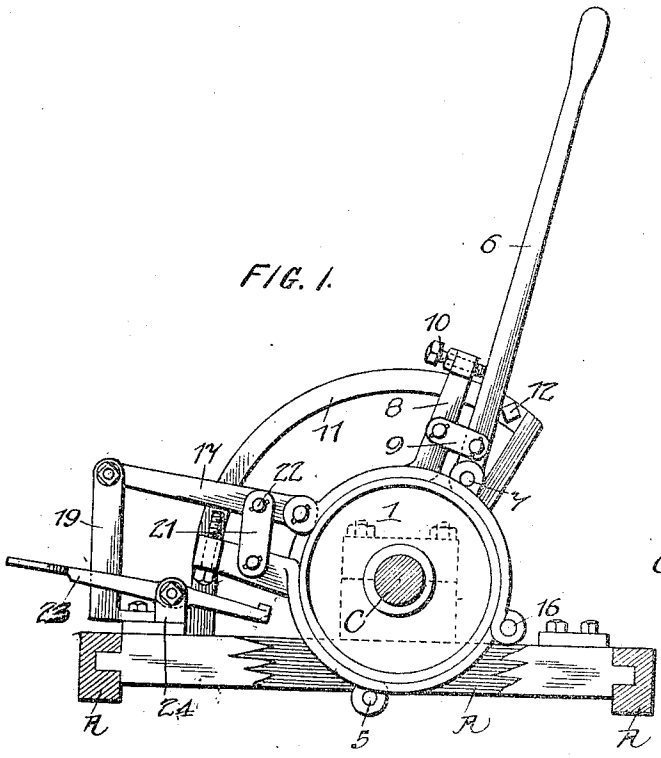


FIG. 2.

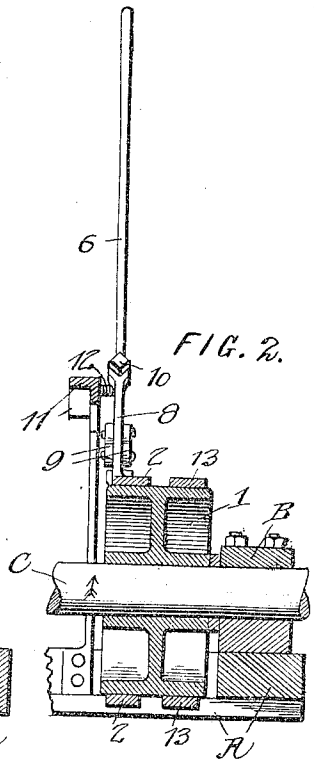


FIG. 3.

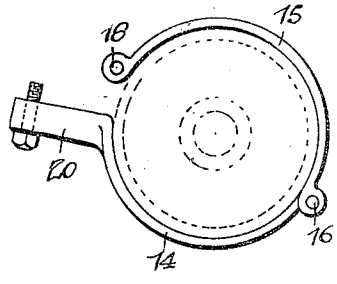
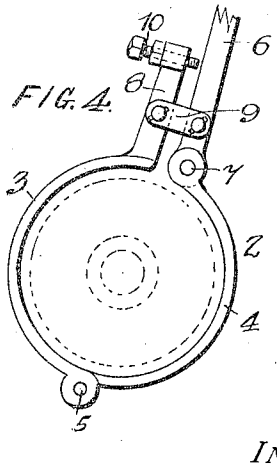


FIG. 4.



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APPLIANCE FOR SAWMILL SET-WORKS.

No. 877,090. Specification of Letters Patent. Patented Jan. 21, 1908.

Application filed June 20, 1907. Serial No. 379,362.

To all whom it may concern:

Be it known that I, WILLIAM F. KOCH, a citizen of the United States, residing at Newbern, in the county of Craven and State of North Carolina, have invented certain new and useful Improvements in Appliances for Sawmill Set-Works, of which the following is a specification.

My invention relates to saw-mill set works and more particularly to an appliance for securely holding the set shaft from movement unless released by the operator.

In the accompanying drawing forming a part of my invention I have shown my improvement upon a portion of a set shaft, the remainder of the mechanism comprising the set works, such as the knees and the means for receding the same, not being included as the same are so well known in the art and are therefore unnecessary.

My invention therefore specifically resides in the following features of construction, arrangement and operation as will be hereinafter described with reference to the accompanying drawings, in which like numerals are used to designate like parts throughout the several figures, and in which, Figure 1 is an elevation of my improvements, Fig. 2 is a vertical sectional view taken therethrough, Fig. 3 is a detail elevation of the holding brake, and Fig. 4 is a similar view of the operating brake.

Referring to the accompanying drawings, A represents the saw-mill carriage frame having bearings B arranged thereon in which the ordinary set shaft C is rotatively mounted. It is to be understood that the set shaft C operates to set the log or material after the same has been secured to the knees by a rotative movement thereof in the direction of an arrow shown in Fig. 2, such devices being well known and, with spring or other means for receding the knees, have been illustrated in many prior patents.

In the practical embodiment of my invention I provide a brake wheel 1 mounted upon the set shaft C and having a two part operating band brake 2 comprising sections 3 and 4 hingedly connected at 5, associated upon its periphery having an operating lever 6 pivotally connected at 7 to the free end of section 4. The section 3 to said brake 2 is provided with a straight integral portion 8 extending therefrom approximately parallel with the lever 6, and between which and said lever 6 is arranged connecting clamps 9 forming a pivot for the operating lever 6 toward the portion 8 as will be seen, the set screw 10 arranged through the upper end of said portion 8 operating to limit said movement.

Mounted adjacent the operating lever 6 is a quadrant 11 carrying an outstanding stud 12 against which said lever is adapted to rest, thereby normally holding the hand brake 2 free and out of clutch with the brake wheel 1. A similar brake 13 is also raised upon the wheel 1 comprising the sections 14 and 15 hingedly connected at 16 and having a lever 17 pivotally connected at its ends to the free end 18 of the section 15, and to an upstanding rigid bracket 19 mounted upon the carriage frame A. The section 14 of the brake 13 is provided with straight integral sections 20 between which and the lever 17 are connected connecting clamps 21 forming at 22 a pivot for the lever 17 whereby the weight of adjacent parts normally tends to maintain the brake 13 frictionally engaged with the brake wheel 1. A foot lever 23 is mounted within the supporting bracket 24 with a forward end beneath the integral section 20 and the connecting clamp 21. Thus a pressure upon the foot plate of said lever 23 tends to lift its forward nose to press upwardly beneath the section 20, thereby lifting lever 17 and opening the brake to allow of a reverse movement of the set shaft C when the knees are being receded.

From the foregoing it will be apparent that the brake 2 will remain free and open upon the movement of said lever to the left of the position shown in Fig. 1, while upon the return movement said brake will be locked upon the brake wheel 1 rotating said brake wheel and the said shaft C in the direction of the arrow shown in Fig. 2 to set the knees after the log or other material has been placed in connection therewith. During this movement to set the knees the brake 13 will remain open, while holding said brake wheel 1 against the reverse movement except when the foot lever 23 is depressed.

Having thus fully described my invention, I claim:

1. In an intermittent gripping device for the purpose described, the combination of a shaft having two frictionally surfaced members mounted thereon, an operating lever fulcrumed outside said shaft, a two part gripping band engaging one of said friction surfaces, said band having its engaging ends hinged to one another, the other end of one

of said parts forming the fulcrum of said lever, connections between said lever and the other end of the other of said parts, a second similar band engaging the other of said friction surfaces, and a foot lever and operating levers for controlling said second band, substantially as described.

2. In an intermittent gripping device for the purpose described, the combination of a shaft having two frictionally surfaced members mounted thereon, an operating lever fulcrumed at its end outside said shaft, a two-part gripping band engaging one of said friction surfaces, said band having its engaging ends hinged to one another, the other end of one of said parts forming the fulcrum of said lever, connections between said lever and the other end of the other of said parts, means for limiting the movement of said lever, a second similarly constructed band engaging the other of said friction surfaces, and a foot lever and operating levers for controlling said second band, substantially as described.

3. In an intermittent gripping device for the purpose described, the combination of a shaft having two frictionally surfaced members mounted thereon, an operating lever fulcrumed outside of said shaft, a gripping band engaging one of said friction surfaces and connected to and operated by said lever, a second gripping band engaging the other of said friction surfaces, and a foot lever and operating levers for controlling said second band, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM F. KOCH.

Witnesses:
S. R. BALL,
R. B. LANE.