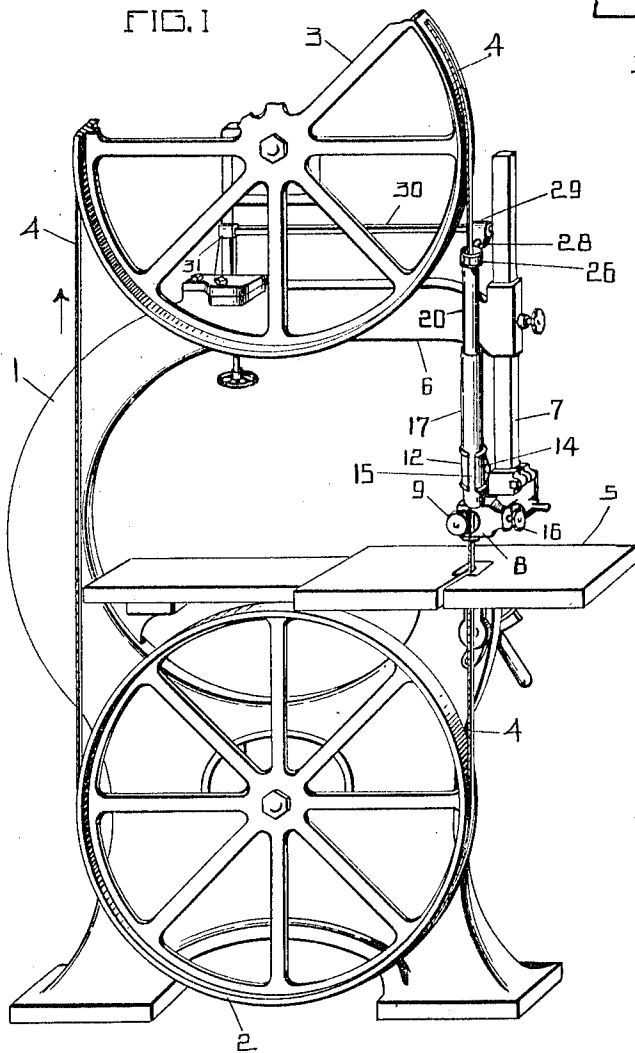
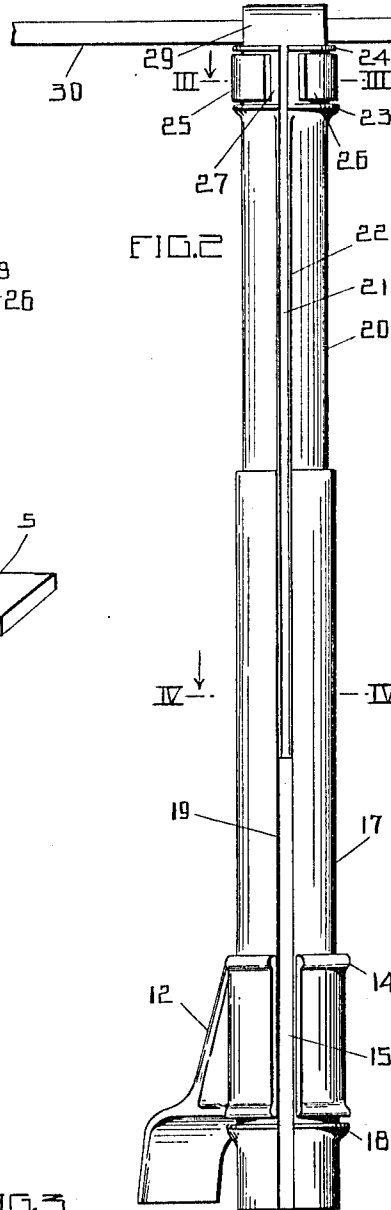
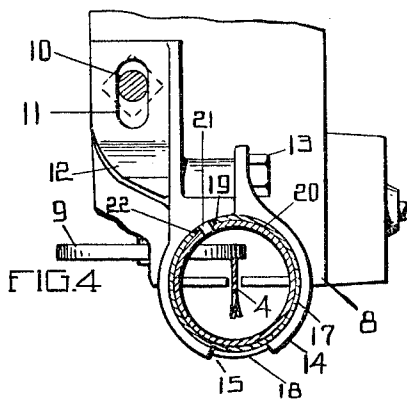
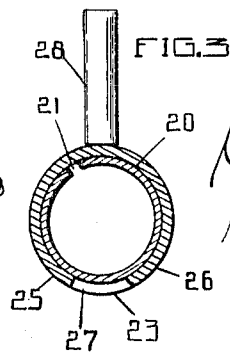


G. E. GOOD.
BAND SAW MILL.
APPLICATION FILED JULY 16, 1917.

1,270,285.

Patented June 25, 1918.



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GEORGE E. GOOD, OF ROCHELLE, ILLINOIS.

BAND-SAW MILL.

1,270,285.

Specification of Letters Patent.

Patented June 25, 1918.

Application filed July 16, 1917. Serial No. 180,804.

To all whom it may concern:

Be it known that I, GEORGE E. GOOD, a citizen of the United States of America, residing at Rochelle, Ogle county, Illinois, have invented new and useful Band-Saw Mills, of which the following is a specification.

This invention relates to shields or safety devices.

10 This invention has utility when incorporated in connection with a movable or running working or cutting member or element, as an endless saw blade.

Referring to the drawings:

15 Figure 1 is a perspective view of an embodiment of the invention in a band saw mill, parts being broken away;

Fig. 2 is a front elevation, on an enlarged scale, of the shield or safety device;

20 Fig. 3 is a section on the line III—III Fig. 2, and

Fig. 4 is a section on the line IV—IV, Fig. 2, looking in the direction of the arrow.

The band saw mill may comprise the 25 frame 1 carrying the driving wheel 2 and follower wheel 3 about which the endless flexible band saw blade 4 travels through the adjustable table 5. Adjustably mounted in the overhanging arm 6 of the frame 1 is the bar 7 carrying the guide 8. The guide is 30 accordingly readily positioned as to thickness and character of wood being cut in the work being handled over the table, and also adjustable as to the table, while the roller 35 9 may position the blade 4 in the guide 8.

Upwardly extending from the guide 8 and back of the blade 4 is the bolt 10 which may coact with the slot 11 in the bracket member 12 as one jaw of the bracket means 40 connected by the bolt 13 with the opposing jaw or member 14 to form a space or slot 15, normally disposed to register with the toothed or cutting edge of the blade or cutting member 4. The embracing position of 45 this tubular bracket 12, 14, may be as desired for bringing the blade 4 into central or back of central position therein, not only from adjusting the wheel 9 by its set screw 16, but by the position of the bracket 12 as to the 50 guide 8 as shifted along the slot 11 and thus locked by the bolt 10.

Resting on the guide 8 and embraced by the bracket clamp 12, 14, may be disposed the tubular member or shield section 17 of 55 the safety device having the annular rib 18 precluding accidental working out of the

member 17. This shield member 17, longitudinally of its extent is provided with the slot 19, which may be of a width to permit ready entrance of the blade 4 narrow-wise 60 therein, as is also the feature of the slot 15 of the bracket 12, 14. However, the slots may be of such extent as to preclude side or wide-wise escape of the blade. Accordingly with the slots 15, 19, in registry, the mill 65 may readily have a new or different blade assembled thereon, or the safety device may be mounted on a mill carrying a blade in working position. After this assembly relative rotation may occur to throw the slots 70 15 and 19 out of registry, thus effecting complete embracing of the blade adjacent the guide 8 and bracket 12, 14, while an operator may not push his head or hands into the blade cutting edge above the bracket 12 14. 75 Furthermore, in operation, a whipping off of the blade, or a breaking thereof, may not result in escape of the blade laterally of the shield 17, for the wide side of the blade may not throw out the narrow slot 19. 80

For a maximum effective range of safety device shielding under varying working conditions, not only as to the transverse or lateral adjustments, but with longitudinal adjustments, there is a supplemental or relatively extensible telescopic tubular member 85 or section 20 having a longitudinal slot 21 registering with the slot 19, being held into position against relative angular movement by the guide ribs or lips 22 bordering the 90 slot 21 and coacting with the sides of the slot 19 in the travel of the member 20 outward and inward as to the member 17. In order that this telescopic extension feature may act automatically in accommodating 95 the safety device to the adjustments, in its upper region it carries the annular shoulders or ribs 23, 24, providing a seat to be engaged by the bracket means including the opposing jaws 25, 26, having their free ends 100 spaced to provide the slot 27. The tubular section 20 in its rotations with the section 17 into and out of registry with the slot 15 accomplishes simultaneous registry and out of registry of the slot 21 as to the slot 27. 105 The locked assembly of the jaws 25, 26, in the annular seat between the ribs 23, 24, may be effected by springing the jaws or the section 20. Extending from the jaws 25, 26, this upper bracket means has the stem 28 110 slidably mounted in the hanger or auxiliary bracket 29 freely movable on the transverse

guide bar 30 locked by the clamp 31 to the frame 1.

This bar 30 may be so positioned as to bring the upper extent of the combined shield device closely to approximate the upper wheel 3 and with its lower section resting upon the guide, there is a maximum range for the safety region, in a device wherein the upper adjustments are all automatic in following the settings of the guide and lower adjustments of the shield.

What is claimed and it is desired to secure by Letters Patent is:

1. A band saw mill embodying a saw blade, a frame, a guide adjustable as to the frame and coacting with the blade, slotted brackets connected to the frame and guide adjacent the blade, and relatively telescopic shield members mounted by the brackets, said members having registering slots held against relative rotation and the slots of said members movable into and out of registry with the bracket slots.

2. A band saw mill embodying a saw blade, a frame, a saw guide adjustably mounted as to the frame, bracket means adjustably mounted as to the blade and slotted to register with the cutting edge of the blade, and tubular longitudinally slotted telescopic members rotatably mounted in the bracket means that the slots of the means and members may register in saw assembly and be out of register in saw operation to preclude saw escape.

3. A traveling cutting member, an embracing shield therefor provided with a slot extending in the direction of the cutting member, and a slotted bearing for mounting the shield, said shield being rotatable in the bearing to bring the slot of the shield from position of registry with the slot of the bearing, in which position the cutting member may be assembled therein, to position out of registry with the slot of the bearing, whereby any whipping or

breaking of the relatively traveling cutting member therein may not throw the cutting portion of the member out of the shield slot.

4. A saw mill having a saw blade, a guide for the blade, a bracket mounted on the guide and forming a bearing having a slot, and a shield also having a slot, said shield being shiftable in the bearing to have the slot of the shield register with the slot of the bearing for admitting edgewise entry of the blade therein, whereby shifting of the shield to bring the slot of the shield out of registry with the slot of the bearing brings the slot of the shield away from the cutting edge of the saw blade.

5. A band saw mill having a flexible saw blade, and adjustable guide for the blade, an adjustable bracket mounted on the guide providing a slotted bearing, a shield mounted by said bearing, said shield having a longitudinal slot permitting edgewise assembly of the blade into the shield through the slot of the bearing, and a work table for the mill, the adjustment of the guide permitting regulation of its clearance as to the table, and the adjustment of the bracket permitting positioning of the shield for operating clearance as to the blade movable therethrough.

6. A saw mill embodying a saw guide, a bracket on the guide having a sectional tubular portion in line with the saw guide and comprising fixed and detachable jaws providing a bearing, the outer ends of the jaws being spaced apart to provide a slot, and a longitudinally split tube held by the bearing to form a shield for the saw, said split of the tube shield being shiftable out of registry with the slot of the bearing, whereby the relatively movable saw therein may be retained from throwing out of the shield laterally.

In witness whereof I affix my signature.

GEORGE E. GOOD.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."