(No Model.)

A. TOUCHETTE.

KNOT SAW GUARD.

No. 344,292. Patented June 22, 1886.

Fig. 1.

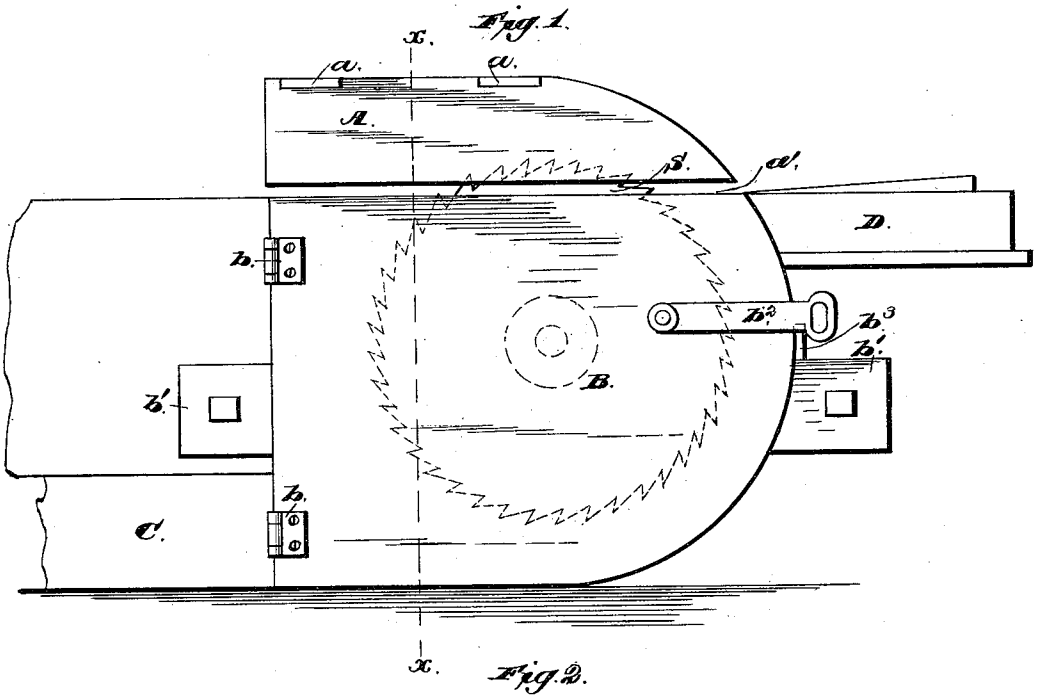
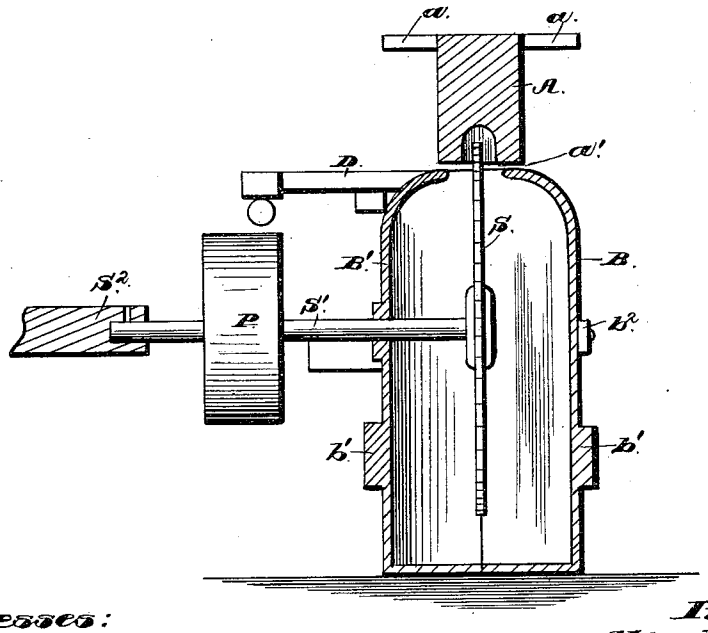


Fig. 2.



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UNITED STATES PATENT OFFICE.

ALFRED TOUCHETTE, OF MANISTEE, MICHIGAN.

KNOT-SAW GUARD.

SPECIFICATION forming part of Letters Patent No. 344,292, dated June 22, 1886.

Application filed April 5, 1886. Serial No. 197,769. (No model.)

To all whom it may concern:

Be it known that I, ALFRED TOUCHETTE, a citizen of the United States, residing at Manistee, in the county of Manistee and State of Michigan, have invented certain new and useful Improvements in Knot-Saw Guards; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to knot-saw guards; and it consists in the construction and arrangement of the parts, which will be more fully hereinafter described, and pointed out in the claims.

One object of my invention is to provide means whereby an operator is protected from injury by the saw, especially when sawing lumber containing knots or irregular fibers.

A further object of my invention is to so arrange the parts of the device that one portion thereof shall be adapted to be opened or closed, as desired, to clean or in any other manner fix or adjust the saw, by means which are simple in their construction, readily operated, and cheaply manufactured.

I attain these objects by the mechanism illustrated in the accompanying drawings, wherein like letters of reference indicate similar parts in the several views, and in which—

Figure 1 is a side elevation of a knot-saw with my improved upper and lower guard arranged in their relative positions therewith. Fig. 2 is a transverse vertical section on the line *x x* of Fig. 1, looking from the rear.

A indicates the upper section of the guard, which is rigidly attached to beams or standards by the strips *a a*, secured thereto. B and B′ are the sections forming the lower guard separate and apart from the upper section, A. The upper section of the guard A is constructed in the form of a hood, being hollowed out so as to just give the knot-saw sufficient room for free movement, being fitted over said saw. The lower guard is constructed of two sections, B and B′, the section B′ being rigidly attached to suitable standards by the strips *b′ b′*, secured to said section, and the section B is hinged to the section B′ by means of hinges *b b*, and is adapted to open in a manner similar to a door. These upper and lower sections A and B B′, forming the guard, almost entirely envelop the saw, leaving a space sufficient for the saw to have free revolution therein, a small space, *a′*, being left between the upper section, A, and the two sections B and B′, comprising the upper and lower guards. This space *a′* is of such height as to just permit the passage of a shingle therethrough, leaving no space whereby the operator's hands could get into contact with the saw. The door-section B of the lower guard is provided with a latch, b^2, which is pivoted thereto, and which engages with the lug b^3 on the rigid section B′ of said lower guard, and secures the said section B to the section B′ when in a closed position.

The rear lower portion of the two parts B and B′, comprising the lower guard, is provided with a duct, C, through which the sawdust passes from the saw, and is carried away from the discharge-opening of said duct to a suitable place of deposit.

The saw S is of the ordinary form of knot-saw, and is mounted on the end of a shaft, S′, which passes out through the bearing formed in the fixed section B′ of the lower guard to a suitable rest or trestle, S^2. A driving-pulley, P, is mounted on this shaft S′, to which a driving-belt may be attached for the transmission of power to said pulley and to the saw.

A feeding-table, D, is secured to the lower section of the guard by suitable means, and is relatively situated with the opening *a′* between the upper section, A, and the lower sections, B and B′, comprising the upper and lower guard, respectively.

The use which I propose making of my improved device is for sawing or slitting shingles containing knots or defective portions after they have been properly sized by another machine.

The shingle *l* is placed on the table D and fed through the opening *a′* to the saw S, the said shingle just filling the space or opening *a′*, the defective part at the same time being cut out.

By this construction of upper and lower guards the operator is shielded against injury by the saw-blade, the hood or upper section, A, of the guard protecting the upper part of his person, and the lower section shielding his limbs from injury.

The device can be readily arranged, constructed, and adjusted to accommodate various

other purposes without departing from the nature and principle of my invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a knot-saw guard, the combination of an upper section, a lower section composed of two parts, one of which is rigidly secured, and the other hinged to the rigid portion and adapted to be opened or closed, and means for supporting the upper and lower sections in place, and for securing the parts of the lower section together when closed, substantially as described.

2. In a knot-saw guard, the combination of an upper section cast in one piece and hollowed out on its under side to permit the free movement of the saw therein, a lower section composed of two parts, one of which is rigid, and the other hinged to the rigid portion and adapted to be opened or closed, said upper and lower sections being adapted to envelop the saw, leaving a feeding-space between them, a lug on the rigid portion of said lower section and a latch on the hinged portion, said latch and lug engaging with each other to secure the parts of said lower section when closed, and a dust-duct connected to the rear portion of the said lower section, substantially as described.

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

ALFRED TOUCHETTE.

Witnesses:

A. V. McALVAY,

J. P. J. KROGEN.