(No Model.)

A. P. HYDE.

GUARD FOR BAND SAWS.

No. 407,211. Patented July 16, 1889.

Fig. 1.

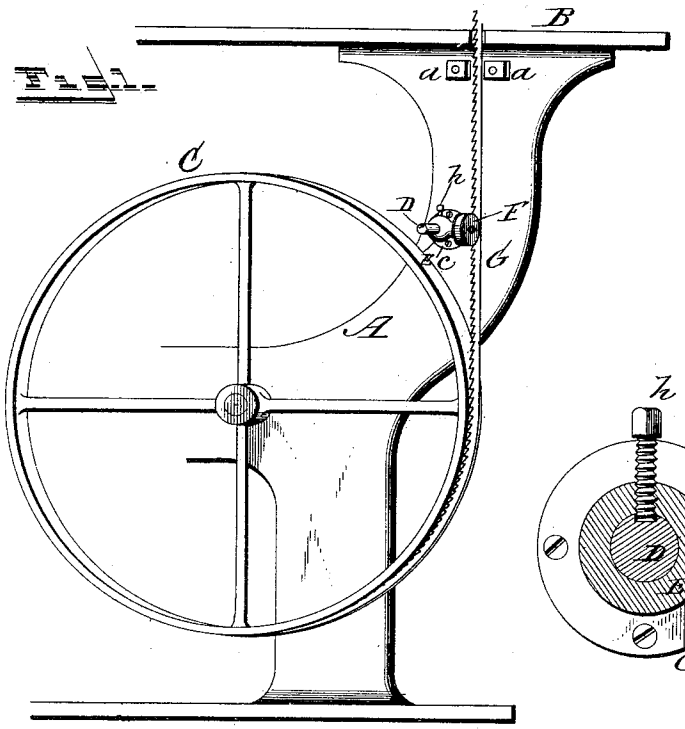


Fig. 3.

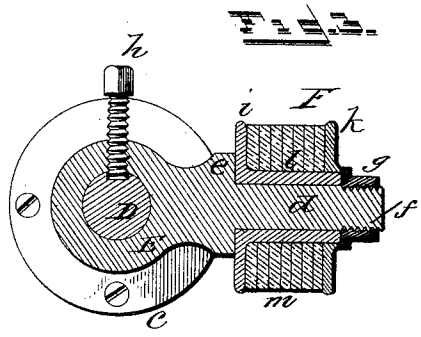
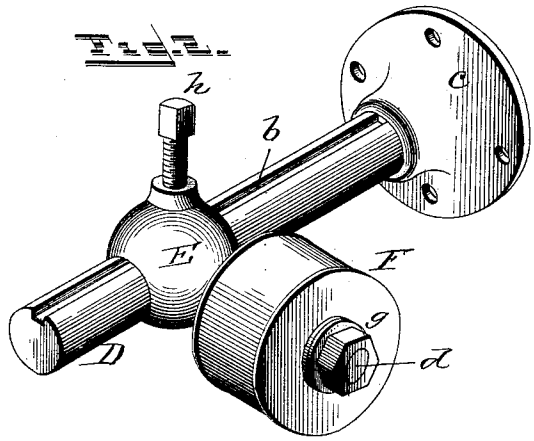


Fig. 2.



WITNESSES

G. S. Elliott.

C. M. Lasher.

INVENTOR

Asa P. Hyde.

per Chas. C. Fowler.

Attorney

N. PETERS. Photo-Lithographer. Washington, D. C.

UNITED STATES PATENT OFFICE.

ASA P. HYDE, OF OXFORD, NEW YORK.

GUARD FOR BAND-SAWS.

SPECIFICATION forming part of Letters Patent No. 407,211, dated July 16, 1889.

Application filed January 19, 1889. Serial No. 296,856. (No model.)

To all whom it may concern:

Be it known that I, ASA P. HYDE, a citizen of the United States, residing at Oxford, in the county of Chenango and State of New York, have invented certain new and useful Improvements in Guards for Band-Saws; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is an elevation of a portion of a band sawing-machine, showing my improved guard connected to the frame thereof. Fig. 2 is a perspective view of the guard upon an enlarged scale, and Fig. 3 a cross-section thereof.

The present invention has for its object to provide means whereby all band-saws may be entirely prevented from running off the rim or periphery of the wheel either by carelessness, accident, or otherwise; and it consists in the details of construction, substantially as shown in the drawings, and hereinafter described and claimed.

In the accompanying drawings, A represents the frame of a band sawing-machine, having the usual table B and band-wheel C, said frame directly under the table having connected thereto the guides *a*, of any well-known construction. A rod or arm D, having a longitudinal groove *b*, is provided with a suitable bracket *c*, having holes therein for attaching it to the frame of the machine by screws or bolts. Any suitable or well-known means may be provided for conveniently securing the rod or arm D to the frame, and is preferably located below the table of the saw-frame near the lower band-wheel.

The rod or arm D projects out horizontally from the frame of the machine, the head E of a stem *d* being mounted thereon, said stem having an annular shoulder *e* and screw-threads *f* at its extremity, as shown in Fig. 3, to receive a nut *g*, for holding on the stem the guard-roller F. The head, with its stem, as above described, is longitudinally adjustable on the rod or arm D, and is held in its adjusted position by means of a set-screw *h*, the end thereof engaging with the groove *b*. The roller I prefer to construct of two metal plates *i k*, the former having a hub *l*, through which passes the stem *d*, and between these plates is held the body *m*, which may be of wood, rubber, metal, a composition, or any preferred material found best adapted to the purpose, and, if desired, said body may be composed either of a series of rings of the material above referred to or solid, as shown. Where rings are used it enables their position with relation to each other to be changed, so as to bring a new surface to the saw when one surface becomes worn, by removing the worn rings and replacing them with those that have not been brought in contact with the saw and placing the worn rings where the new ones were formerly.

When the saw is drawn forward by accident or otherwise, the saw will strike the roller and cause it to revolve upon its axis and prevent it from coming forward and off the band-wheel or out of the guides *a*.

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

1. The combination, with the band-saw frame and saw, of the lateral arm provided with means for securing it to the frame, the stem projecting at right angles to said arm and having a head provided with an opening through which said arm is passed, said stem being adjustable on said arm, and a roller carried by said stem, substantially as shown and described.

2. The combination, with the band-saw frame and the saw, of the lateral arm provided with means for securing it to the frame, and grooved longitudinally, as shown, the stem projecting at right angles to said arm and having a head provided with an opening through which said arm is passed, a roller carried by the outer end of said stem, and a set-screw passed vertically through the head of the stem and working in the groove of the arm, substantially as shown and described.

3. A guard for band-saws, consisting of a

stem, a clamp *i*, having a hub *l*, through which the said stem is passed, the clamp *k* on said stem, the plurality of rings on the stem between the said clamps, and the nut *g*, all substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ASA P. HYDE.

Witnesses:
JAMES W. GLOVER,
JOHN R. GLOVER.