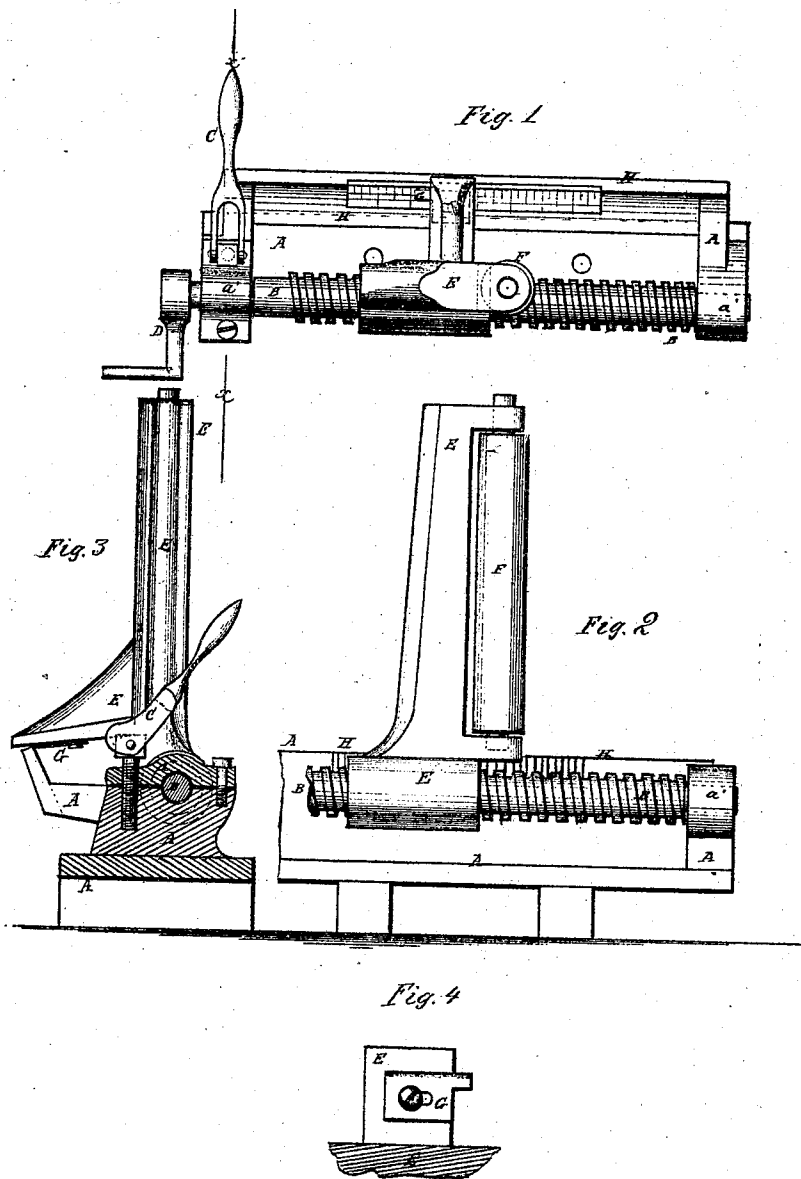


C. E. Grandy,

Head Block.

No. 103,871.

Patented June 7, 1870.



Witnesses:  
A. W. Almquist  
L. S. Mabe

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# United States Patent Office.

CYRUS E. GRANDY, OF UPTON, ASSIGNOR TO S. HEALD & SONS, OF BARRE,  
MASSACHUSETTS.

Letters Patent No. 103,871, dated June 7, 1870.

## IMPROVEMENT IN HEAD-BLOCKS FOR SAW-MILLS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, CYRUS E. GRANDY, of Upton, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in Circular-Saw Mills; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

Figure 1 is a top view of my improved attachment.

Figure 2 is a side view of the same.

Figure 3 is an end view of the same, partly in section, through the line  $x x$ , fig. 1.

Figure 4 is a detail view of the under side of the knee, showing the index.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved attachment for the frames of circular-saw mills in front of the saw, of that kind which are so constructed and arranged that, while supporting the side of the log from which the board or other lumber is being cut as it is being carried past it by the carriage, it may also serve as a set-gauge when setting up the log for another cut; and

It consists in the construction and combination of the various parts of the device as hereinafter more fully described.

A is a frame, to the ends of which are attached bearings  $a'$ , in which revolve the journals of the screw B.

One of the bearings  $a'$  is left loose, so that it may be forced down by a lever-cam C to clamp the journal of the screw B, and thus prevent it from being turned by the friction of the knee when the said knee is being turned down or up.

To the projecting end of the outer journal of the swiveled screw B is attached a crank, D, by means of

which the said screw is turned to move the knee E back and forth.

The knee E has a screw-hole formed through it for the passage of the screw B, so that the said knee may be adjusted according to the thickness of the strip or board to be sawn from the log, by turning the said screw.

In the side of the knee E, toward the log, is pivoted a roller, F, against which the log rests as the said log is being carried forward to the saw.

The knee E is held up to its place by the pressure and friction of the log against the roller F as the said log is being carried forward by the carriage.

To the short or horizontal arm of the knee E is adjustably attached an index, G, which points to a scale, H, of division marks formed upon or attached to the upwardly-projecting side bar of the frame A, as shown in figs. 1 and 3.

By this construction the knee E may be turned down out of the way until the first cut or slab has been sawn from the log, and then turned up to its place for the squared side of the log to rest against, and move along as the log is carried forward to the saw by the carriage. The device thus supports the forward side of the log and prevents all rolling and canting, and it also acts as a gauge in setting the log up to the saw.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

The frame A, provided with the scale H, swiveled screw B, crank D, cam-lever C, loose bearing-cap  $a'$ , knee E, roller F, and adjustable index  $g$ , all said parts constructed and arranged as shown and described.

CYRUS E. GRANDY.

Witnesses:

GEO. C. DAVIS,  
L. E. DENNIS.