

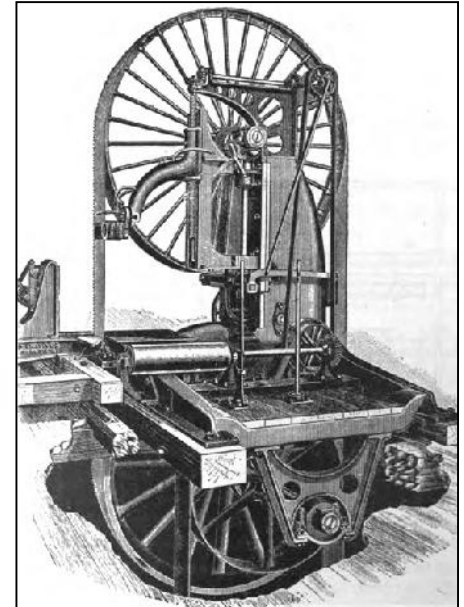
# Band Mill

Production quartering cutting cuts.

## **G** Band Mill

The idea of using an endless saw blade of the band type for cutting logs into lumber occupied the minds of lumbermen as early as 1860. During this decade a mill built on this principle was brought to Philadelphia from France. In 1865 the Hoffman Bros., of Fort Wayne, IN had 5-foot diameter Band Mill wheels with rubber faces for-sale. They used 5 inch wide saw bands imported from France.

A number of other types of Band Mills were sold by other firms from 1883 similar to the Hoffman Bros. Lumber cut by these early Band Mills was of poor quality with some dealers refusing to handle band-sawed lumber. One defect was the wheels being supported by only one bearing. Also the band had a tendency to drag when the log was giggered back. These problems were overcome with two bearings supporting each wheel and Carriages with rollers on returns.



In 1887 a Sawmill machinery inventor took out patents that resulted in the general lines of the Band Mills used at the VCLCo. The Lake States region was the first region to accept the new and improved Band Mills.

Band saw blades had narrower saw kerfs than circular saw blades therefore they wasted less lumber and cut more accurately. Also being thinner than a round blade there was less friction which required less power to operate them than a circular saw. Also, band-sawed lumber usually is more free from saw marks and is more evenly sawed than a circular saw. This came at a cost, the Band (Head Saw) Mill was relatively expensive to install and to maintain as compared to a Circular Sawmill.

The VCLCo had two Head Saws which reduced log into boards, planks, timbers, and cants. The Band Mill at the VCLCo consisted of a continuous 7"-8" wide "band" of steel with teeth filed into one side (double-cutting blades with teeth on both edges of the band were also available) mounted on two big wheels with the stationary bottom wheel (see below) being heavier and acted as a flywheel driving the blade downwards as logs were fed by the Head Carriage. The upper wheel was mounted on adjustable bearings so it could be lowered for removal of the blade, and to raise it for tightening.

The lower wheel would have been partially below the floor as shown below. Common size wheels were about 48 inches in diameter and 12 inch wide with 49 feet long blades.

Band saw blades dulled quickly from dirt and sand; one of the reasons for logs being supplied from a pond which kept logs clean. The VCLCo would probably always have had between 10 and 40 extra saw blades on hand to immediately replace broken or dull blades. Blades were filed/sharpened on the third floor above the Band (Head Saw) Mill for ease of removing and easily dropped back down for installation.



Note, heavy lower wheel.

