L. H. Bridgeman,

Cutting Veneers.

No. 107,654. Patented, Sep. 27, 1870

Fig: 1.

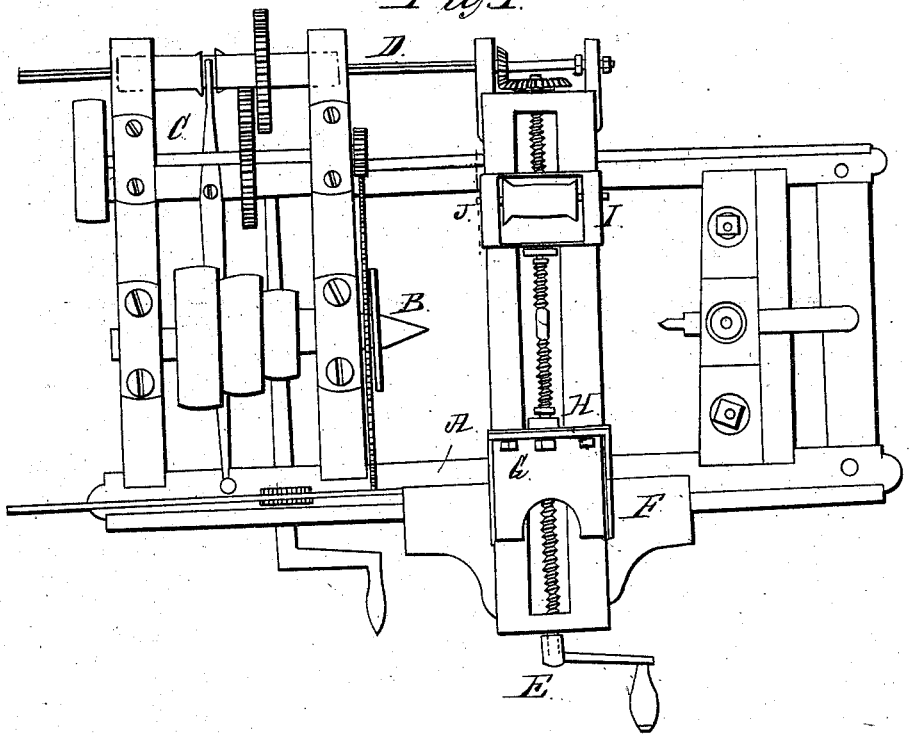
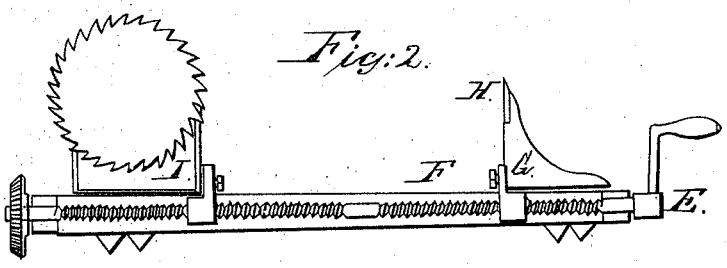


Fig: 2.



Witnesses:

John L. Lewis

Charles Bethune

Inventor:

Lewis H. Bridgeman

United States Patent Office.

LEWIS H. BRIDGEMAN, OF ROCK STREAM, NEW YORK.

Letters Patent No. 107,654, dated September 27, 1870.

IMPROVEMENT IN MACHINES FOR CUTTING MATERIAL FOR BASKETS.

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

I, LEWIS H. BRIDGEMAN, of Rock Stream, in the county of Yates and State of New York, have invented certain Improvements in Cutting-Machines, of which the following is a specification.

The first part of my machine relates to a lathe for holding and turning the log from which grape-box stuff is cut off by a stationary knife or cutter, that is carried toward the center of the log, with the proper speed to cut the stuff the proper thickness

The second part relates to a circular saw, that is supported by the same carriage that holds the cutter, and it is so adjusted that it will cut into the log before the cutter cuts the stuff off.

The third part relates to the means used to move the cutter and saw toward the center of the log.

Figure 1 is a top view, and

Figure 2, a longitudinal vertical section of the carriage, with the cutter and saw upon it.

A is the frame that supports the various parts of the machine. It may be made of wood or iron, and it has upon the upper surface ways for the carriage.

B is the arbor that sustains one end, and turns the log. It is made and supported the same as the arbor of ordinary lathes. It has a large cog-wheel on it, to turn it, so that it will move steadily and give a uniform motion to the log. It has, also, a series of band-wheels upon it, that may be used to turn the log round before cutting.

C is an arbor, that has a driving-pulley at one end, and a pinion at the other, to drive the cog-wheel on the first arbor. It also has a wheel to drive the screw in the cutter-carriage.

D is a spindle, that turns the bevel-wheels, that turns the screw E.

The end has a bevel-wheel. It is held in a journal-box to the carriage.

The other end must be made to slide through the wheel that drives it, so that it may be driven when the carriage is moved in any position. If it is made round, a groove should be made in it the length that the carriage is required to be moved, and in the hub of the wheel that drives it is a spline that prevents the wheel turning on the spindle.

E is the feeding-screw. One part of it has a right, and the other a left-hand thread, so that it will move the cutter and saw-stands, both toward the center of the log, or both back from the center at the same time.

It is held in journal-boxes at each end of the carriage F.

It is driven by a bevel-wheel at one end, and may be turned by a winch at the other, by throwing the driving-wheels out of gear.

F is the carriage that carries the cutter and saw-stands. It is made similar to a carriage on a lathe for turning iron, as represented in fig. 1. It is placed on the ways upon the top of the frame, and on them it is slid where wanted. It has ways made upon it in any ordinary manner, for the cutter and saw-stands to slide upon.

G is the cutter-stand. Its lower part is fitted to slide upon the ways of the carriage F, and it has fastened to it a nut, that the feeding-screw E passes through, so that, by turning the screw, the stand is moved. The upper end is made to receive the cutter, and have it held by bolts, so that it may be adjusted as it is worn away by use.

H is the cutter. It must be made strong and straight, and the length that the stuff must be cut that is required for boxes.

I is the saw-stand. The lower part is fitted to slide on the ways of the carriage F. It has a nut fastened to it, for the feeding-screw E to pass through, so that, by turning the screw, the same will be moved where required.

J is a saw-arbor. It is held by journal-boxes on the top of the stand I. It is provided with a driving-pulley, that may be driven by the same power that drives the other parts of the machine.

At the end of the arbor is a circular saw fastened, that cuts off the wood at the edge of the slice before the cutter cuts it off.

What I claim as my invention, and desire to secure by Letters Patent, is—

The cutter G, when made and operated as and for the purpose specified, in combination with the circular saw J, when both are used to cut stuff, substantially as set forth.

LEWIS H. BRIDGEMAN.

Witnesses:

JOHN L. LEWIS,

CHARLES KETCHUM.