J. R. Graham,

Cutting Veneers.

No. 45,488. Patented Dec. 20, 1864.

Fig 1

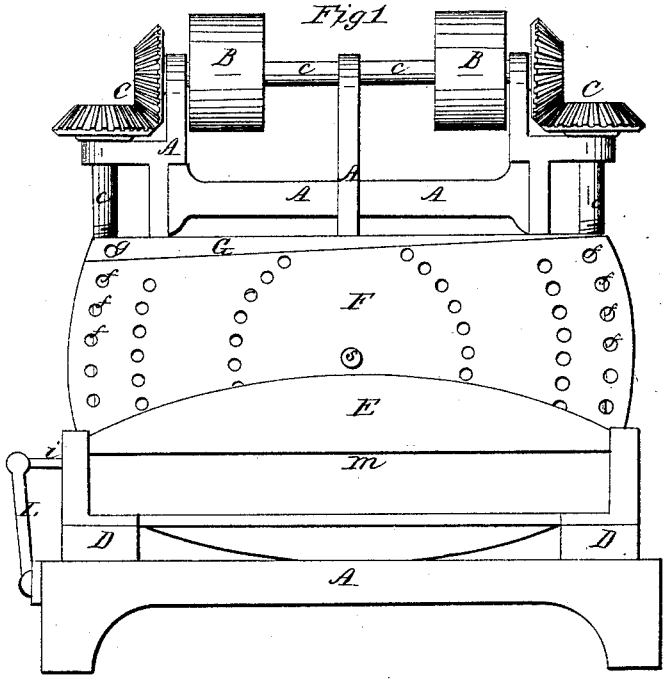
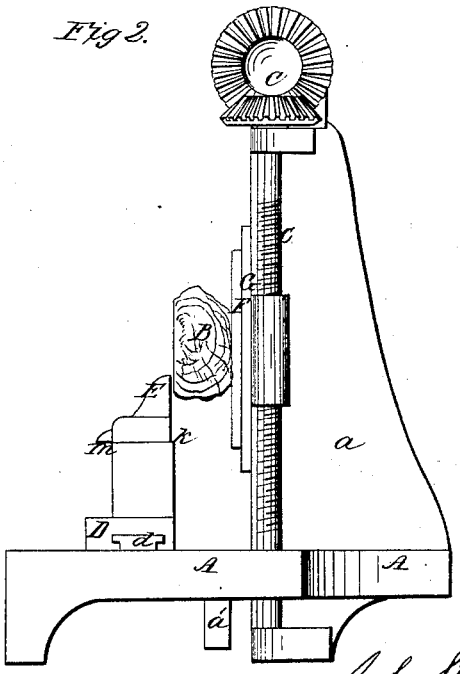


Fig 2.



Witnesses:

a G. Anderson

J. G. Morgan

Inventor:

John R. Graham

UNITED STATES PATENT OFFICE.

JOHN R. GRAHAM, OF NEW YORK, N. Y.

IMPROVEMENT IN VENEER-CUTTING MACHINES.

Specification forming part of Letters Patent No. **45,488**, dated December 20, 1864.

To all whom it may concern:

Be it known that I, J. R. GRAHAM, of the city, county, and State of New York, have invented a new and useful Improvement in Veneer-Cutting Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same.

The nature of my invention consists in giving to the stay-plate, on which the log is secured, an independent movement as regards the position of the knife, so as to allow the log, after it has been secured to the plate, to be adjusted in the most favorable position for cutting the grain of the wood, and also to be turned end for end without detaching it from the plate, keeping the surface of the log constantly in the same plane.

I will now proceed to more fully describe my invention, reference being had to the accompanying drawings and to the letters of reference marked thereon, said drawings forming a part of these specifications.

Figure 1 is a front view of the machine; Fig. 2, an end view.

A A represent the frame of the machine; *a a*, braces; B B, driving-pulleys; C C, cog gear-wheels; *c c*, shaft; c^2 c^2, large screws for carrying the plate and log up and down; D D, slides on which the knife and its stock are mounted; *d*, way on which the slide moves; E, knife-stock; *k*, knife; *m*, mouth of the stock where the veneer is delivered from the machine; F, the stay-plate to which the log is fastened. It (the stay-plate) is planed to an uniform thickness, and is hung on a strong bolt, S, so as to allow it to turn on the bolt within its own plane. G is another plate, having its front surface parallel to those of the stay-plate, and to which the stay-plate is securely fastened by the bolt S.

The plate G has a reciprocating movement up and down on suitable ways or guides given it by means of the screws c^2 c^2, and carries with it the stay-plate and log L. There are holes *f f f* at each end of the stay-plate F, and corresponding holes in the plate G, in which pins or bolts are inserted to secure the stay-plate in its proper position. The other holes in this stay-plate are for screws to fasten the log on with.

I *i* are levers by means of which a reciprocating longitudinal movement is given to the knife and its stock during the time the veneer is being cut and the log ascending. There is also other well-known machinery for moving the knife toward the log as fast as the veneers are cut off.

The operation is as follows, to wit: The log is securely fastened to the stay-plate F by means of screws inserted through the holes in the plate F and screwed into the log, (there being holes through the plate G to allow of the inserting and screwing of the screws.) The log is then adjusted to the desired position by turning the stay-plate F on the bolt S, and secured in this position by inserting pins in the holes *f f*, these pins passing through both plates F and G. The knife and its stock are then adjusted to the proper position, and the machine started. The plates G and F then move up and down, bringing the log in contact with the knife, and cutting off a veneer at each downward movement. At the same time a longitudinal movement is given to the knife during the cutting operation. The knife-stock is advanced toward the log at each upward movement of the log. If the grain of the wood should prove unfavorable for cutting in the position the log is put on, the machine can be stopped and its position changed, even to reversing the ends of the log, and consequently the grain of the wood, by removing the bolts or pins in the holes *f f* and turning the plate F on its bolt S till the best position shall be found.

As the various working parts of veneer-cutting machines are well known, I do not deem in necessary to give a more detailed description of their working parts, my invention relating solely to the independent movement of the stay-plate.

I claim—

The stay plate F, when made adjustable, as specified and for the purpose set forth, in combination with the cutting-knife, substantially as described.

JOHN R. GRAHAM.

Witnesses:

A. C. ANDERSON,

J. F. MORGAN.