Bonnell & Cole,

Cutting Veneers.

No. 25,622. Patented Oct. 4, 1859.

Fig. 1.

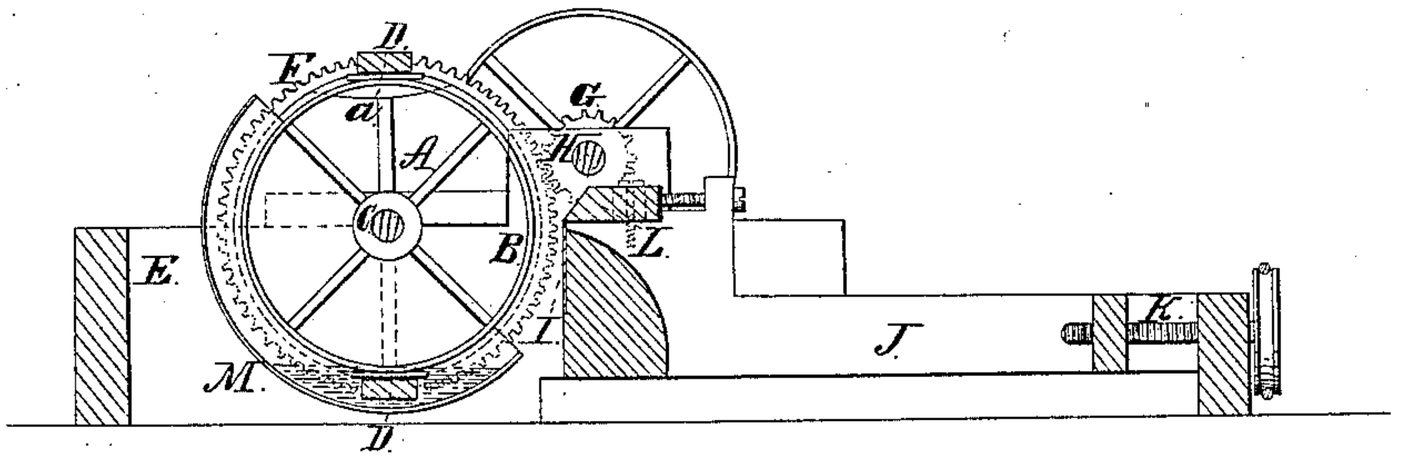
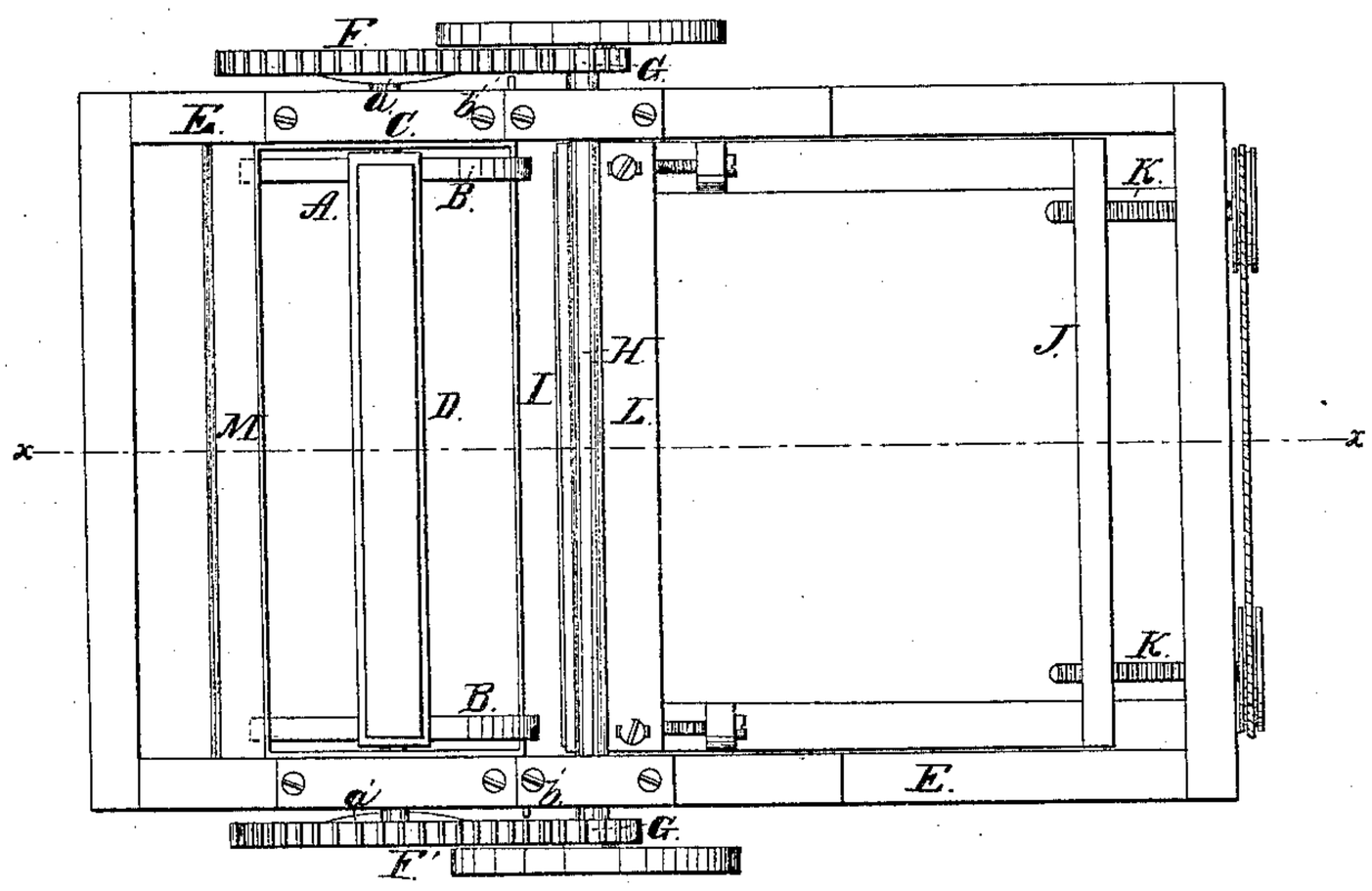


Fig. 2.



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UNITED STATES PATENT OFFICE.

M. BONNELL, OF NEW YORK, N. Y., AND I. I. COLE, OF TAPPAN, NEW JERSEY.

MACHINE FOR CUTTING VENEERS.

Specification of Letters Patent No. 25,622, dated October 4, 1859.

To all whom it may concern:

Be it known that we, MAHLON BONNELL, of the city, county, and State of New York, and ISAAC I. COLE, of Tappan, in the county of Bergen and State of New Jersey, have invented a new and Improved Machine for Cutting Veneers; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 represents a longitudinal vertical section of our invention, the line *x x*, Fig. 2, indicating the plane of section. Fig. 2 is a plan or top view of ditto.

Similar letters in both views indicate corresponding parts.

Our invention consists, first, in arranging the rotary log carrier by means of cams in such a manner that the same receives a longitudinal motion whenever one of the logs comes in contact with the knife, and during the whole time which it takes the knife to pass through the log, whereby the cutting operation is materially facilitated; and our invention consists also in combining with the rotary log carrier a tank containing hot water, so that each log is passed through the water and reheated with every revolution of the log carrier, and just before said log comes in contact with the knife.

To enable those skilled in the art to make and use our invention we will proceed to describe it.

The log carrier, A, consists of two or more wheels, B, of exactly the same diameter, that are rigidly secured to the shaft, C. These wheels are united by metal bars, D, which are firmly attached to the faces of said wheels, and which form the platforms to which the logs are secured. The shaft, C, has its bearings in a frame, E, and it receives a rotary motion by means of cog wheels, F F′, that gear into pinions, G, which are mounted on the driving shaft, H.

Secured to the sides of the cog wheels, F F′, are the cams, *a a′*, one opposite the other so that the cam, *a′*, on the wheel, F′, reaches its lowest point when the cam, *a*, on the wheel, F, is in its highest position. These cams strike against projections, *b b′*, on the side of the frame, E, whereby the shaft, C, together with the log carrier, A, receives a longitudinal sliding motion.

The knife, I, is secured to a sliding carriage, J, which is moved toward or from the log carrier by means of screws, K, and a gage plate, L, serves to regulate the depth of the cut.

The cams, *a a′*, are so arranged that they begin to impart a longitudinal motion to the log carrier as soon as one of the logs comes in contact with the knife, and this motion is kept up until the knife has passed entirely through the log. By this longitudinal motion of the logs the same effect is obtained as if the logs were stationary, and a drawing motion would be imparted to the knife, and the cutting operation is thereby wonderfully facilitated.

The log carrier, A, is surrounded, or partly surrounded, by a tank, M, in which a supply of hot water is kept up as long as the cutting operation is carried on. Each log as it rotates with the log carrier passes through the hot water during a certain portion of each revolution, so that the logs are always kept hot and in the most favorable condition for the knife to act on them. It is obvious that the number of logs on the log carrier may be increased according to its size and to the speed with which it rotates, and the number of cams on the sides of the wheels, F F′, has to correspond to the number of logs, so that for every cut of the knife a drawing motion is imparted to the log carrier.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is:—

1. The arrangement of the cams, *a a′*, or their equivalents, in combination with the log carrier, A, substantially in the manner and for the purpose specified.

2. The arrangement and combination of the log carrier, A, with the tank, M, or its equivalent, substantially as and for the purpose described.

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Witnesses:
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