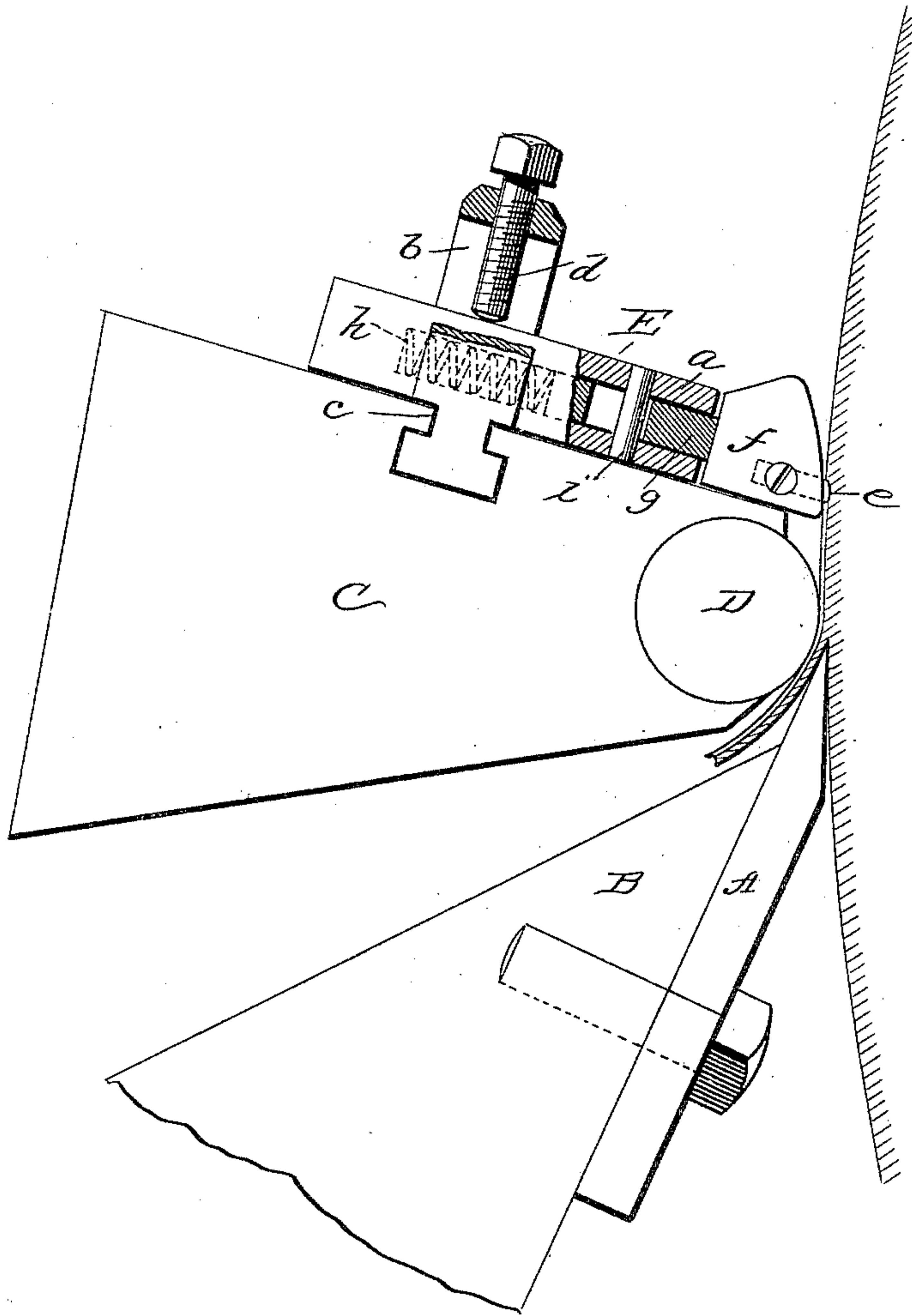


(No Model.)

E. DENSMORE.
VENEER CUTTING MACHINE.

No. 446,585.

Patented Feb. 17, 1891.



Attest
Walter D. Moulton
F. L. Middleton

Inventor
Edwin Densmore
by *Wm. S. May*
J. H. Y.

UNITED STATES PATENT OFFICE.

EDWIN DENSMORE, OF CORONADO, CALIFORNIA.

VENEER-CUTTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 446,585, dated February 17, 1891.

Application filed April 17, 1890. Serial No. 348,334. (No model.)

To all whom it may concern:

Be it known that I, EDWIN DENSMORE, of Coronado, in the county of San Diego and State of California, 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 same.

My invention relates to veneer-cutting machines, and is a scoring attachment therefor.

In the manufacture of fruit-boxes from veneer it is necessary to score them, so as to enable the sheets to be bent into the required form, thus preventing breaking or uneven bending at the corners.

The object of my invention is to provide an automatically-adjustable scoring-knife which will adjust itself to the diminishing periphery of the log, and, further, to provide for an even depth of cut.

In the accompanying drawing the figure represents a portion of a veneer-machine with the periphery of the log shown, and with my improvement connected to the frame-work of the machine.

The knife A, which is of ordinary construction, is supported upon the frame-work B, and between the part B and the upper frame-work C is an opening through which the veneer passes as it is cut. A roller D, supported in the forward part of the frame C, bears against the periphery of the log directly in line with the cutting-point of the knife. As the periphery of the log is removed by the action of the knife in a thin sheet, I provide for the scoring of the sheet before it is cut from the log by means of my improved scorer E. This consists of a box or casing *a*, which is adjustably supported upon the bed or frame C, so as to be moved to bring the scorer in different lines to the periphery of the log according to the requirements of the boxes, which are to be made from the veneer being cut. This adjustment is effected by the yoke *b*, which encircles the scorer E, and is fitted to slide in a groove formed in the upper face of the frame C. This groove has a contracted opening, as shown at *c*, and the ends of the yoke engaging therewith are made to conform to the shape of the groove. The scorer is also adjustable in the direction of its length by means of a set-screw *d*, passing through the

yoke and bearing against the upper face of the scorer E. The scoring-knife *e* is held by means of a set-screw in a socket formed in the end of the head *f*, which has its forward face formed on a curve away from the point where the scoring-knife is seated. The knife may be readily adjusted so as to allow its cutting-edge to project to a greater or less extent from its socket in the head *f*, and thus the depth of the scoring may be readily provided for. The head *f* is provided with a rearwardly-extending spindle *g*, which is fitted to a recess in the casing *a*, and in rear of the spindle within the casing is a spring *h*, which keeps the head *f* constantly pressed forward. A pin *i* passes through the casing and through a slot in the stem *g* of the head, and this limits its movement. It will be seen that as the head is pressed constantly forward by its spring it bears against the periphery of the log, and the knife is allowed to penetrate the log a little less than its full depth by reason of the curve of the log and the position of the knife in relation to the log's center, and thus the depth of the score can be accurately maintained without requiring attention after it has been once adjusted. As successive layers are removed from the log by the action of the main knife A, no adjustment of the head carrying the blade is required, as the spring *h* will move it forward so as to provide for the loss in the diameter of the log by the removal of the sheet of veneer therefrom.

The scoring-knife is provided with a cutting-blade with a shank against which a set-screw bears to hold it in place.

It will be understood that the frames B and C, with the knife, are moved forward constantly as the log is reduced in size; but the automatic adjustment of the scorer is in addition to this forward movement of the frames and the knife, so that the scoring-knife changes its position relatively to its support and to the cutting-knife. This is necessary because the knife is arranged on the center line of the log and as it cuts is adjusted toward the center, and it will be seen that as the scorer is located above the knife the distance between the surface of the log and the scorer (were it fixed) would be constantly increasing as the log is reduced in size and the curve of its surface becomes more abrupt.

This is illustrated by the curves in the figure, the inner sharper curve representing the reduced log, the surface of which is not touched by the scorer. In order to allow the scorer
5 to act in view of these conditions it is given the independent adjustment mentioned.

What I claim is—

1. In combination, the knife, the supporting frame-work movable toward the log, the
10 casing carried by said frame-work, a scorer-support having sliding movement in said casing, and a spring within the casing for forcing the support outward, substantially as described.

15 2. In combination, the knife, the movable supporting frame-work, a scorer, a casing *a*, carrying the said scorer on its front end, means for keeping the scorer pressed con-

stantly outward, the said casing being adjustable on the frame-work independent thereof, 20 both longitudinally and laterally, substantially as described.

3. In combination, the knife, the frame-work, the casing *a*, adjustable laterally and longitudinally and provided with a socket, 25 the head *f*, having a shank fitted thereto, the spring for forcing the head outward, and the scorer-blade carried by the head, substantially as described.

In testimony whereof I have signed my 30 name to this specification in the presence of two subscribing witnesses.

EDWIN DENSMORE.

Witnesses:

C. B. WADE,

CHAS. A. FIEWEGER.