2 Sheets-Sheet 1.

W. M. Davis,

Making Wooden Boxes.

No. 6,038. Patented Jan. 16, 1849.

Fig. 3

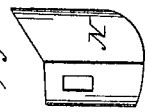


Fig. 2

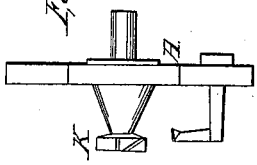
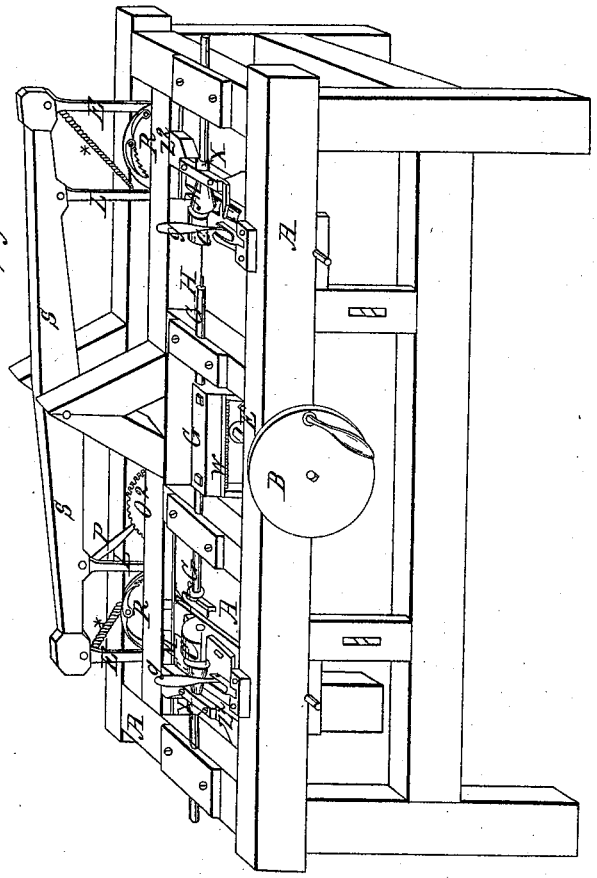


Fig. 1



2 Sheets-Sheet 2.

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Fig. 4.

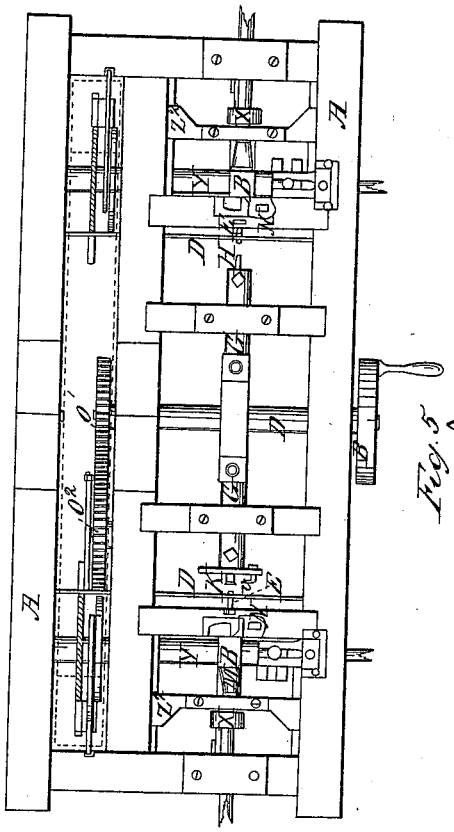
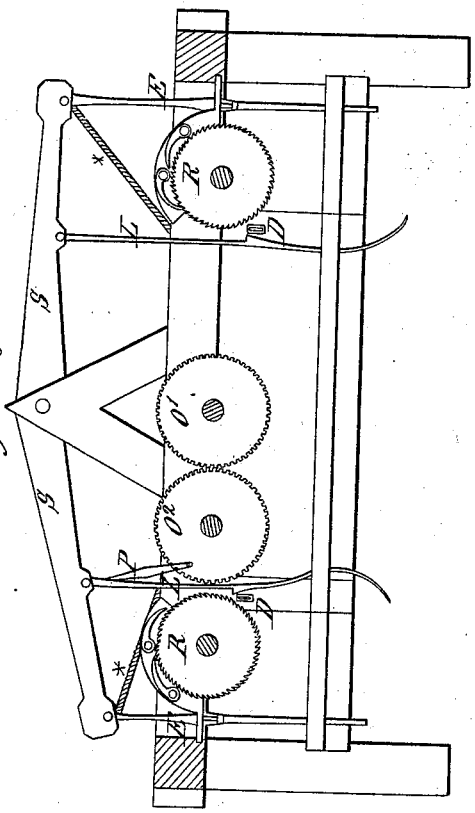


Fig. 5.



UNITED STATES PATENT OFFICE.

WILBUR M. DAVIS, OF GARDINER, MAINE.

MACHINERY FOR MAKING BOXES.

Specification of Letters Patent No. 6,038, dated January 16, 1849.

To all whom it may concern:

Be it known that I, WILBUR M. DAVIS, of Gardiner, in the county of Kennebec, State of Maine, have invented a new and useful Improvement in Machines for Turning Boxes Out of Wood; and I do hereby declare that the following is a full and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a perspective view and Figs. 2, 3, 4, 5 sectional views.

The nature of my invention consists in turning out from a solid piece of wood, a circular wooden box turning or cutting a tenon on the same, at the same time, and then by a reverse motion of the same shaft or frame holding the cutters a cover or lid is turned, or cut chamfering the inner edge at the same time to fit said box.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Fig. 1: A, A, is the frame of my machine. B is a balance wheel, or power wheel to propel the machine; *c*, *c*, puppet heads or boxes to hold the cutters for the purpose of turning or cutting the outside of the wood to make the box and cover, when the wood has passed through far enough to make the said bar and cover the inside is turned out and cut off by the spur cutter E, Fig. 4. N, N, are the cutters to cut or turn the outside of the wood to be made into boxes. M, M, is tapering screw sockets to hold the wood to be turned. These sockets are made tapering for the purpose of holding different sized wood and placed in while the sockets is turning which is very important for it saves much time in tending the machine. z^2, z^2, is carriages to hold the sockets, these carriages is moved forward by an endless belt or chain being attached to the underside and passing around shafts *y*, *y*, Fig. 4 After the wood is all made into boxes the carriage is moved back by hand for the purpose of receiving another piece of wood to be turned. The clutch is changed when it is wished to slide the carriage back by means of the handles *g*, *g*. *x*, *x*, are pulleys to drive the screw sockets. K is the cutter for turning or cutting out the inside of the box. V is a cutter for cutting the tenon on the box to receive the cover, represented more plainly by Fig. 2. A is the clasp for holding the tenonder. *g*, *g*, *g*, is a traverse shaft for holding the cutters that cut the inside of the box and cover. W is a rack frame attached to shaft *g*, *g*, *g*. E, is a pinion with cogs on part of its circumference operating in rack W, to move *g*, *g*, *g*, forward and back. H is a cutter for cutting the inside of cover. R, R, is ratchet wheels to gage the length of the box and cover. These wheels are placed on the endless chain shaft *y*, *y*, Fig. 4.. S, S, is a sweep to operate ratchet wheels. E, E, is rods to operate the pawls or dogs on ratchet wheels R, R. This operation moves up the carriages z^2, z^2. L, L, are rods to lift the bars D, D, Fig. 4, which hold the cutters for cutting off the box and cover. These rods are attached to the sweep S, S, more plainly represented in Fig. 5. *p* is a connecting rod to operate sweep S, S; *, *, spiral springs to hold the rods L, L, firm to the bar, which holds the cutter for cutting off the box and cover. These rods L, L, have a notch to lift up to the cutting off bar with a curve at the bottom to slip the notch from the bar as the sweep rises. This is plainly represented on Fig. 5.

Fig. 2: K, is the cutter for cutting the inside of box. V is the cutter for cutting the tenon on box. A, is clasp to hold the tenonder.

Fig. 3: N is the cutter to be placed in puppet heads C, C, for cutting the outside of box and cover represented on Fig. 1.

Fig. 4: A, A, is the frame of machine; B, balance wheel; D, driving shaft. G, G, G, is the traverse shaft that holds the cutters for cutting the inside of box and cover. K is a cutter for cutting the inside of the box. V cutter for cutting the tenon on the box. H is a cutter to cut the inside of the cover and chamfering the inside edge of the same. This improvement is preferable to chamfering the tenon on the box as is usually done, as it slips on to the box more easily and holds on better. 61 62 is cog wheels which operate the sweep S, S, by the connecting rod *p*, as represented on Figs. 1 and 5. *y*, *y*, is a shaft over which the endless belt passes to move the screw socket carriages z^2, z^2, also on which is attached the ratchet wheels. B B represents the endless belt where it passes over the shafts *y*, *y*. M, M, is the screw sockets as explained on Fig. 1. D D represents the bar which holds the cutter for cutting off the box and cover, E E is the spur cutters for cutting off the box and cover.

Fig. 5: S, S, sweep; P, connecting rod to

operate the sweep by the turning of cog wheel O^2. R, R, ratchet wheels for gaging the length of box and cover by turning shafts *y*, *y*. E, E, gage rods to lift the pawls to turn ratchet wheels, R, R. These rods have slots in them for the purpose of varying the distance of moving the ratchet wheels to gage the length of the box and cover. L, L, rods with hooks for the purpose of raising the spur cutter bars D, D. These rods are made sweeping at the bottom for the purpose of slipping the hook from the spur cutter bar as the sweep S, S, rises. D D is the end of the spur cutter bars. *, *, is spiral springs to hold rods L, L, against spur cutter bars D, D.

Having thus described the nature of my invention the way on which it is constructed and its operation, I do not claim any particular part of the machine as new, but what I claim as my invention and for which I desire Letters Patent is the combination of well known principles to effect an object which has not been effected before, which is to turn a box and cover, by one operation, as fully set forth and described.

What I claim as my invention is—

1. The arrangement of the sweep S, S, in combination with the gage rods E, E, for varying the length of box and cover in combination with the ratchet wheels R, R, and the curved and notched rods L, L, as fully described and set forth.

2. I finally claim the whole as a combination of the machine for effecting the object as fully set forth and described.

WILBUR M. DAVIS.

Signed in presence of—

L. CLAY,

N. O. MITCHELL.