

N. Jenkins. Template
for
Paneling and Variety Moulding Machines.
Wood Working.

105216

Fig. 1. PATENTED JUL 12 1870

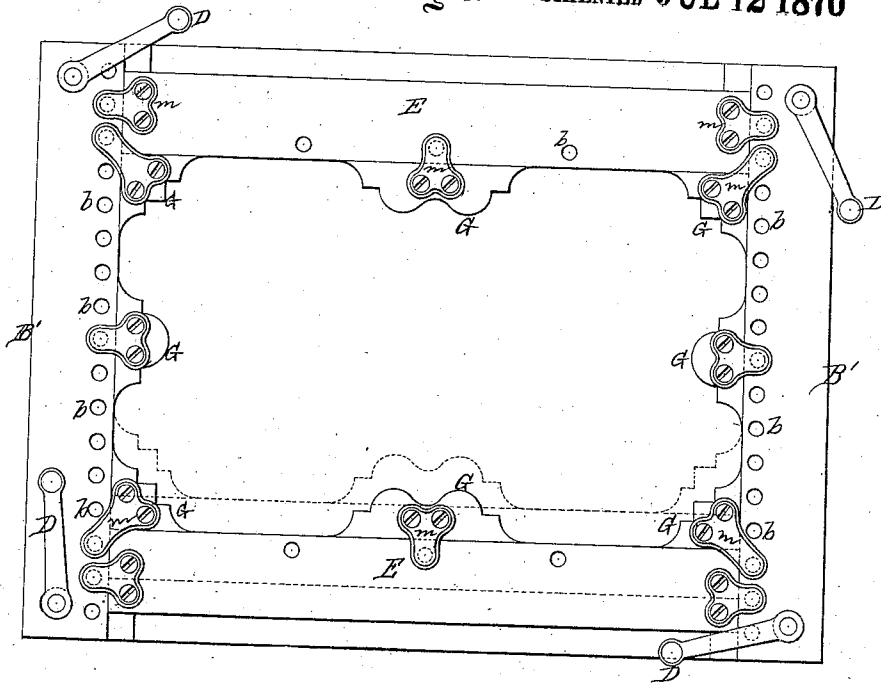
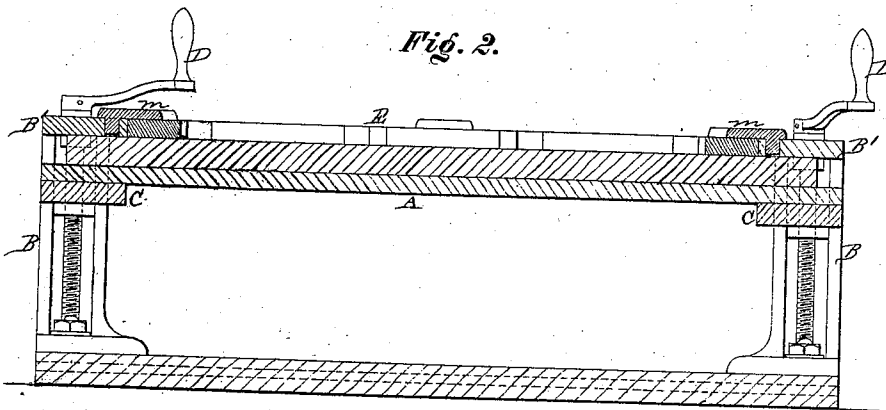


Fig. 2.



Witnesses.

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Fig. 5.

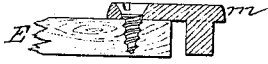
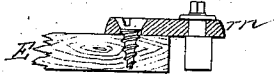


Fig. 6.



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Fig. 3.

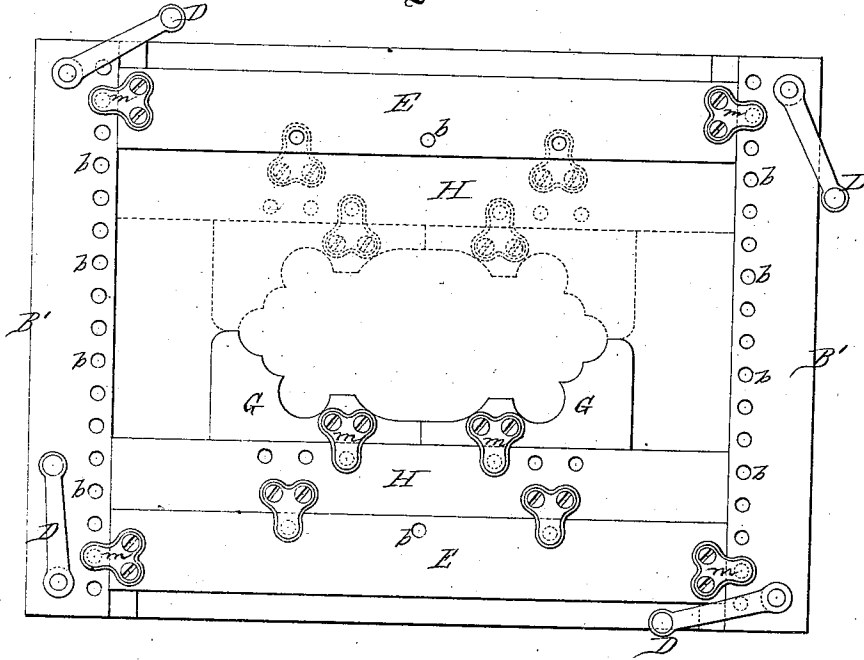
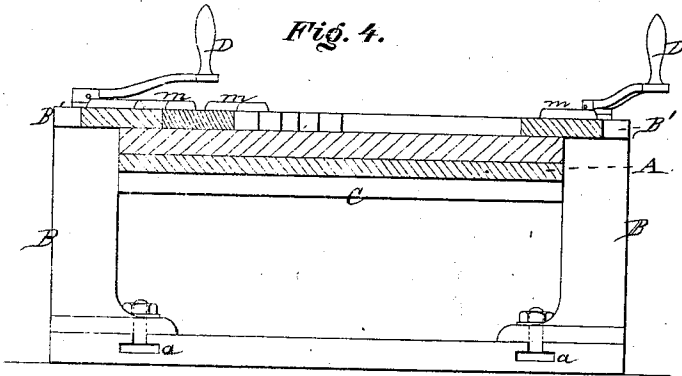


Fig. 4.



Witnesses.

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NICHOLAS JENKINS, OF NEW YORK, N. Y.

Letters Patent No. 105,216, dated July 12, 1870; antedated June 29, 1870.

IMPROVEMENT IN TEMPLETS FOR PANELING-MACHINE.

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

To all whom it may concern:

Be it known that I, NICHOLAS JENKINS, of the city and county of New York, in the State of New York, have invented certain new and useful Improvements in the Construction and Use of Templets for Paneling and Molding-Machines; and I do hereby declare that the following is a full and exact description thereof.

In my former machines I have felt the want of means for executing work within work previously executed without removing the first templet from the machine. I have described interior templlets fitted to match tightly and easily within the main or exterior templet. I have now a mode of construction and a mode of using templlets which accomplishes a far greater economy in the templlets themselves, and in the labor attending their use.

My invention allows me also to produce a very great variety of patterns with but few pieces, and most of them of small size, as substitutes for the large templlets previously necessary.

My present invention also allows me to economize the wood used by executing patterns, which extend nearer to the ends of the wood than heretofore.

It also allows me to execute larger work on a machine or a table of a given size.

I will first proceed to describe what I consider the best means of carrying out my invention, and will afterward designate the points which I believe to be new therein.

The accompanying drawing forms a part of this specification—

Figure 1 is a plan view of my improved templet and of the entire clamps which help to form and to support the templlets. It also shows a little of the edge of the table on which it is supported and carried. It shows the exterior templet and the inner changeable pieces arranged in place for executing the exterior line of cutting. The dotted lines near the lower edge of the figure represent the side piece and its attachments in a changed position.

Figure 2 is a longitudinal vertical section along the center line.

Figure 3 is a view corresponding to fig. 1, but with certain small changeable pieces removed, and a long changeable piece substituted, fitting inside the main templet, and having small changeable pieces fixed on it, so that the removal of this long inside piece removes all the small pieces together. This and its advantages will be fully explained below.

Figure 4 is a cross-section, representing the same parts and in the same position.

Figure 5 is a cross-section of a part of a side bar or of one of the inside pieces, on a large scale, showing the hook which I employ for connecting.

Figure 6 is a corresponding section, showing the hook differently formed, being made in two pieces, adapted to hold the work more tightly.

Similar letters of reference indicate like parts in all the figures.

A is the table, corresponding to my table marked E in my patent dated November 23, 1869.

It will be understood, without further words, that this table is capable of being moved longitudinally and transversely by means of the mechanism described in my aforesaid patent, or by other suitable means, so that the templlets already used, being fixed by suitable means upon this table A, and properly presented to the cutter, (which may be a revolving cutter of any suitable pattern, fixed on a vertical arbor, mounted and revolved in supports above, not represented,) the work may be moved to and fro and from side to side, according to the contour of the templet employed.

B B are movable frames, corresponding to the clamping-frames marked E', in my aforesaid patent.

The horizontal bars B' B' are fixed on the uprights B, and they form a part of the same casting.

The part B' forms the upper side of each clamp.

The lower face of each clamp is formed by the part C, and each end of the part or bar C is separately raised or lowered by means of hand-screws D.

It will be observed that in clamping a piece of board, plank, or lumber of whatever name between the parts B' and C, the upper face will be held at a uniform level, however much the stuff may vary in thickness at different points, while the lower clamp or lower part of each clamp C will adapt itself to the inequalities in the thickness. Thus, if the board is thicker at one edge than at another, the screw D nearest the thick edge will not be drawn up so far as the corresponding screw, which is near the thin edge.

As a consequence, the clamping-pieces C will stand at various inclinations when the stuff to be treated varies in thickness on the two edges, but the upper face of the lumber will be always level.

I have endeavored to attain this end in my previous patents, but the present arrangement is superior thereto, and more effective.

It will be understood that the entire clamps B may be shifted near together and further apart, by means of suitable bolts, which may be tightened at the desired point in the slots or grooves a.

So far, I have spoken only of the construction of the clamps, and will now proceed to describe the peculiarities of the templlets, which, it will be understood, the clamps are to support. The clamps in my improvement form a part, properly speaking, of the templlets.

I produce in each bar B' a series of uniform holes, b, arranged at uniform distances apart. I prefer that

the holes shall be one-quarter ($\frac{1}{4}$) of an inch in diameter and one-half ($\frac{1}{2}$) an inch apart. They are arranged in straight lines, at uniform distances from the inner edge of each clamp.

Now, I provide two side pieces, as indicated by E, which are straight bars of stout wood or metal, of equal length, and provided with hooks *m* on each end, which are firmly fixed on the side pieces E, and project over the end, and are adapted to hook into the holes *b* on the clamps B.

Each hook is of such size as to snugly fill the hole into which it is applied.

By lifting a side piece, E, and moving it a little out or in, it may be fitted in different holes, and thus adapted to serve as the side pieces of a templet for wider or narrower patterns, at pleasure.

The inner edges of the side pieces E E form the long sides of my main or exterior templet, and the inner edges of the clamps B B form the short sides or ends of my exterior templet.

By placing the side pieces E E wider apart, I can adapt the templet to work on a broad panel for a church-door, and by shifting the same side pieces E E close together, I can adapt the same templet to work on the front for a bureau-drawer.

By providing the several different lengths of side pieces E E each with a hook, *m*, at each end, I can vary the length of my templet.

To change the length, it is necessary simply to remove one set of side pieces, shift the clamps B into the new position, and apply the shorter or longer side pieces.

Now, it being understood that the plank to be treated is mounted, as has been described in my previous patents, in the clamps B B, I have now described how I make a plain rectangular templet. This is all that is required for paneling or molding any plain rectangular figures.

To produce fancy patterns, I apply small pieces within the rectangular frames thus produced, and secure the small pieces by hooks *m*, adapted to fit in the same holes *b*, and to be changed about at pleasure.

I will designate the holes in the side pieces E, by the same letter *b*, as designates the holes in the clamps. I provide a variety of these small pieces of different sizes and forms, according to what is wanted. I have represented a number of these by the letters G¹, G², &c.

Some of these are adapted to fit in the corners of the rectangular or main templet. I can provide such with hooks, which are adapted to take into the holes *b* in the clamps alone, or in the side pieces alone, or in both, or I can fit a single hook on each corner-piece which extends obliquely outward.

Now, by applying and changing these pieces, I can produce an indefinite variety of modifications of patterns with very little expense for templets. I will designate the small changeable pieces generally by the letter G. A stock of these pieces, such as may be readily stowed within the space of a cubic foot, will suffice to produce a very great variety of patterns.

Now, I have devised an almost equally simple plan for producing work within work. This is to employ a long inside piece, as represented by H, provided with hooks *m*, as before described, for attaching it to either of the side pieces E at pleasure, and I fix on the inner edge of this inner side piece H such of the pieces G as may be necessary to produce the proper pattern or templet for the inner work.

As soon as I have executed the outer line of work by means of the main templet and the pieces G fixed thereon, I remove the pieces G from the inner edge of the exterior or main templet, and apply the previously prepared inner piece H with its pieces G. This change being made, I immediately proceed to execute

one-half of the inner work. Then I stop a moment and change the inner piece H, with its attached small pieces G, to the other side of the main templet, and then produce the other half of the interior work.

It will be perceived that I can produce the outer work by the employment of a corresponding inner templet, H, with attached pieces, only having the inner piece H for the outer work narrower than the inner piece H for the inner work. Such an arrangement will facilitate the exchange by making it practicable to remove all the little pieces G which are employed for the outer work at a single operation, but I have not found it necessary in practice.

The addition of each piece, whether a long piece, H, or a small piece, G, adds to the templet by pieces lying in the same plane, and the addition and removal of pieces, each firmly hooked to the next, as described, may be carried to any extent desired. Thus, for example, instead of loosening the connection of the frames B to the table A and moving the frames B nearer together, and substituting shorter bars C, in order to make short panels, I can, if preferred, keep the original bars C and maintain the original position of the frame B, and simply fill out the space or fill up the ends by cross-pieces adapted to hook into the parts B' or into the bars C, or both, in the same manner as has been before described for the other additions.

Various modifications of my invention may be made by any good mechanic. It may be desirable in some cases to bush the holes *b* with metal to prevent their becoming much worn by long use. There may be means applied for tightening the hooks in their hold on the parts to which they are attached.

A convenient means of accomplishing this latter may be to make the cylindrical part of each hook which extends down into the hole *b* capable of revolving, and then, by mounting it a little eccentrically, the hook may be tightened with great facility; that is to say, the hook *m* may be formed in two pieces, one part, bolted or otherwise, firmly fixed upon the piece G or H, which is to be secured, and extending over upon the other work in the same manner as the hooks *m* here represented. Then the small cylindrical part, which extends down into the hole *b*, and which is here represented as being cast or otherwise produced in one piece with the other part, may be made in a separate piece and adapted to turn in the other part. So far the idea is very simple. Now, I propose to provide very simple means of tightening the hold obtained by means of such hook by making the cylindrical revolving part a little eccentric to its bearing, and providing a square end or other means of taking hold of the revolving part above to operate it. Now, by turning such eccentric hook into the position which will make it the loosest in its hold, it may be easily inserted in the hole *b*. Then, after its insertion, by turning the loose part of the hook, it will, by reason of its eccentricity, tighten its hold and make the hold very rigid. It will remove all the disposition to become, possibly, loose and shakily, which may otherwise result from a slight misfitting or shrinkage or wear of the parts. I have not, however, found any such expedient necessary in practice, and prefer the form of the parts here represented.

The invention as here represented is cheaply and easily constructed. It involves no very delicate fitting or very skilled workmanship. It allows the patterns to be changed with great facility, and allows the production of new designs when required, with the addition simply of a few new forms of the small pieces G, and a few hooks by which to secure them to the already suitably-prepared exterior frames or templets.

I do not consider it essential to the success of some parts of my invention that all the other parts shall be constructed as here set forth. Thus, my pieces G and H, hooked or otherwise secured as represent at any

point desired on the interior of a rigid inclosing-frame, may be used within a frame made in one piece, instead of a frame made by movable bars C C and the clamps B' B'. And, again, the peculiar construction of the parts B', whereby they are able to serve to form the end-pieces for the rectangular inclosing-frame of my templet, are highly useful and form a novel feature of my invention, and may be used with success with the bars C, as represented, to form an adjustable inclosing-frame, without the employment of my parts G and H, changeable therein, as represented.

I claim—

1. The clamps B', in combination with the changeable bars C C, and with means for attaching the bars at various positions upon the clamps B', so as to form various sizes of templets with the use of the same pieces, all substantially as and for the purposes herein set forth.

2. The changeable pieces G, in combination with an inclosing or main templet B E, and with means *m* for connecting and disconnecting, and changing the positions of the parts G within the main templet at will, as and for the purposes herein specified.

3. In combination, the sub-frames H, small changeable pieces G, and means *m*, adapted for ready insertion and removal within a main inclosing-frame, substantially in the manner and for the purposes herein set forth.

In testimony whereof I have hereunto set my name in presence of two subscribing witnesses.

NICHOLAS JENKINS.

Witnesses:

C. C. LIVINGS,
WM. C. DEY.