

J. Jenkins. Printing Oil Cloths.

N^o 8941.

Patented May 11. 1852

Fig. 1.

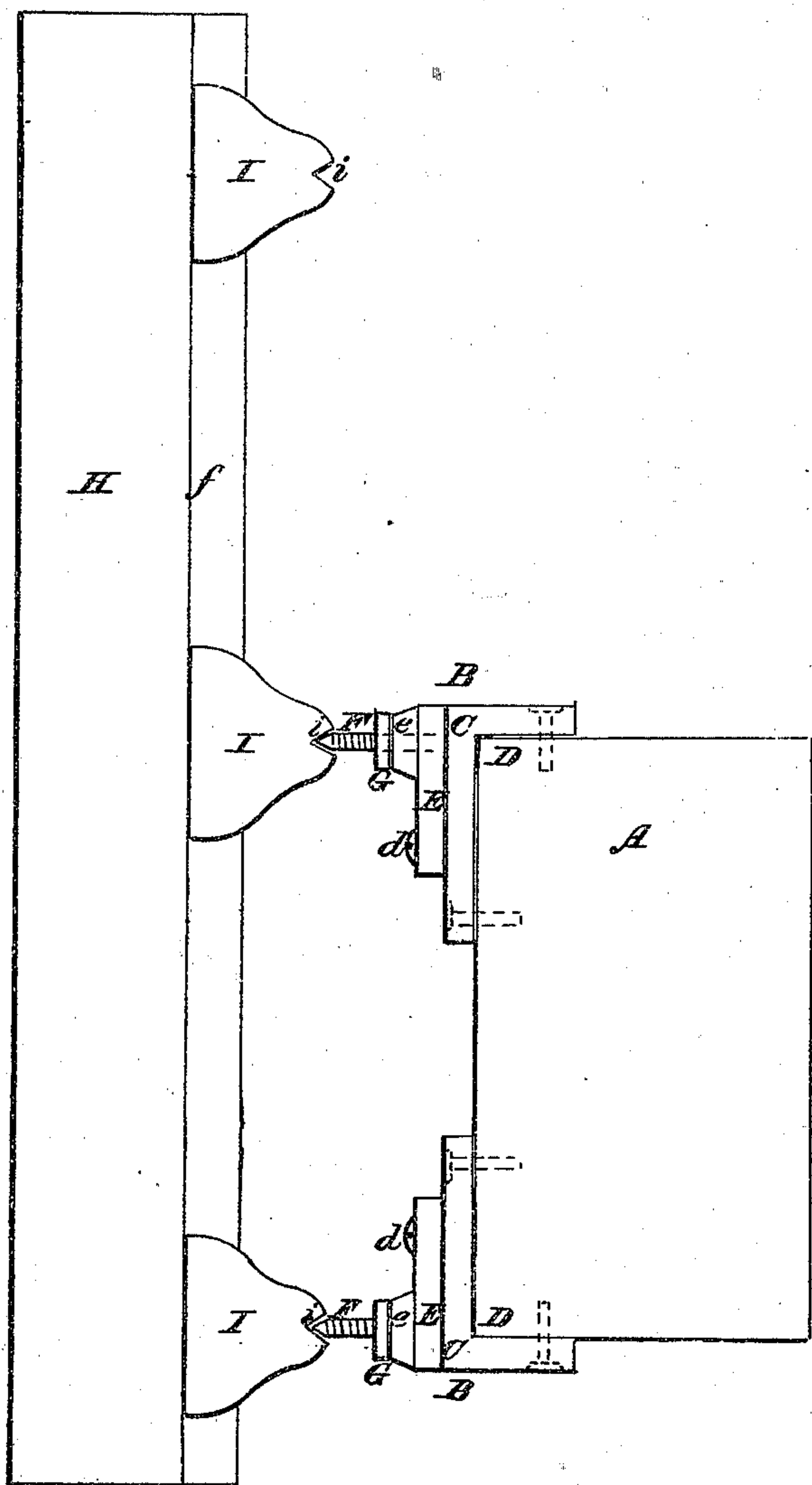


Fig. 2.

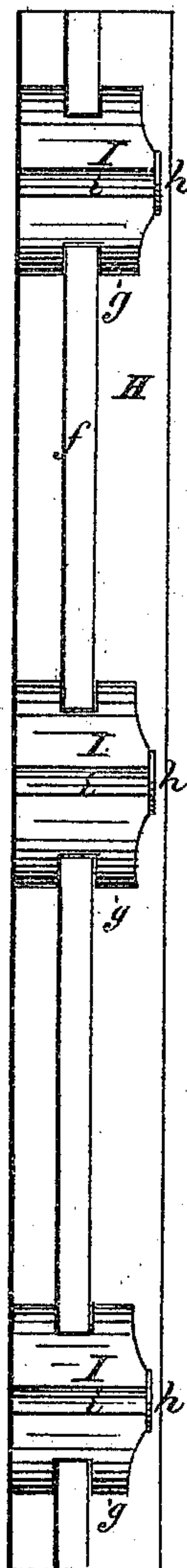


Fig. 3.

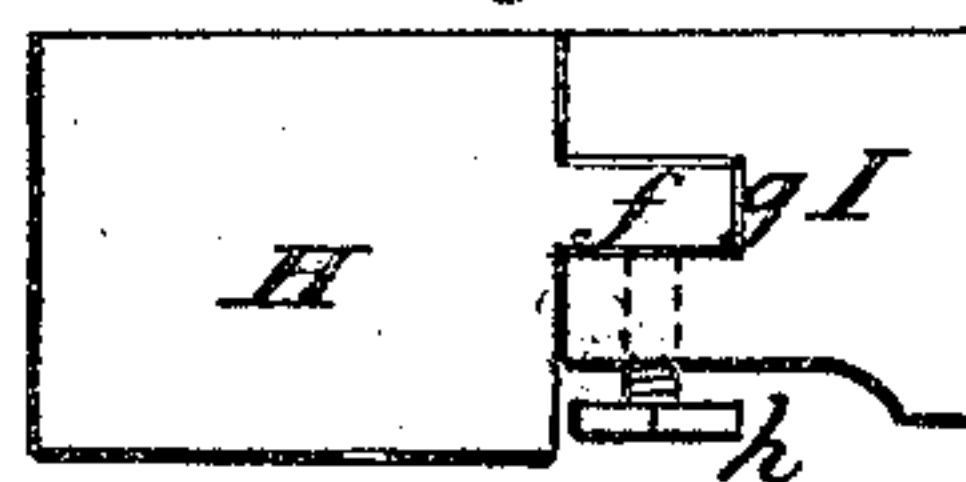


Fig. 4.

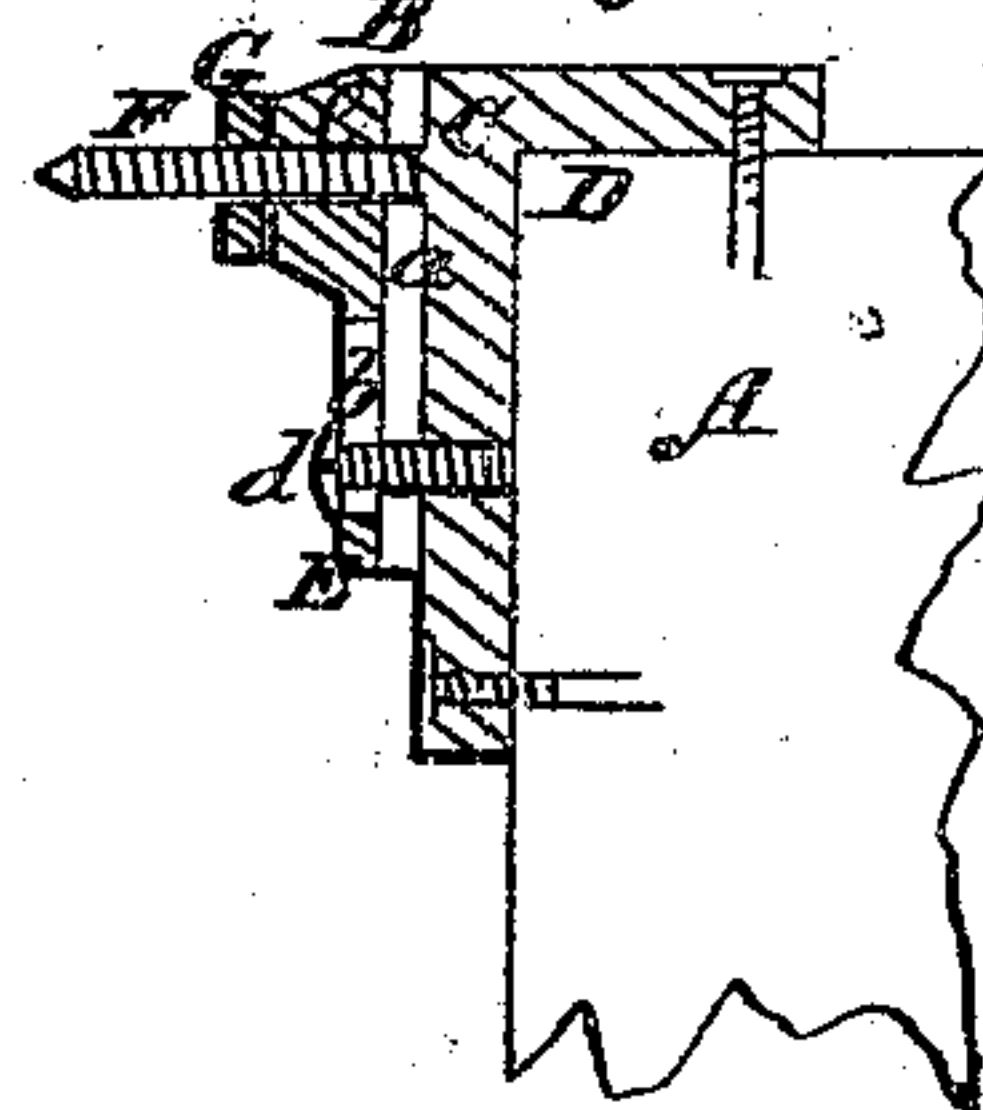


Fig. 5.

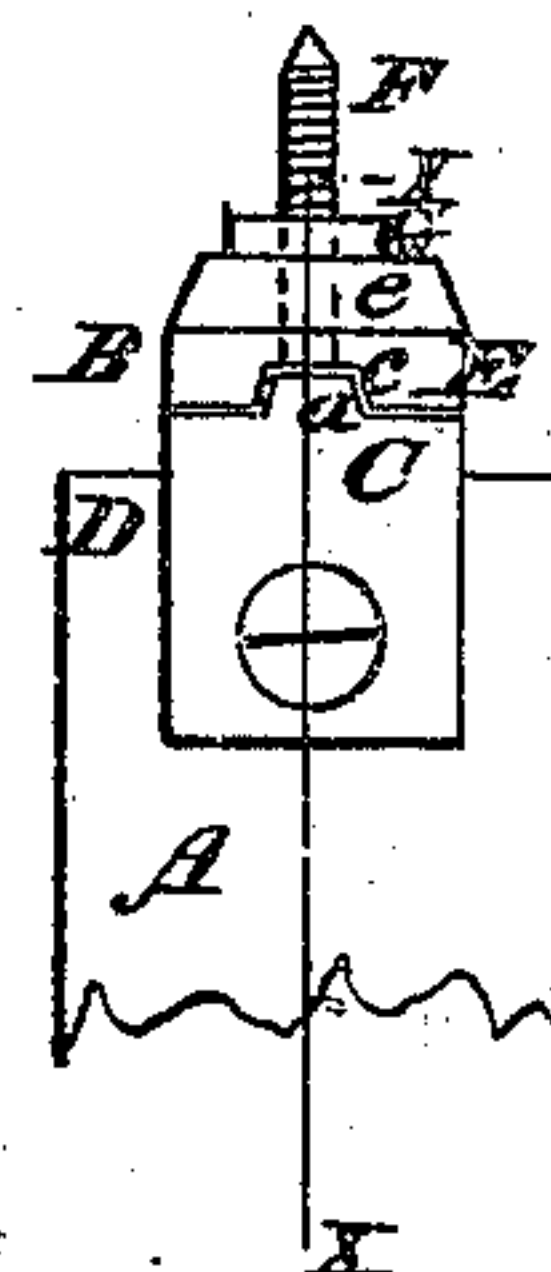
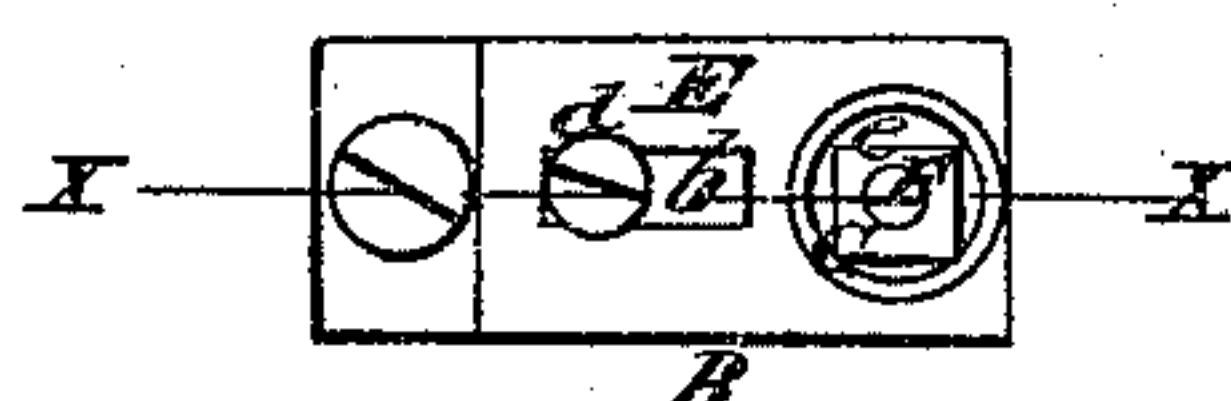


Fig. 6.



UNITED STATES PATENT OFFICE.

JAMES JENKINS, OF ELIZABETHTOWN, NEW JERSEY.

BLOCK FOR PRINTING OIL-CLOTHS.

Specification of Letters Patent No. 8,941, dated May 11, 1852.

To all whom it may concern:

Be it known that I, JAMES JENKINS, of Elizabethtown, in the county of Essex and State of New Jersey, have invented a new and Improved Mode of Registering Blocks for Printing Oil-Cloths, &c.; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a top or bird's eye view, showing the gages attached to the block, and the slides attached to the stock, the points being in the vertical grooves in the slides. Fig. 2, is a side view of the stock showing the cleat on the stock which fits in recesses or grooves in the slides, the slides working on the cleat and permanently secured to it at proper distances by set screws. Fig. 2, is an end view of the stock, showing the cleat, one slide and its set screw. Fig. 4, is a section of one of the gages taken at the line X, X, Figs. 5 and 6. Fig. 5, is a back or end view of one of the gages. Fig. 6, is a plan or bird's eye view of ditto.

Similar letters of reference indicate corresponding parts in each of the several figures.

The nature of my invention consists in attaching to two of the corners of wooden pattern blocks, a gage admitting of adjustment to accommodate the expansion and contraction of the wood, also by means of horizontal pitch points (formed of a screw working in a collar on the gage) adjusting the parallelism of the edge of the block and face of the stock, enables the printer more accurately and expeditiously match the block, or as it is technically termed register.

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

A Fig. 1, represents a block, a section of a block is also seen in Figs. 4, and 5, B, B, are gages attached to the block as seen in Fig. 1. These gages are constructed in the following manner. A strip of metal C, is bent so as to form a right angle and is screwed on to each of the corners D, D, of a block see Fig. 1. One side of the strips has a projection (a) see Figs. 4 and 5, and this projection fits in recesses (c) Fig. 5, of sliding caps E; these sliding caps have an oblong slot (b) Figs. 4, and 6, cut through them through which screws (d) pass, these screws are

screwed into the strips c, see Fig. 4, and the inner surface of the heads of the screws bear against the sliding cap on the edges of the slots (b) and secure the caps when desired, permanently to the strips C.

The object of the oblong slots is to allow the sliding caps to be moved on the strips, F, F, are screw rods having their outer ends pointed, the opposite ends work in female screws cut in collars (e) on the sliding caps, by turning the screw rods the points will of course be brought nearer or forced out farther from the block A.

The screw rods have nuts G, G, on them which permanently secure the screw rods by being screwed down tightly upon the collars.

The several parts of the gages are now described and it will be seen that the object in constructing them as shown is to vary the points of the screw rods. The points may be brought closer to the block or thrown out from it by turning the screw rods as has been before stated, and the points may be drawn or brought nearer together or further apart, or the position of both points may be changed so as to bring the block in the correct position longitudinally, the last position of the points being obtained by the sliding caps E, which are moved on the strips C, and secured by the screws (d).

H, is the ordinary stock having a cleat or projection (f) on its side toward the block Figs. 1, 2, and 3. I, I, I, are slides constructed of metal and having recesses (g) in them in which the cleat (f) on the stock H, fits see Figs. 2 and 3. (h) are set screws which secure the slides to the cleat and stock. Each slide has a vertical groove (i) in it more particularly seen in Fig. 2, and the points of the screw rods F, F, are placed in these grooves when the block is pressed upon the oil cloth see Fig. 1.

It is not requisite to have the slides I, I, I, of any particular form or shape; but the vertical grooves (i) and having the slides so arranged as to be adjusted the proper distance on the stock are advantageous.

In order to describe the operation, it will be necessary to give an idea of the manner in which oil cloth is printed.

In the first place it is well known that oil cloths are printed with figures composed as a general thing of many colors. Now a block is required for each color, and it will be seen at once how necessary it is that the blocks

should match, or as it is technically termed "register."

The stock H, is placed upon a table or platform and secured to it longitudinally the stock being at one side of the platform. Two gages B, B, are secured to each block that the cloth is to be printed with; one is seen in Fig. 1, and before described. The slides I, are then secured permanently to the cleat (f) by the set screws (h) the slides having been properly adjusted so that the points of the set screws will fit in the grooves (i) as seen in Fig. 1.

Things being thus arranged the printer commences work. He first charges the block with the proper color and placing the points of the screw rods in the groove (i) he presses the block upon the oil cloth; he then raises it and again charges it with color and places the points of the set screws in the grooves (i) of other slides, for it must be understood that the stock with the slides attached to it at proper distances apart may extend the whole length of the table, and as the same surface of cloth is not printed twice with the same block or color, the printer keeps working upward or downward as the case may be, the slides being at equal distances from each other. After the cloth is printed with the first color, the printer proceeds to arrange the points of the screw rods on the second block. He measures the distance from the extreme ends of the points and the edge of the block (that is, the first block). Ascertaining this distance he makes the points of the screw rods of the second blocks project out the same distance. He then places the points of the second block the same distance apart longitudinally of the block, as the points of the first block. This last is done by adjusting the sliding caps E. All the blocks are adjusted in the same manner, and the printer proceeds with his work using the different blocks and applying the several colors of which the figure is composed.

The ordinary method of registering is done by using pitch pins driven into the blocks, and pointed so as to prick the cloth, and the succeeding blocks are laid on, so that the pins will enter or lie on the marks made by the pins in the preceding block.

Two disadvantages attend this method; 1st the pitch pins are liable to be moved or bent, and then it requires considerable care to re-adjust them properly; this is of frequent occurrence; 2d the pins mark the cloth by a perforation, or produce a blur by a dot of color.

A greater difficulty arises in the old method adverted to above, and equally applies to an improvement proposed by Moore, viz, that in neither case is there any contrivance to overcome the expansion and contraction of the wood of the pattern blocks, or of errors in pitching from the holes in the cloth being abraded, or the manner in which the printer handles the block, as the slightest bearing either to the right or left produces irregularity. Moore's plan also involves the greatest care to be observed in adjusting the screws securing his hinged plates, letting them into the wood, bringing to an exact thickness &c., besides the expense of constructing accurately, greatly advance the cost of his application; while in my device, which readily admits of adjustment to overcome the difficulty of expansion, the adjustment being readily made by the printer by turning the screw F forming the pitch point, or moving the sliding cap B, thus operate and adjust the point F with the greatest accuracy. The advantage of a point entering the V shaped cut in the stock will be apparent, as the contact of a point on a line is the most perfect. By these improvements of mine the printer is enabled expeditiously and accurately to match the block, or as it is technically termed register.

Having described the nature and operation of my invention I do not claim the construction of the stock H or gages thereon but

What I do claim as new and desire to secure by Letters Patent is,

The movable gage E in combination with the adjustable point F or its equivalent, to compensate for the contraction and expansion of the pattern block in the manner and for the purpose substantially as shown and described.

JAMES JENKINS.

Witnesses:

H. O. CURREN,
GEORGE R. SKINNER.