

(No Model.)

J. KIRK.

SAW TABLE GAGE.

No. 267,001.

Patented Nov. 7, 1882.

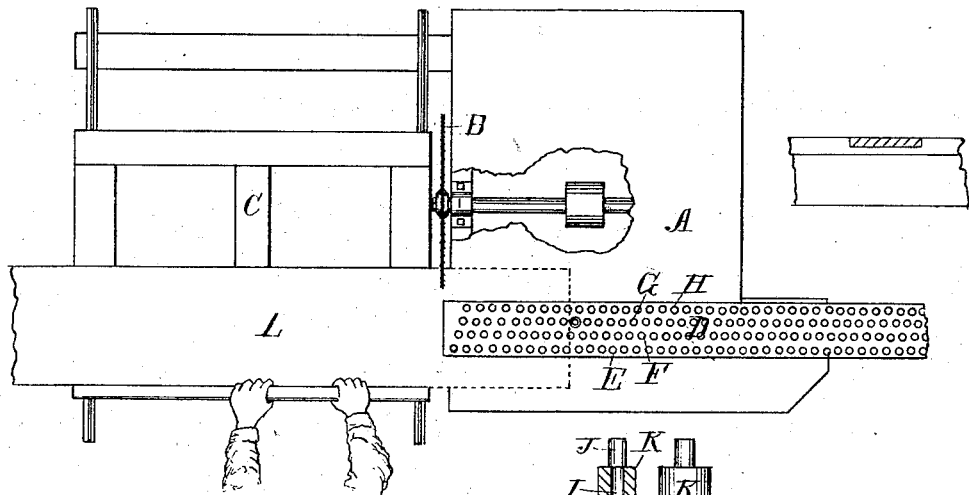


Fig. 1.

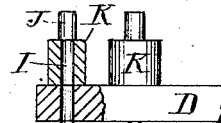


Fig. 3.

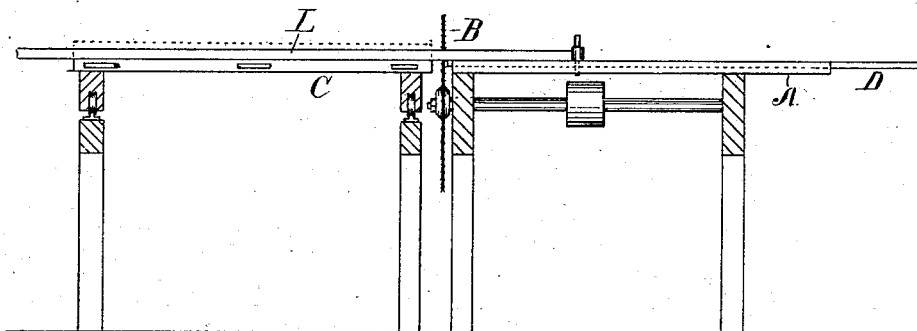


Fig. 2.

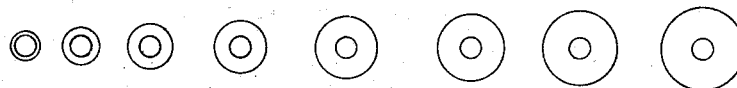


Fig. 4.

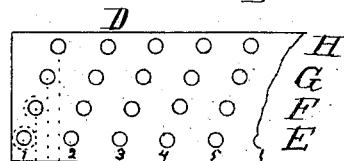


Fig. 5.

Witnesses:
Robert Kirk
O. J. Bailey

Inventor:
John Kirk
By S. S. Perle
att'y

UNITED STATES PATENT OFFICE.

JOHN KIRK, OF CINCINNATI, OHIO.

SAW-TABLE GAGE.

SPECIFICATION forming part of Letters Patent No. 267,001, dated November 7, 1882.

Application filed July 21, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN KIRK, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Saw-Table Gages, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a top or plan view of a saw-table equipped with my improved gage. Fig. 2 is a front elevation of same. Fig. 3 is an enlarged front view, partly in section, of the gage-board, guide-pin, and roller; Fig. 4, a top view of the various rollers, and Fig. 5 an enlarged top view of the gage-board.

The object of my invention is to provide an accurate adjustable gage for saw-tables; and it consists in a plate secured to the saw-table, having a series of regular perforations, which are adapted to receive pins having rollers or cylinders of various diameters, whereby the distances to or from the saw-blade may be regulated in a regular and systematic manner, all of which will now be set forth in detail.

Referring to the accompanying drawings, A represents the saw-table; B, the saw, and C the sliding or reciprocating table upon which the material to be cut is placed.

On the forward side of the table, and parallel with the saw-mandrel, is a metallic plate, D, of suitable width and thickness, sunk into the table so as to be flush with the upper surface. The plate is located on the right side of the saw, as shown in Fig. 1, so that its inner end will be exactly on a line with the cut of the saw. The plate D has four rows of perforations, E F G H, of even size, adapted to receive a pin or pins, I, having a head, J, as shown in Fig. 3.

K represents a roller or cylinder, through which the pin I also passes. A set of rollers, preferably eight in number, are designed for each table. These rollers increase successively in size diametrically by one thirty-second of an inch radius, the object of which will now be explained in connection with the gage-plate.

As shown more clearly in Fig. 5, the hole numbered 1 in the first row, E, is so located that when the center pin, I, is placed therein and the smallest roller used thereon the distance between the saw-line (shown by x) and the said

roller will be one inch. Using this distance as a guide, the successive holes 2 3 4, &c., in row E are placed an inch apart from center to center, so that if the same roller should be used in the successive holes the distances between the saw and roller would be an inch greater at each removal. The first hole in the second row, F, is so located that if the pin should be used therein with the small roller the distance between the roller and saw would be one and one-fourth inch. The first hole in the third row, G, is so located that the distance between the roller and saw will be one and one-half inch, and the first hole in the fourth row, H, so that the distance between the roller and the saw will be one and three-fourths inch. Thus the uniform gradations in the plate indicate spaces equal to one-fourth of an inch in this instance, although it is obvious that they may be any other distance apart. The only rule to be observed is that the distances between the holes shall be uniform. It will be readily seen that if rollers of varying sizes, as shown in Fig. 4, are placed upon a center pin located in one of the holes, any intermediate thirty-second of an inch may be measured between the saw and the roller. Thus, in use, if the operator desires to cut material of any length which is measured by inches, the center pin is placed in the row E; if a quarter of an inch more is desired, it is removed to row F; if a half-inch more is desired, it is moved to row G, and if three-fourths is desired, row H. To cut lengths which are intermediate between the quarter-inch measures, the varying rollers K are employed, and since they are graduated in size, as stated, by the thirty-second part of an inch, it is obvious that any desired length of material can be cut. The first row of holes, E, have preferably the successive numbers 1 2 3 4, &c., and the spools or rollers may also be suitably marked, so they can be readily distinguished one from the other.

In operation, the board L to be cut is placed on the table and drawn forward so that the board will clear the saw. The end of the board is first cut off square, the table again drawn back, and the board moved over to the right until the end touches the roller, when the table is moved toward the saw, which cuts off

the board at the desired point, the roller K permitting the end of the board to move freely past.

I do not confine myself to any number of holes in the gage-plate, nor to any specific number of graduated rollers; but

What I claim is—

1. A gage for saw-tables, composed of a plate permanently secured to the stationary part of a saw-table, having therein on a line parallel with the saw-mandrel four rows of holes, which alternate regularly with each other, as described, in combination with a center pin adapted to be placed in said holes and a roller placed thereon, and with the reciprocating table and saw, substantially as and for the purpose herein shown.

2. A gage for saw-tables, composed of a center pin adapted to be placed in suitable holes

in the plate or table, carrying rollers or spools which regularly increase in size with respect to each other, in combination with the reciprocating table and with the saw, substantially as and for the purpose herein set forth.

3. The plate D, secured permanently to the saw-table, and having the perforations, as shown, at regular intervals and alternating, in combination with the removable center pin, I, having the rollers K, of varying sizes, and with the reciprocating table and saw, substantially as and for the purpose herein shown.

In testimony that I claim the foregoing I have hereunto set my hand, this 18th day of July, 1882, in the presence of witnesses.

JOHN KIRK.

Witnesses:

J. C. ROBINSON, Jr.,

WM. KLEINE.