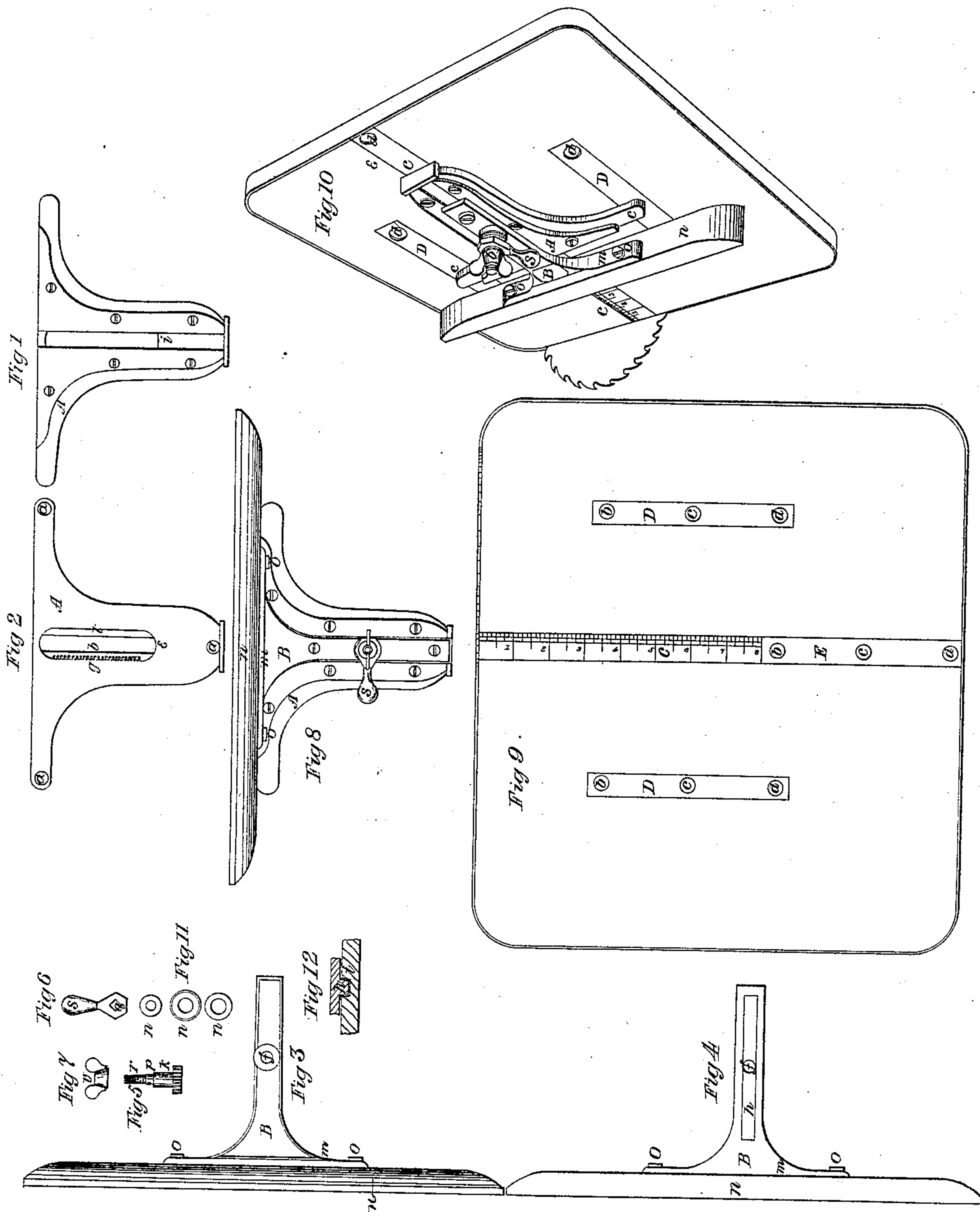


M. B. Ticley,
Circular Sawing Machine.

N^o 16,812.

Patented Mar. 10, 1857.



UNITED STATES PATENT OFFICE.

M. B. TIDEY, OF ITHACA, NEW YORK.

TABLE-GAGE FOR CIRCULAR SAWING MACHINES.

Specification of Letters Patent No. 16,812, dated March 10, 1857.

To all whom it may concern:

Be it known that I, M. B. TIDEY, of Ithaca, in the county of Tompkins and State of New York, have invented a new and Improved Mode of Constructing Gages Upon the Tables of Circular Saws; and I do hereby declare that the following is a full and clear description of the same, reference being had to the accompanying drawings, forming part of these specifications, in which—

Figure 1 shows the lower section or bed piece thereof and Fig. 2 is a reverse view of the same. Fig. 3 is the upper section or sliding bar and face and Fig. 4 is a reverse view thereof. Fig. 5 is the shaft and pinion which has its bearing in sliding bar Figs. 3 and 4 and pinion at recess cavity Fig. 2. Fig. 6 is the thumb lever which is received by central or square part of shaft Fig. 5. Fig. 7 is the nut which serves upon the end of said shaft and Fig. 11 are washers which belong thereto. Fig. 12 shows the connection of bed piece and sliding bar by tongue and groove. Fig. 8 is the combination of the parts referred to. Fig. 9 shows a section of the saw table to the right of the saw as constructed for the gage and Fig. 10, shows an application of the gage upon the table together with the relative position of the saw as invented and constructed by me.

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

The object of this invention is to operate and render portable a guide in a desired connection with circular saws for the purpose of gaging and sawing stuff to a desired width.

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

The mode of my invention consists in the construction of a portable gage of metal and wood and of several parts, A being the lower section thereof having at its bottom several dowels shown at *a a a* Fig. 2, which are received by eyes provided in the table *b b b*, *c c c*, *d d d*, Figs. 9 and 10, and recess cavity at its bottom shown at *e* Fig. 2 at one side of which is a rack shown at *g* and at its top a converge groove as shown at *i* Figs. 1 and 12.

B is the upper section or sliding bar with face *m* to which is attached wood face or guide *n* by screws *o*. From the bottom of said sliding bar there projects a tongue *h*

Figs. 4 and 12, corresponding in form with groove *i* Figs. 1 and 12 by which it is received. These two parts are connected by tongue and groove as seen at *i, h*, Fig. 12, 60 and shaft and pinion Fig. 5, the shaft having its bearing *k* in slide bar B at *f* Figs. 3 and 4 and pinion *j* at recess *e*, Fig. 2. The central part of said shaft *p* being square receives thumb lever, Fig. 6 at *q*, by which 65 it is propelled along the rack *g* so that the sliding bar B with face or guide *n* may be adjusted to any desired point within the distance corresponding with the length of recess *c*. Upon the extremity of shaft, Fig. 70 5, at *r*, above the lever *s* there is a worm or spiral thread which receives nut, Fig. 7, by the pressure of which the shaft is drawn up bringing the sides of pinion *j* in contact with the projections *t t* Fig. 2, thereby bringing 75 the tongue *h* of sliding bar B snugly into the groove *i* of bed piece A by which in consequence of their wedge form the bar is brought to a uniform set position, as seen at *i h*, sectional Fig. 12. Hence the guide 80 or face *n* is brought to its uniform permanency by the nut *v* upon thumb lever *s*.

u u u, Fig. 11, are washers which serve upon shaft, Fig. 5, on either side of thumb lever *s* and between pinion *j* and projections 85 *t t*.

Fig. 8 shows the several parts described in their proper connection with sliding bar and wood face or guide brought back to their most contracted position. 90

Fig. 9 is a section of the saw table to the right of the saw as arranged for the gage in which C is a rule indicating the distance of the guide *n* from the saw. From this rule there is an extension plate E corresponding with side plates D D all of which 95 are of durable metal and are inserted into the top of the table at right angle with the course of the saw. Through these plates holes are drilled to receive the dowels from the bottom of the gage from which points 100 *b b b*, *c c c*, *d d d*, Figs. 9 and 10, the bore is continued through the table to prevent them from filling with dust. The first set of these eyes are to be the distance from the saw or 105 end of the rule that is denoted by the full extension of guide *n* from the dowels of the gage hence when the dowels are received by eyes *b b b*, and slide bar B is thrown out to its full capacity the guide *n* will be brought to 110 the end of the rule or against the saw and each succeeding set of eyes to correspond in

distance from the last with that denoted by
the throw of the slide bar from the bed
piece. These eyes may be added at pleasure
by which the gage may be carried to any
5 distance from the saw that may be desired.

What I claim as my invention and de-
sire to secure by Letters Patent is:

The construction of a portable saw gage
for the purpose and in the way substantially
set forth.

M. B. TIDEY.

Witnesses:

WM. ANGLE,
WM. F. PEEK.