C. M. Baxter,

Scroll Saw.

No. 82,585. Patented Sep. 29, 1868.

Fig. 1.

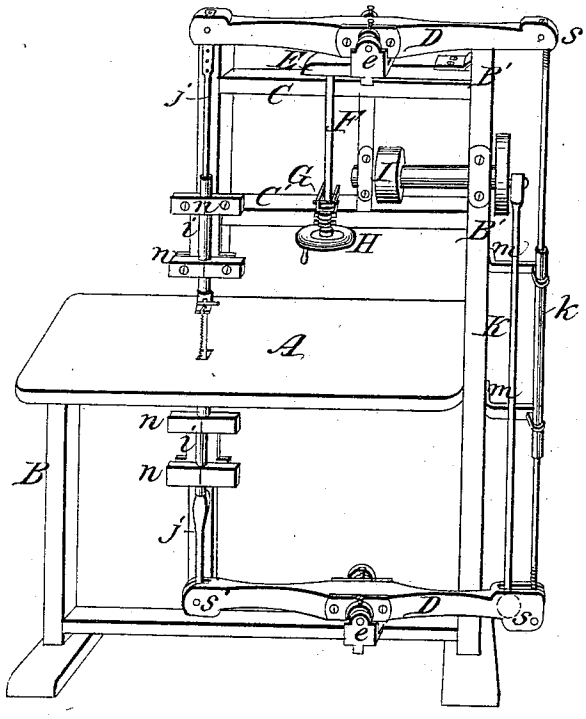


Fig. 3.

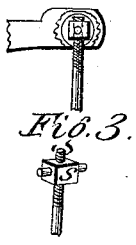
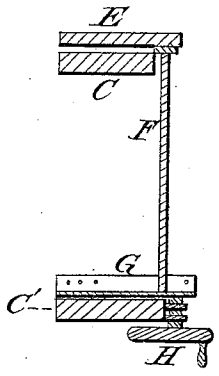


Fig. 2.



Witnesses:

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C. M. BAXTER, OF LEBANON, NEW HAMPSHIRE.

Letters Patent No. 82,585, *dated September* 29, 1868; *antedated September* 17, 1868.

IMPROVEMENT IN SCROLL-SAWS.

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

TO WHOM IT MAY CONCERN:

Be it known that I, C. M. BAXTER, of Lebanon, Grafton county, and State of New Hampshire, have made new and useful Improvements in Gig-Saws; and I hereby declare the following to be a full and exact description of the same, reference being had to the drawings that accompany and form a part of these specifications.

The object of my device is to provide for sawing scroll and other ornamental and fine work with more facility, producing less vibrating motion to the floor than in saws as heretofore arranged.

Figure 1 is a front view.

Figure 2, a vertical section on line *a b*.

Figure 3, view of rolling pivots in end of beam.

Letter A, platform or table.

B, frame, with one standard, B′, extending above the platform.

C C′, arms, extending from the standard B′ over the platform, to sustain the upper end of the saw.

D D, working-beams, hung in the centre on journal *e e*.

E, short arms, attached to the standard B′ by a hinge above the arm C. On this the upper beam rests.

F, a movable standard or support for the short arm E.

G, a grooved piece of metal, attached at one end to the arm C′, in which the lower end of the standard F is moved back and forth for the purpose of throwing the strain off or on the saw.

H, screw, with crank-wheel attached, made fast to the arm C, directly under the grooved piece G, for the purpose of raising or lowering the outer end thereof, which is calculated to be elevated in front, forming an inclined plane, as shown in fig. 2.

I, pulley, with crank-wheel on the outer end.

K, pitman, connecting the crank-wheel of the pulley with the end of the lower beam. The lower end of the pitman is connected with the beam by a ball-joint, which provides for the movement of the crank and sweep of the beam.

j j, rods, connecting the slides *i i* with the ends of the beams D. These slides *i i*, or parts of the rods *j* that come within the bearings above and below the saw, are made larger than the rods. A hollow tube may be used for this purpose, the rods *j* and the hook for holding the saw screwed into the end thereof.

The rod *k*, connecting the outer ends of the beams D, is constructed in the same manner, and is supported and steadied by the arms or brackets *m m*, as seen in fig. 1.

I have double bearings, *n n*, above and below the saw, in which the slides *i i* operate, and which serve to guide the saw more steadily and accurately than those in common use.

In the ends of the rocking-beams are turning pivots S, into which the ends of the rods *k* and *j* are screwed, fig. 3 being an enlarged view of the same. These pivots provide for the sweep or circle of the beams when in motion, and by the screws on the end of the rod *k* the distance between the ends of the beams is adjusted.

To provide for longer or shorter saws, I make several holes in the upper part of the rod *j* where it connects with the beam, passing a pin through the beam and rod. By this means it is very readily adjusted to saws of different lengths.

In sawing scroll and ornamental work, the saw has to be frequently unshipped at one end and put through a hole in the work. It is, therefore, important to have it done quickly. This I have provided for by the movable standards F working in the inclined groove G. I adjust the saw by the means heretofore described, and bring it to the proper degree of tension by the screw H, the standard F being kept in a vertical position. In order to relieve the saw of the strain, I have only to move the lower end of the standard F back in the groove G, and when ready for operating again, pull the standard back to its original position, and I have exactly the same degree of tension as before, always sure and expeditious.

The advantage I claim for the beams D D is, that there being a certain amount of weight going up at one end, the same amount is going down at the other, thus balancing, and preventing that vibrating motion generally given to the floor by quick-motioned saws.

Having only one standard, the platform or table A is left clear for turning the material to be sawed in any direction desired.

By this arrangement of mine, it will be seen that the power is applied by the pitman to the opposite end of the beam from the saw. This gives a steadier motion than if applied directly to the saw.

What I claim, and desire to secure by Letters Patent, is—

The combination of the short arms E, the movable standard F, and inclined groove G, with the screw and crank-wheel H, being so arranged that the strain may be thrown off or on the saw by a single motion, substantially as set forth.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

C. M. BAXTER.

Witnesses:

E. J. DURANT,

J. M. PERKINS.