

(No Model.)

G. P. SCOTT.

SAW.

No. 300,805.

Patented June 24, 1884.

Fig. 1.

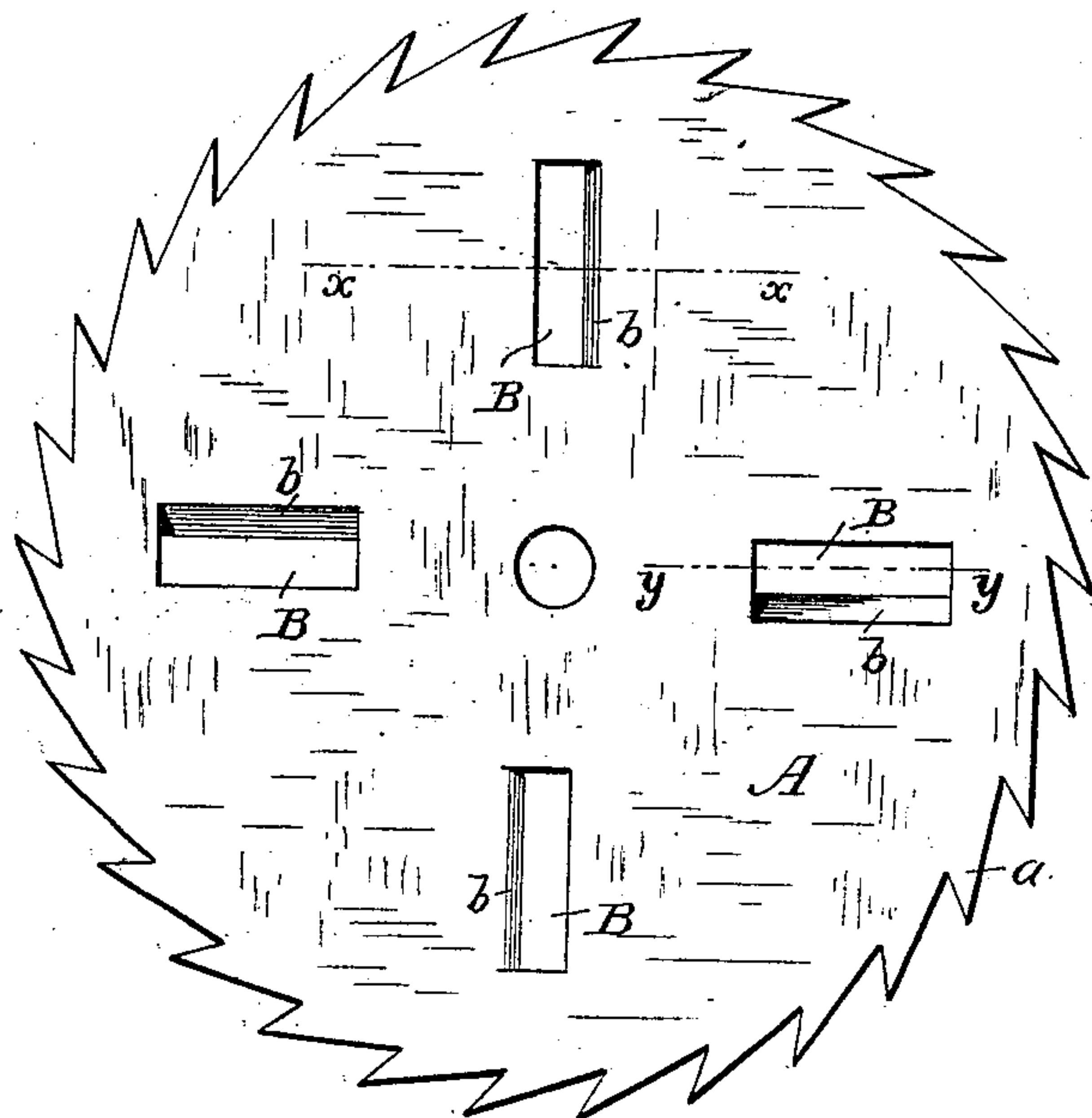


Fig. 2.

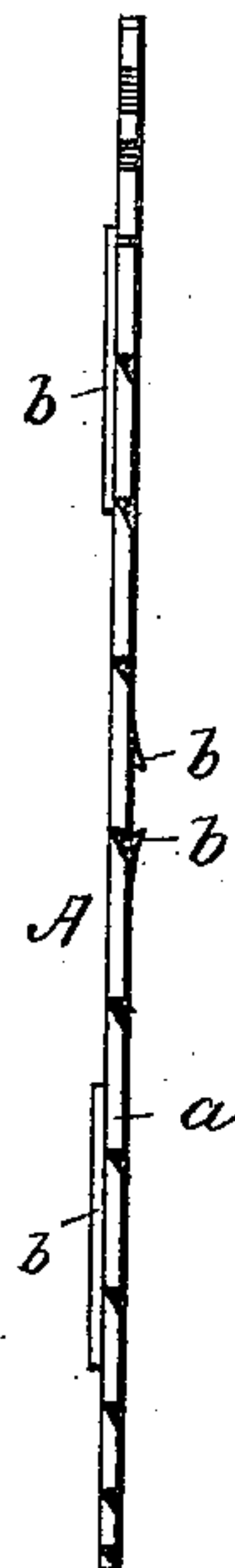


Fig. 3.

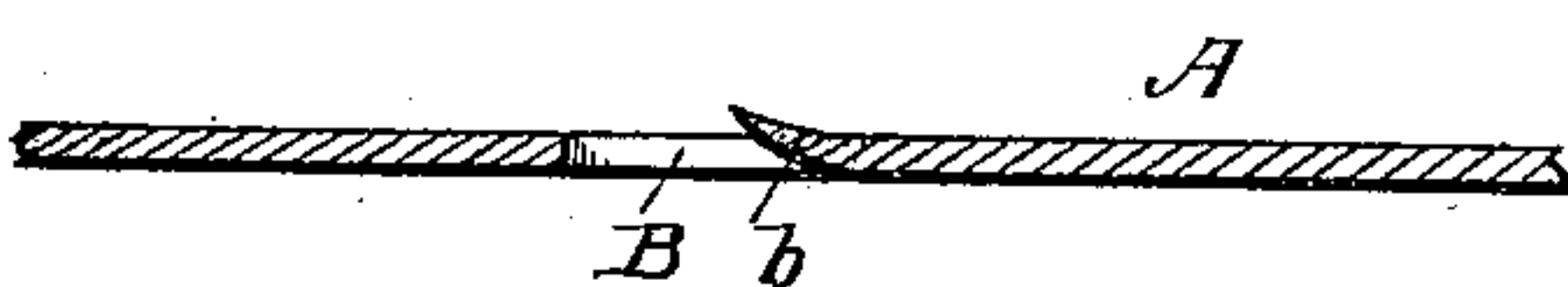
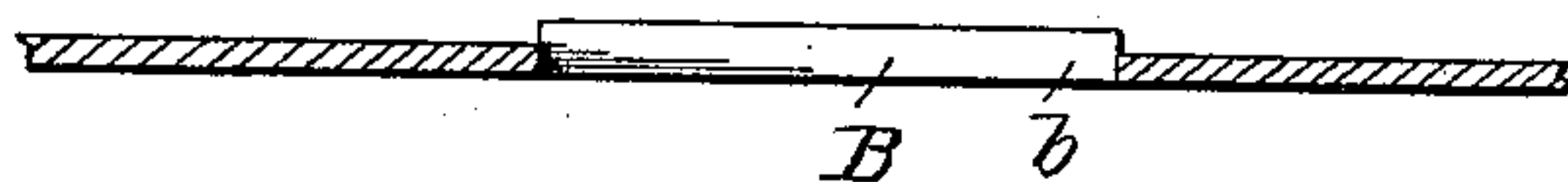


Fig. 4.



WITNESSES

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UNITED STATES PATENT OFFICE.

GEORGE PIRIE SCOTT, OF SEDALIA, MISSOURI, ASSIGNOR OF ONE-HALF TO
DONALD A. CLARKE, OF SAME PLACE.

SAW.

SPECIFICATION forming part of Letters Patent No. 300,805, dated June 24, 1884.

Application filed April 29, 1884. (No model.)

To all whom it may concern:

Be it known that I, G. PIRIE SCOTT, a citizen of the United States, residing at Sedalia, in the county of Pettis and State of Missouri, have invented certain new and useful Improvements in Saws; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to that class of circular saws which comprise planing-blades adapted to smooth the edge of boards during the operation of sawing.

The object of my improvements is to provide a simple and improved saw of this class, which will possess advantages in point of inexpensiveness and durability of construction and general efficiency in operation.

In the drawings, Figure 1 is a side elevation of a circular saw embodying my improvements. Fig. 2 is an edge view of the same. Fig. 3 is a sectional view taken on the line x , Fig. 1. Fig. 4 is a detail sectional view taken on the line $y y$, Fig. 1.

Corresponding parts in the figures are denoted by the same letters of reference.

Referring to the drawings, A designates the blade of the saw, upon the periphery of which is provided the usual series of teeth, a . In the blade of the saw, and at a suitable point between its eye and its cutting-edge or periphery, are provided openings B, which are preferably of rectangular form and disposed in a radial series, as shown. Any suitable number of these openings may be provided; but I prefer to employ a series of four, each pair of openings being disposed at diametrically-opposite sides of the eye of the saw. One of the side edges of each opening is beveled longitudinally, as shown at b , to form a sharp cutting or planing edge, which is turned out slightly from the face of the saw, so that it will plane or smooth the sides of the kerf during the operation of sawing. It will be observed that by this arrangement the planing-edges extend radially in relation to the eye of the saw; and by reason of being formed

longitudinally from end to end of the recesses a sufficient length of cutting-edge is secured to effectively plane any thickness of board. The longitudinal planing-edges are turned out from both faces of the saw, this arrangement being preferably effected by having the cutting-edges of one pair of openings turned out from one face of the saw, while the cutting-edges of the other pair of openings are turned out from the opposite face, as shown. The longitudinal cutting-edges are also formed at relatively opposite sides of the pairs of openings.

From the foregoing description and annexed drawings, the operation and advantages of my invention will be readily understood by those skilled in the art to which it appertains.

Saws embodying my improved planing-edges can be manufactured at but a small cost over the initial expense, inasmuch as there are no separate blades or attachments, the planing-edges being integral with the blade of the saw and formed by providing the openings, as described. It is also manifest that in this arrangement of longitudinal radial planing-edges a superior degree of efficiency and durability is attained, and that both sides of the kerf will be planed, so that the boards will be delivered from the saw with smooth edges.

I am aware that circular saws have been heretofore provided with a radial slot having its edge turned out to form a cutter, and that a circumferential or circular series of slots has been provided with cutting-edges turned alternately from opposite faces of the saw, and also that curved slots have been arranged in pairs on opposite sides of the eye of the saw and adapted to receive planing-blades. I therefore do not broadly claim such construction, my invention consisting in the novel construction and arrangement as set forth, comprising the radial and integral series of longitudinal straight cutters.

I claim as my invention—

In a circular saw, the combination of the pairs of rectangular openings disposed in a radial series, and having one of the side edges of each opening beveled longitudinally

from end to end and turned out from the face
of the saw, whereby a radial series of straight
integral planing-edges is formed, the openings
comprised in each pair being on diametrical-
5 ly-opposite sides of the eye of the saw, and
having their integral planing-edges formed on
relatively opposite sides, substantially as and
for the purpose set forth.

In testimony whereof I affix my signature in
presence of two witnesses.

GEORGE PIRIE SCOTT.

Witnesses:

D. A. CLARKE,
B. F. MEYER.