

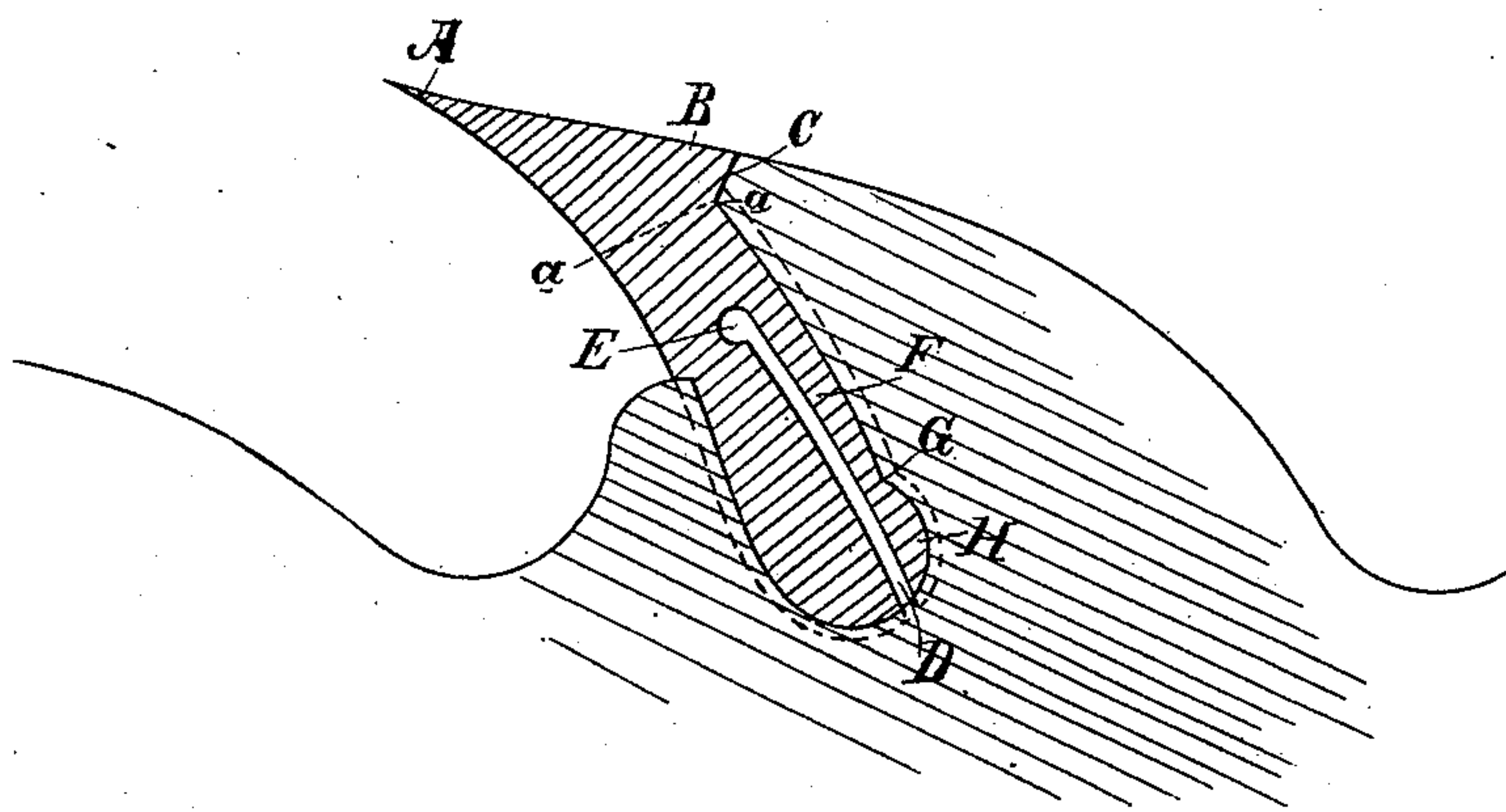
(No Model.)

S. KINNEY.

SAW TOOTH.

No. 343,713.

Patented June 15, 1886.



Witnesses,
Geo. H. Strong
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UNITED STATES PATENT OFFICE.

SIMON KINNEY, OF BROWNSVILLE, CALIFORNIA, ASSIGNOR OF ONE-HALF
TO S. H. PRATT, OF SAME PLACE.

SAW-TOOTH.

SPECIFICATION forming part of Letters Patent No. 343,713, dated June 15, 1886.

Application filed October 1, 1885. Serial No. 178,769. (No model.)

To all whom it may concern:

Be it known that I, SIMON KINNEY, of
Brownsville, Yuba county, State of Califor-
nia, have invented an Improvement in Saw-
5 Bits; and I hereby declare the following to
be a full, clear, and exact description of the
same.

My invention relates to a bit or cutter to
be used in circular saws; and it consists of a
10 curved bit having its front and rear grooved
to fit corresponding tongues in the socket
of the saw-plate into which it fits, the bit
having a slot made longitudinally in it from
the base outward, so that one side forms an
15 elastic tongue. The base or inner portion of
the bit is wider than the outer portion, and
when introduced into the slot or channel in
the saw-plate the elastic tongue allows it to be
compressed until it reaches its final position,
20 when an enlargement or catch at the lower
end falls into a corresponding place in the
socket of the saw-plate and locks it firmly.

Referring to the accompanying drawing
for a more complete explanation of my inven-
25 tion, the figure is a view showing a section of
a saw-plate with my bit.

A is the point of the bit or cutter, and from
this point the back B extends nearly or quite
in line with the curved portion of the saw-
30 plate within which the socket is formed to
receive the bit. From the rear of the back
portion the bit is formed at right angles, or
nearly so, with this portion, thus providing a
shoulder, C, which rests against the corre-
35 spondingly-formed part of the saw-plate at
this point.

The front and rear edges of the bit are
formed in circular curves, and the base is also
formed in a circular curve, as shown.

40 This bit has a channel or groove formed
upon its front and rear, so as to fit a corre-
sponding V-shaped tongue, which is formed
in the socket of the saw-plate, so that when
the bit is in place it will not slip to either
45 side.

A slot, D, is made longitudinally, extend-
ing from an enlargement or hole, E, in the
bit down to the base, so as to form an elastic
tongue, F, which is widest at the hole E, and
50 decreases in width to the point G near its
lower end. From this point an enlargement
is made at H, which fits into a corresponding

enlargement at the bottom of the socket when
the bit is in position.

The bit is made narrowest between the 55
points *a a* in a line extending across below
the shoulder C, and it is made widest at the
point extending across in line from G to the
front of the bit.

When this bit is introduced in the socket 60
in the saw-plate which corresponds to its
shape, it will be manifest that the lower end
of the tongue or elastic portion F will be
compressed so as to nearly or quite close the
slot D, and thus allow the bit to slip 65
the socket, which is narrower at the top than
it is at the bottom. The bit may then be
pushed in until it reaches the bottom of the
socket, and the enlargement H will spring
outward into the corresponding space made 70
to receive it, and will thus lock the bit firmly
in place and prevent it from coming out.
By this construction I am enabled to place
more bits in the saw-plate than by any other
means. The throat for the escape of the saw- 75
dust is a natural one, and is the greatest and
most perfect that can be given.

The points of the bits are presented to the
wood at a greater angle than by any other
style of construction, and thus provide an 80
easy-cutting edge.

Having thus described my invention, what
I claim as new, and desire to secure by Letters
Patent, is—

A saw-bit formed with curved or circular 85
lines, with a cutting-point and shoulder at the
rear end of the back to fit a corresponding
portion of the saw-plate, the bit being made
narrowest at the base of this shoulder, and
enlarging from this point toward the inner 90
end, in combination with an elastic tongue
formed by slotting said bit from the base to-
ward the point, said elastic tongue tapering
and decreasing in thickness toward its end,
and provided with a locking projection or 95
catch to fit a corresponding socket and open-
ings in the saw-plate, substantially as herein
described.

In witness whereof I have hereunto set my
hand.

SIMON KINNEY.

Witnesses:

HARMON A. PHELPS,
JOHN SCHRODER.