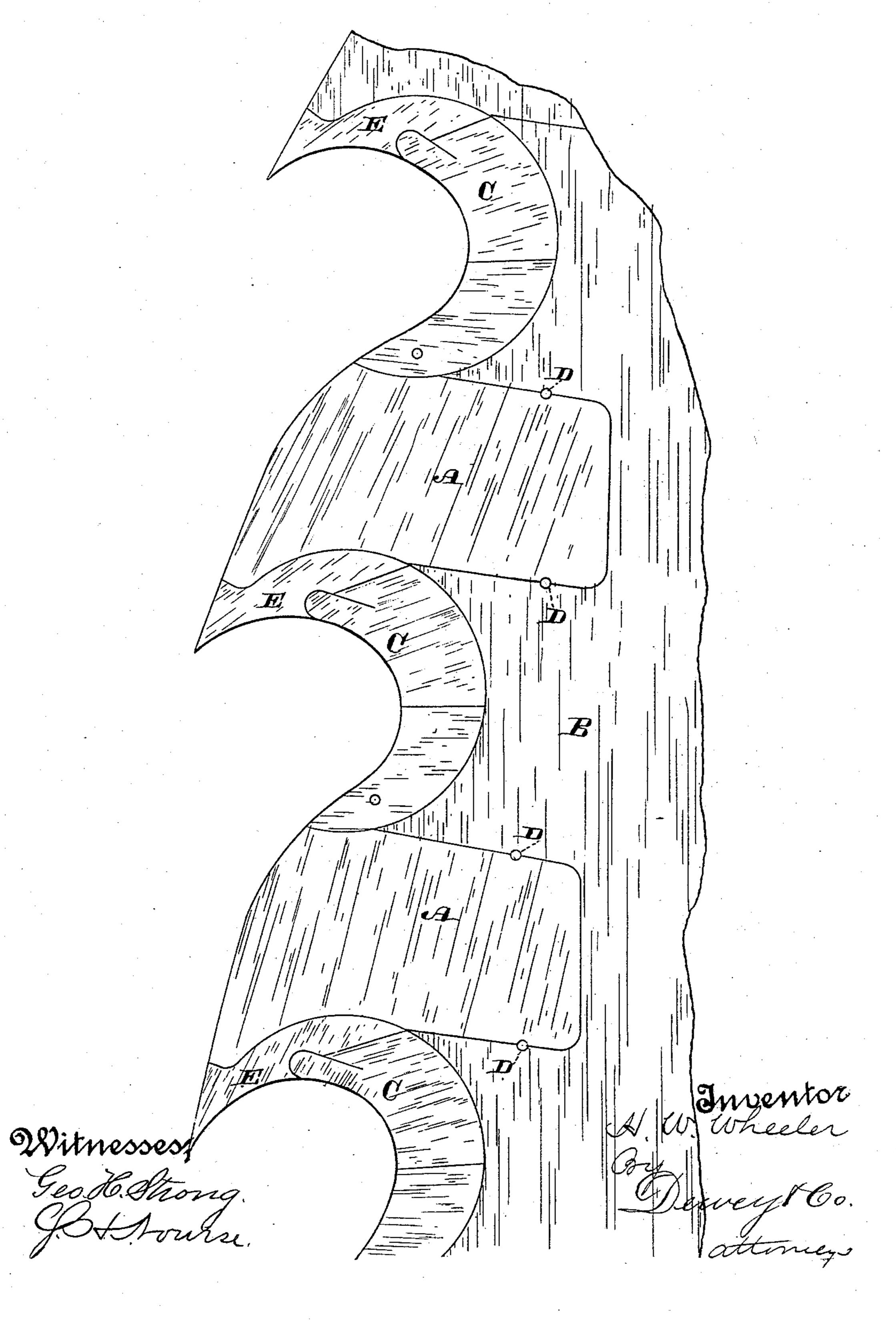
H. W. WHEELER. SAW.

No. 328,164.

Patented Oct. 13, 1885.



United States Patent Office.

HENRY WILLIAMS WHEELER, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR TO TATUM & BOWEN, OF SAME PLACE.

SAW.

SPECIFICATION forming part of Letters Patent No. 328,164, dated October 13, 1885.

Application filed July 1, 1885. Serial No. 170,386. (No model.)

To all whom it may concern:

Be it known that I, HENRY WILLIAMS WHEELER, of the city and county of San Francisco, State of California, have invented an Improvement in Saws; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to an improvement in saws of that class known as "inserted-tooth

10 and chisel-bit saws."

It consists of supplemental plates or extensions fitted in the periphery of the saw-plate, extending outward therefrom, and having their front and rear edges formed to receive the holding-shanks and cutting teeth or bits.

Referring to the accompanying drawing for a more complete explanation of my invention, the figure is a side view of a portion of a sawplate, showing my improvement and the in-

20 serted teeth or bits.

In all inserted-tooth and chisel-bit saws the saw-plate wears thin upon the rim or periphery behind the bits from the constant passage of the sawdust and from the friction, and the sockets in which the shanks are fitted soon become enlarged, so that the shanks and bits wear loose from constant changing, and the saws soon become worthless on this account.

My invention consists in the insertion of extensions or plates A, which are fitted in sockets in the periphery of the saw-plate B. These plates project outwardly from the rim of the saw-plate, in which they are fitted with the usual tongues and grooves, and they are held in place by rivets or pins D.

The cutting-bits E may be of any well-known or desired form, and are held in place by the

segmental shanks C.

The fronts of the plates A are formed to receive the backs of the cutting-bits, the curve
being such that these bits and their shanks C
may be inserted or removed at will, and the
rear portion of each plate A has also a curved
depression, into which the forward portion of
the shank C fits.

This construction admits of as many teeth in a saw as can be gotten into a solid rim, and the arrangement is such that it will not affect the tension of the saw detrimentally. These pieces A extend from shank to shank C, thus y forming with the shanks and bits an entire movable and adjustable rim, which extends to a considerable distance beyond the ordinary diameter of the plate.

The cost of large saw-plates is greatly in-5 creased by every additional inch of diameter; but by my invention I am enabled to extend the diameter of the plate about four inches, thus making a sixty-inch saw with only a fif-

ty-six-inch plate.

The invention is applicable to all saws in which the chisel-tooth is used, whether the tooth be held by a shank, wedge, or other device, and is applicable to repairing old saws.

Having thus described my invention, what 5 I claim as new, and desire to secure by Let-

ters Patent, is—

1. The combination, with the saw-plate provided with sockets, of the extension-plates fitting the sockets and projecting outwardly begond the periphery of the saw-plate and filling the space between the shank of one cutting-bit and that of the adjoining cutting-bit, substantially as herein described.

2. In a saw, the extension-plates projecting 7 outward from the periphery of the saw-plate, in combination with the cutting-bits, and the holding-shanks fitted in the periphery of the plate and extending the entire distance between the extension-plates, substantially as 8 herein described.

In witness whereof I have hereunto set my hand.

HENRY WILLIAMS WHEELER.

Witnesses:

LINCOLN SONNTAG, S. P. SMILEY.