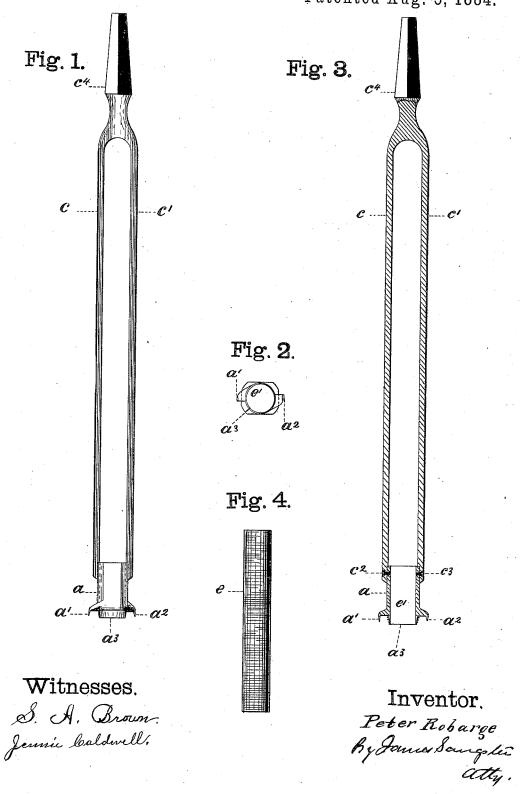
## P. ROBARGE.

DEVICE FOR CUTTING PLUGS OR DOWEL PINS.

No. 302,941.

Patented Aug. 5, 1884.



## United States Patent Office.

PETER ROBARGE, OF EAST AURORA, NEW YORK.

## DEVICE FOR CUTTING PLUGS OR DOWEL-PINS.

SPECIFICATION forming part of Letters Patent No. 302,941, dated August 5, 1884.

Application filed February 2, 1884. (No model.)

to all whom it may concern:

Be it known that I, Peter Robarge, a citizen of the United States, residing in East Aurora, in the county of Erie and State of 5 New York, have invented certain new and useful Improvements in Devices for Cutting Plugs or Dowel-Pins, of which the following is a specification.

The object of this invention is to provide a ready and convenient means for cutting plugs or dowel-pins across the grain of the wood, all of which will be fully and clearly hereinafter shown and explained by reference to the accompanying drawings, in which—

Figure 1 is a front elevation of the implement complete. Fig. 2 is a bottom view. Fig. 3 is a sectional elevation, and Fig. 4 represents a portion of a plug cut by this instrument.

It is well known that plugs to cover the heads of spikes in vessels, and for many other purposes, must be cut across the grain of the wood, so as to make it water-tight. These plugs have usually been turned in a lathe; but it is a troublesome matter to make them in this way. Besides, they are liable to be broken if an attempt is made to turn them too long. By means of my invention they can be made of any length required, and with a very smooth surface, and made rapidly and cheaply. The bit a is provided with the usual cutting-edges, a' a². a³ is a circular cutting-edge arranged between the cutting-edges a' a². Its office is to cut the plug smoothly, while the cutting-edges a' a² cut the material away

around it. The bit is fastened to the parts or side pieces, c c', by means of screws  $c^2$   $c^3$ , so as be easily removable for the purpose of putting on bits of different sizes. The side pieces, c c', terminate at the top in the usual square bit-shank,  $c^4$ , adapted to be put into any bit-stock or other instrument by which it is operated.

In operating with my invention, the cutters  $a'a^2$  cut out an annular opening around the plug e, which plug passes through the opening e' within the circular cutters  $a^3$ , and up between the side supporting-bars,  $c\ e'$ , which are made sufficiently long to cut the required length of plug. The circular cutting-edge makes a sliding cut, and consequently cuts a 50 very smooth surface on the plug. If desired, a screw may be cut around the circular cutter, to assist in feeding the bit in as it cuts.

A plug-cutter having an opening, e', through 55 it, an unbroken circular cutting-edge,  $a^3$ , surrounding the opening for giving a sliding cut and a smooth surface to the plug, in combination with the cutters a'  $a^2$ , for cutting the material away around it, and a suitable supportfong-frame consisting of the two bars e', united at the top to form a shank for holding it, substantially as described.

PETER ROBARGE.

Witnesses:
J. M. CALDWELL,
JAMES SANGSTER.