G. L. SAVAGE.
AUGER.

No. 478,970.

Patented July 12, 1892.

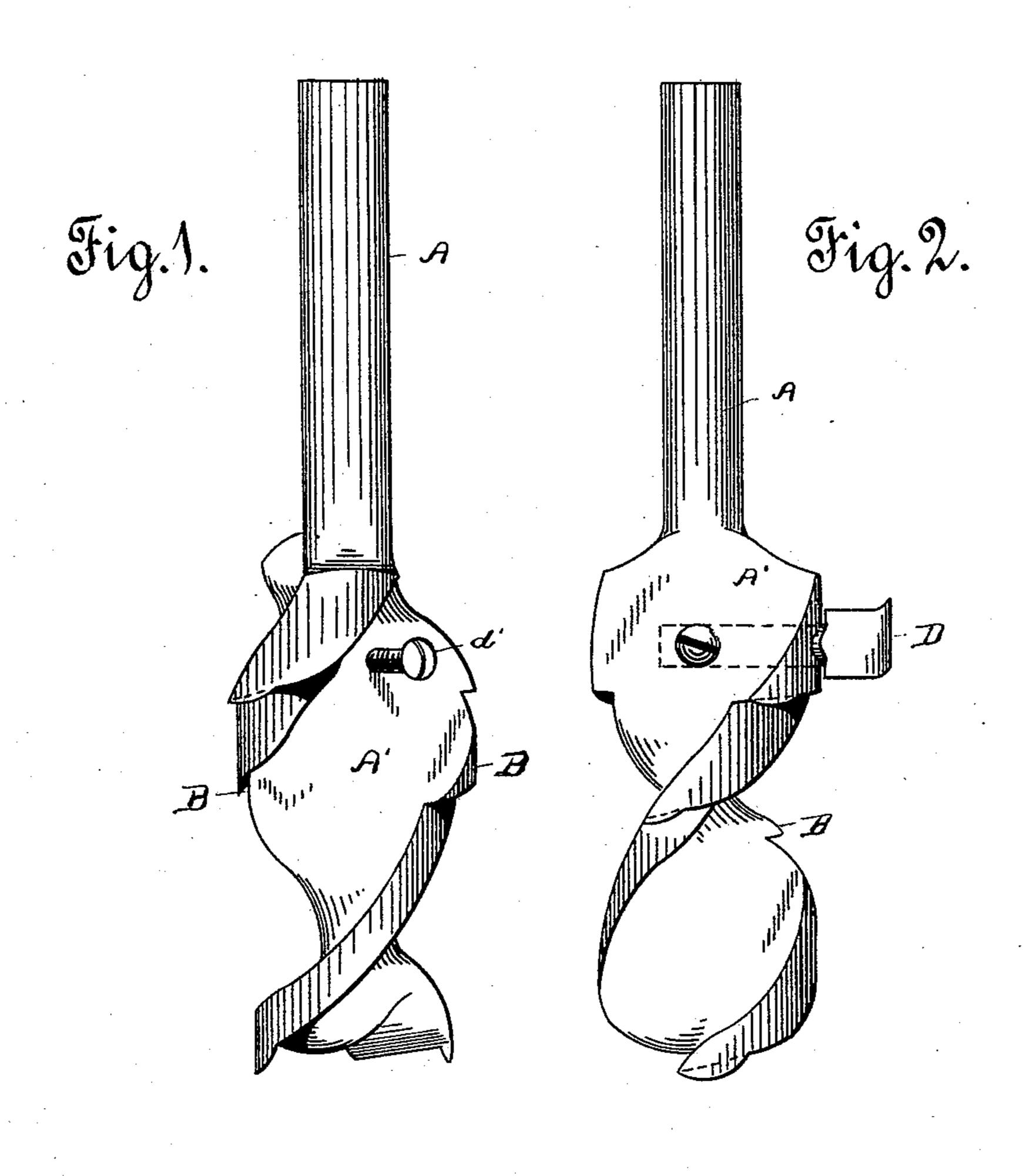


Fig. 3.

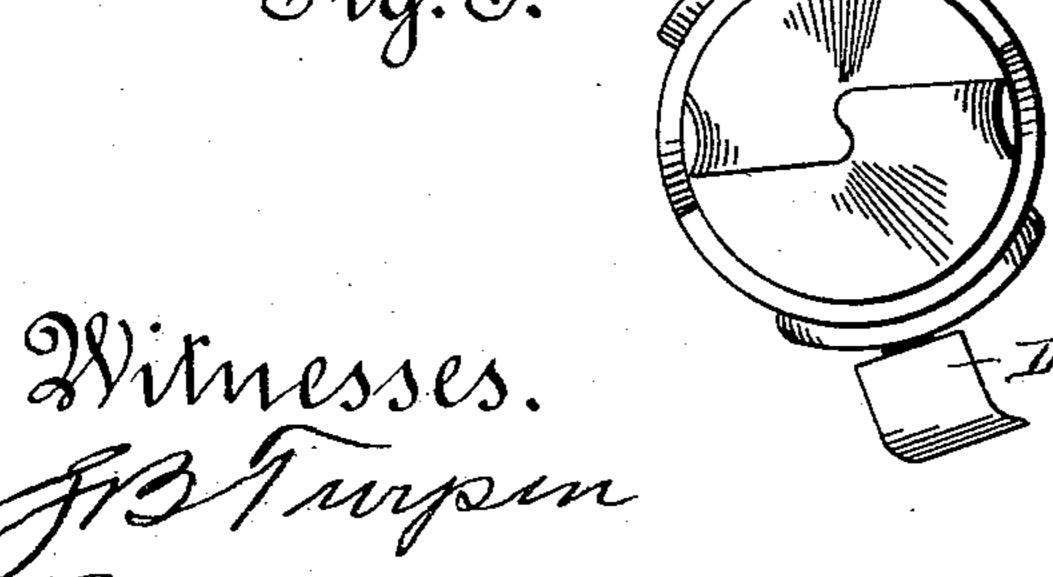


Fig.4.

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United States Patent Office.

GRANVILLE L. SAVAGE, OF NEW YORK, N. Y., ASSIGNOR TO THE GOLDEN GATE SAFETY FAUCET COMPANY, OF SAN FRANCISCO, CALIFORNIA.

AUGER.

SPECIFICATION forming part of Letters Patent No. 478,970, dated July 12, 1892.

Application filed June 25, 1891. Serial No. 397,461. (No model.)

To all whom it may concern:

Be it known that I, GRANVILLE L. SAVAGE, a citizen of the United States, residing at the city of New York, in the county of New York 5 and State of New York, have invented certain new and useful Improvements in Augers; and I do hereby declare the following to be a full, clear, and exact description of said invention, such as will enable others skilled in the art to which it most nearly appertains to make, use, and practice the same.

My invention relates to certain new and useful improvements in augers, which consists in the arrangement of parts and details of construction, as will be hereinafter set forth in the drawings and described and pointed out in the gracification.

in the specification.

The object of my invention is to provide an auger which shall permit the boring of holes so as to bore an annular shoulder and at the same time even the surface of the wood surrounding the auger-hole.

This invention is more applicable for the forming of bung or tap holes in casks, bar25 rels, or the like, wherein it is necessary to provide a countersunk annular shoulder for the reception of faucet-bushing or bushing-thimble.

Referring to the drawings, forming a part of this specification, wherein similar letters of reference denote corresponding parts throughout the entire specification, Figure 1 is a rear view, in elevation, of the auger, showing attaching - screw for the removable shaving-sharife; Fig. 2, a side elevation of Fig. 1; Fig. 3, a bottom plan of Fig. 1; Fig. 4, a detail view of the shaving-knife.

The letter A represents the auger proper, which is provided with the usual spiral cutting-blade A'. I form or provide the spiral blade with the outwardly-projecting cutting

blades or spurs B. The spiral cutting-blade of the auger gradually increases in diameter from its bottom up, and each cutting blade or spur B extends outward beyond the one below. By thus providing the spiral blade with projecting blades or spurs I am enabled to form a circular opening with a countersunk shoulder. This style of auger is designed for use when it is desired to increase the diameter of a previously-bored hole or to enlarge the opening of an old bung or tap hole in a barrel.

The shaving-knife is indicated by the letter D and is provided with the rearwardly-extending portion d, which fits within an opening formed in the upper portion of the augerblade and is secured therein by means of the screw-bolt d'. The knife is thus made so as to allow of the auger being used with or with-60 out the same. The object of said knife is to allow the top surface of the wood to be evened or shaved smoothly while the hole is being bored.

Any desired number of projecting spurs or 65 cutting-blades may be formed in the spiral blade of the auger.

Having thus described my invention, what I claim as new, and desire to secure protection in by Letters Patent of the United States, is— 70

The combination, with a spiral blade of an upwardly-increasing diameter provided with outwardly-projecting spurs, each one of which projects beyond the next spur below, of a lateral shaving-knife removably secured to 75 the blade above the spurs.

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

GRANVILLE L. SAVAGE.

Witnesses:

EDWIN WOODCOCK, AUGUSTUS S. BIRD.