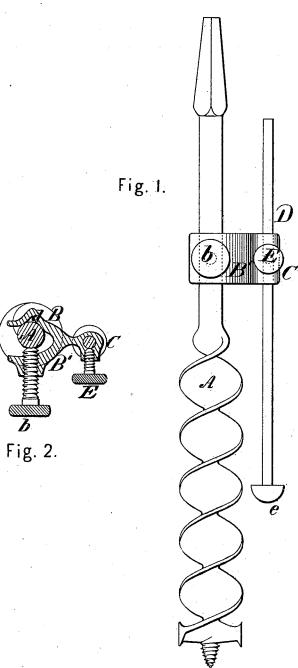
## R. GARDINER. GAGE FOR BITS.

No. 191,133.

Patented May 22, 1877.



WITNESSES. Villette Anderson PhileMasi. INVENTOR.

R. Gardiner;

Chipman Hoamer of a cettys

## UNITED STATES PATENT OFFICE.

RODOLPHUS GARDINER, OF OLNEYVILLE, RHODE ISLAND.

## IMPROVEMENT IN GAGES FOR BITS.

Specification forming part of Letters Patent No. 191,133, dated May 22, 1877; application filed April 4, 1877.

To all whom it may concern:

Be it known that I, R. GARDINER, of Olneyville, in the county of Providence and State of Rhode Island, have invented a new and valuable Improvement in Gage for Bits; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of my bit gage. Fig. 2 is a horizontal

section of same.

This invention has relation to gages for auger-bits; and it consists in the construction and novel arrangement of the several parts constituting a gaging attachment, as

hereinafter more clearly specified.

Referring to the drawings, A designates the auger-bit, to the shank of which are secured the jaws B B', connected together and to the sleeve C. These jaws are held to the shank by means of the set-screw b, and are adjustable along the shank. One of the jaws has a V-shaped recess, d, cut or formed in its |

inner surface, so that the gage may be applied to the heads of the smallest sized bits. D designates the gage-rod for gaging the depth of the holes produced by the bit. This rod passes through the sleeve C, is adjustable, and is held in place by means of a setscrew, E. Upon the lower end of the gage. rod is a button, e, the purpose of which is to clear away the cuttings or borings which accumulate around the top of the hole, so as to allow the hole to be accurately gaged.

What I claim as my invention, and desire

to secure by Letters Patent, is-

The gaging attachment for bits herein described, consisting of the removable and adjustable jaws B B', guide C, the removable and adjustable rod D having convex head e, and the set-screws E and b, constructed and adapted for use as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence

of two witnesses.

RODOLPHUS GARDINER.

Witnesses:

A. J. Cushing. J. F. GARDINER.