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DRILL HOLDER AND GAGE.

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Fig. 1.

Fig. 2.

Fig. 3.

INVENTOR

Witnesses:

INVENTOR

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DRILL HOLDER AND GAGE.


To all whom it may concern:

Be it known that I, ANTHONY LA FRANCIS, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Drill Holders and Gages; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to figures of reference marked thereon, which form a part of this specification.

The objects of this invention are to provide a more convenient stand or holder for drills; to enable the device to perform the double function of a holder for the drills and a gage for measuring drills; to prevent clogging of the device by dust, &c., in the open shop; to enable a small and compact structure to be formed whereby the cost is reduced and the handling of the device is rendered more easy and convenient; to enable the holder to be easily cleaned and accumulated dust or dirt removed therefrom, and to secure other advantages and results, some of which may be referred to hereinafter in connection with the description of the working parts.

The invention consists in the improved drill holder and gage and in the arrangements and combinations of parts of the same, all substantially as will be hereinafter set forth and finally embodied in the claim.

Referring to the accompanying drawings, in which like figures of reference indicate corresponding parts in each of the several figures, Figure 1 is a plan of my improved gage. Figure 2 is a front elevation of the same, and Figure 3 is a sectional view taken at line x of Figure 1.

In said drawings, 5, 6, and 7 are respectively the top plate, the intermediate plate, and the bottom plate of the improved device, the said plates being held apart by means of collars 8 and 9, the lower collars being comparatively short and the upper collars being considerably longer, thereby forming spaces 10 and 11, the upper spaces being considerably deeper than the lower spaces for the purposes hereinafter more particularly referred to. Through said collars and plates, at the corners of the latter, are arranged bolts or screws 12, which serve to unite the plates and collars into a rigid and strong frame.

The top plate 5 is provided with a graduated series of perforations 13, which serve as gaging perforations for determining the size of the drill, &c. They are also adapted to serve as receptacles for the upper ends of the 60 drills in holding the same while said drills are out of service. The said plate 5 at the top is stamped with size-marks 14, Figure 1, showing the size of the holes lying adjacent thereto, the said size-marks ranging in order from size 1 to 63 or such other range of sizes as may be desired. The intermediate plate 6 is similarly perforated, the perforations ranging from a large to a small size in correspondence with the perforations of the top plate, the perforations, however, in the said intermediate plate being somewhat larger than the corresponding perforations of the gaging top plate to enable the lower ends of the drills to enter or be freely inserted when lowered through the perforations of the top plate. The said lower perforations are countersunk at their upper ends to facilitate the insertion of the drills. The bottom plate 7 is plain or imperforate, as indicated in Figure 3, or is devoid of openings, recesses, or the like for the drills, and thus the said plate can be cleaned by simply inserting a cloth or other implement through the open sides of the frame, thereby enabling the device to be easily kept in neat order by a simple rubbing operation performed by simply lifting the drills upward, but without the complete withdrawal of said drills from the frame.

At the front of the device, between the upper and the intermediate plates, is secured by soldering or otherwise a vertical guide-plate 15, having thereon marks 16, enabling the workman to determine first the size of drill required in connection with the tap and other instructions convenient to the user of the drills.

Having thus described the invention, what I claim as new is—

The improved drill holder and gage herein described, comprising a top plate having a graduated series of gaging perforations and
having marks indicating the sizes of said perforations, an intermediate plate having a corresponding series of perforations which are larger than those of the top plate, an intermediate perforate bottom plate, and means for holding said plates in relative position.

In testimony that I claim the foregoing I have hereunto set my hand this 14th day of December, 1904.

ANTHONY LA FRANCIS.

Witnesses:
CHARLES H. PELL,
RUSSELL M. EVERETT.