

J. W. RIGGLE & B. D. SNYDER.
BORING IMPLEMENT.
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950,542.

Patented Mar. 1, 1910.

Fig. 2

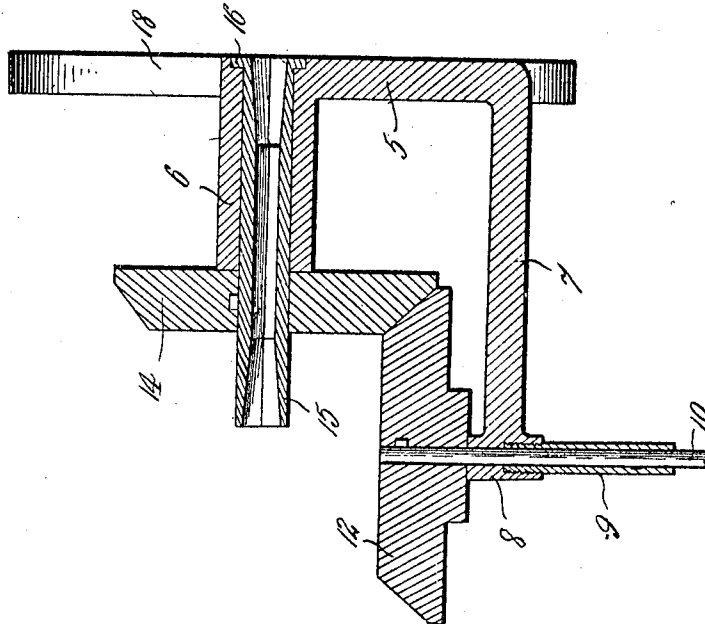
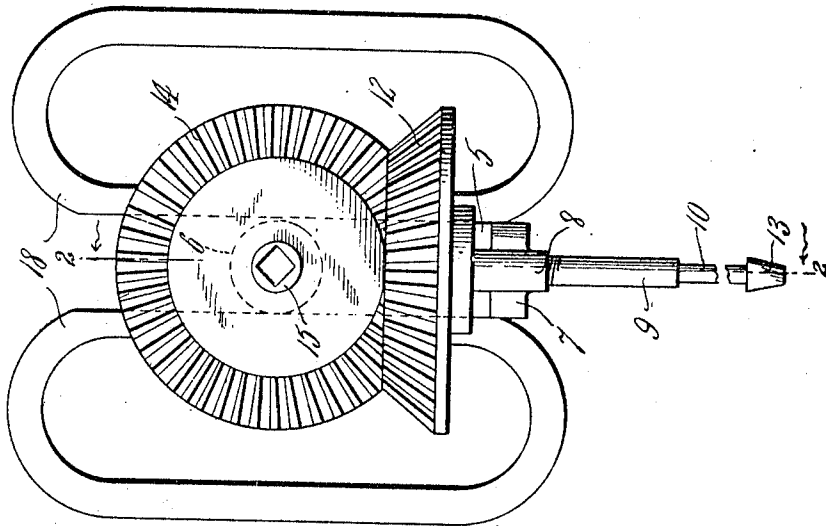


Fig. 1



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BORING IMPLEMENT.

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To all whom it may concern:

Be it known that we, JOHN W. RIGGLE and BOWMAN D. SNYDER, citizens of the United States, residing at Danville, in the county of Vermilion, State of Illinois, have invented certain new and useful Improvements in Boring Implements; and we 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.

The present invention has reference to improvements in implements for boring or drilling holes in localities where the ordinary brace can be used, if at all, only with great difficulty, as for example, between the sills of a car, in which instance, it is necessary for the workman to crouch beneath the car in order to reach the sills.

The invention therefore resides, broadly, in the provision of an extremely simple speedy and powerful implement which can be readily operated in narrow spaces.

More especially, however, the invention resides in the particular form of supporting frame employed, it being the object of the invention to provide a frame having a double handle by means of which it can be held steadily in place against the work, the handle members extending in opposite directions from the sides of the frame to which latter they are rigidly secured.

The preferred embodiment of the invention is illustrated in the accompanying drawings, in which like parts are designated by the same reference characters throughout the several views.

Of the said drawings, Figure 1 is a front elevation of the complete invention; Fig. 2 is a section taken vertically therethrough on the line 2—2.

Referring more particularly to the drawings, the frame of the implement is shown as comprising a body portion 5, and upper and lower arms 6 and 7 which project laterally therefrom and are arranged in spaced relation to and parallel with each other, the arms being formed integral with the frame body.

The lower arm terminates at its outer end in a vertically-arranged bearing sleeve 8, the lower end of whose bore is arranged to receive the threaded upper end of a tubular handle 9. Through this handle extends a vertical spindle 10, the upper end of which projects above the upper face of the sleeve

8 and has rigidly secured thereto at such point a beveled gear 12, the hub of said gear resting upon the above mentioned face of the sleeve. The lower end of the spindle is preferably squared, as indicated by the numeral 13 to fit the socket of an ordinary brace, (not shown).

The gear 12 above referred to meshes with a similar gear 14 secured to a hollow shaft 15 loosely mounted in the upper arm 6, the latter being formed for this purpose with a longitudinal bore which opens through the ends thereof. The rear end of the shaft 15 is formed with a circumscribing lateral flange 16 arranged to bear against the adjacent end of the arm 16, so as to hold the shaft in question against endwise forward movement. The bore of this shaft is squared, so that the squared head of the bit, (not shown) may be inserted in either end thereof. Thus, when the bit head has been fitted in the front end of the bore, and the bit sunk into the wood up to within a very short distance from the gear 12, the implement may be disengaged from the bit head, reversed, and subsequently reengaged therewith, in which latter position the bit head fits in the rear end of the bore, whereupon the drilling may thus be continued. The entire working length of the bit may be utilized, as will be apparent. The body portion 5 of the frame carries a pair of D-shaped handles 18, whose inner members are rigidly secured thereto, the handles being disposed upon opposite sides of the frame body and occupying a common plane at right angles to the plane of the arms 6 and 7.

It will be understood from the foregoing, that the above described arrangement of the handles permits the implement to be held in place and the bit pressed steadily against the work, while the employment of the hollow driven shaft 15 as a bit holder permits the implement to be readily operated in spaces so narrow as to be inaccessible to the ordinary brace, since the entire distance from the point of the bit to the handles 18, is but little greater than the length of the bit itself.

What is claimed is:—

1. In a boring implement, the combination of a frame comprising a body portion; an arm projecting from said body portion having a bearing opening, a gear journaled in said opening, a second arm projecting from said body portion on the same side as the first named arm and having a longitudinal

bore, a shaft fitting in said bore and formed at each end with a bit-receiving socket and having its inner end extending through said body portion and terminating in the plane
5 of one of the sides of said body portion, and its other end located between said body portion and the outermost end of that diameter of the gear which extends parallel to the first named arm; and driving connections
10 between said gear and shaft, for rotating the latter.

2. In a boring implement, the combination of a frame comprising a body portion having a pair of handles secured thereto on
15 opposite sides and extending in a common plane therewith; an arm projecting from said body portion having a bearing opening, a gear journaled in said opening, a second arm projecting from said body portion on
20 the same side as the first named arm and having a longitudinal bore, a shaft fitting in said bore and formed at each end with a bit-receiving socket and having its inner end
25 extending through said body portion and terminating in the plane of one of the sides of said body portion, and its other end located between said body portion and the outermost end of that diameter of the gear

which extends parallel to the first named arm; and driving connections between said
30 gear and shaft for rotating the latter.

3. In a boring implement, the combination of a frame comprising a body portion, an arm projecting from said body portion having a bearing opening, a gear journaled in
35 said opening, a second arm projecting from said body portion on the same side as the first named arm and having a longitudinal bore, a shaft fitting in said bore and formed at each end with a bit-receiving socket and
40 having its inner end extending through said body portion and terminating in the plane of one of the sides of said body portion, and its other end located between said body portion and the outermost end of that diameter
45 of the gear which extends parallel to the first named arm, a gear rotatably mounted on said shaft meshing with the gear journaled in the bearing opening of the first named arm whereby rotation of said last
50 named gear will rotate said shaft.

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