

F. H. OAKMAN & H. A. AXTELL.
TOOL FOR HOLDING DISKS FOR DRILLING.

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928,275.

Patented July 20, 1909.

Fig. 1.

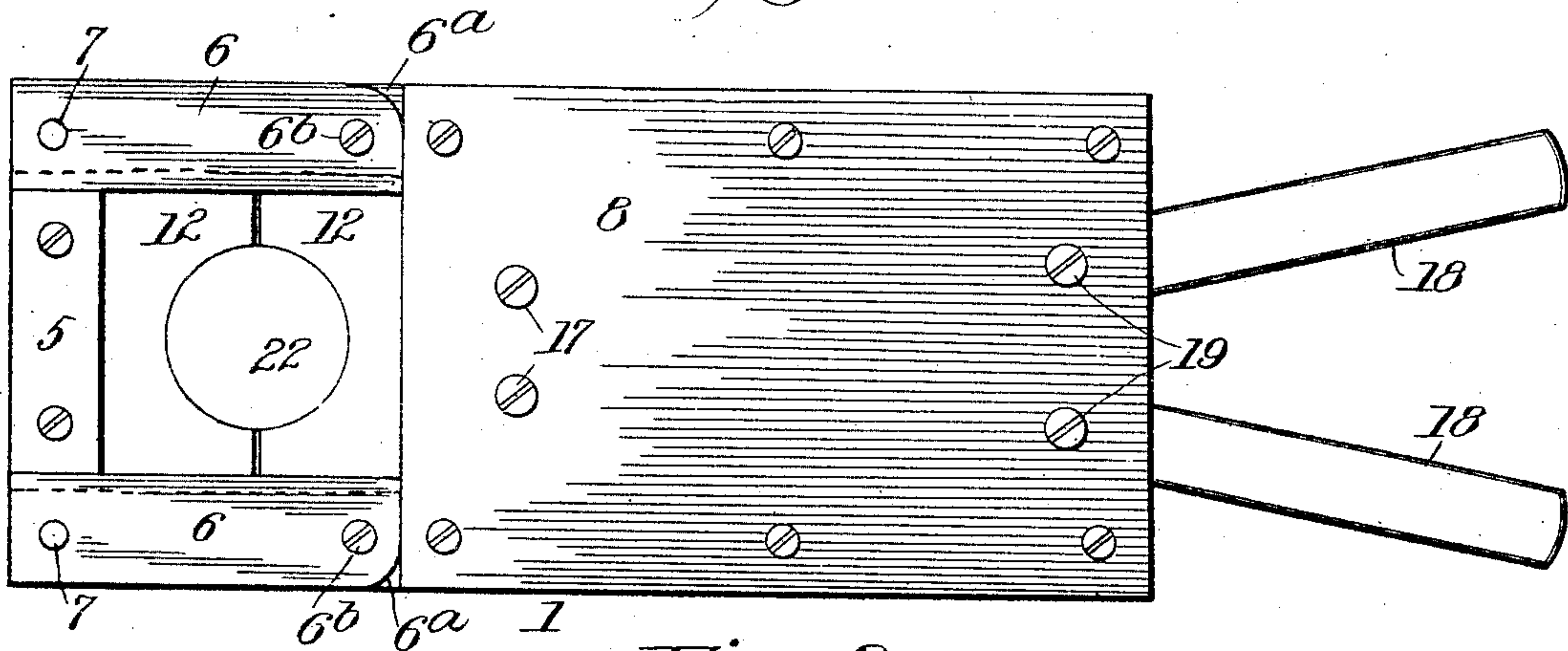


Fig. 2.

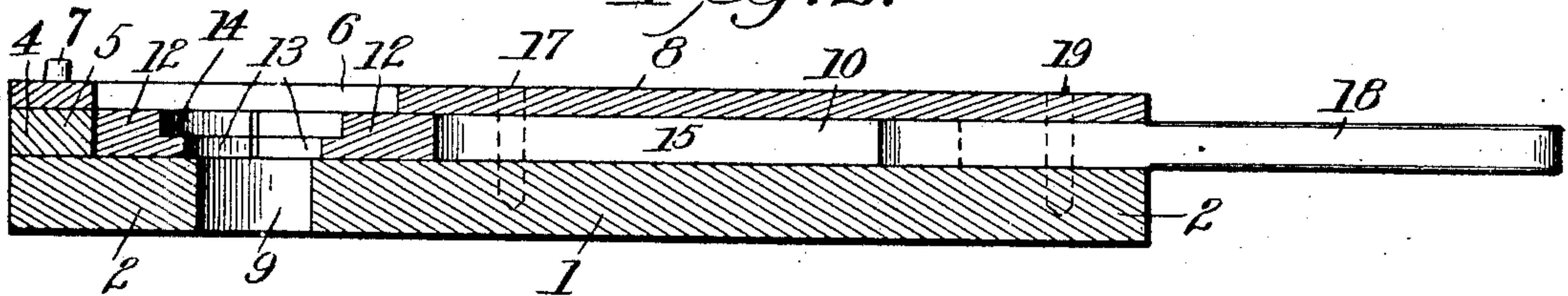


Fig. 3.

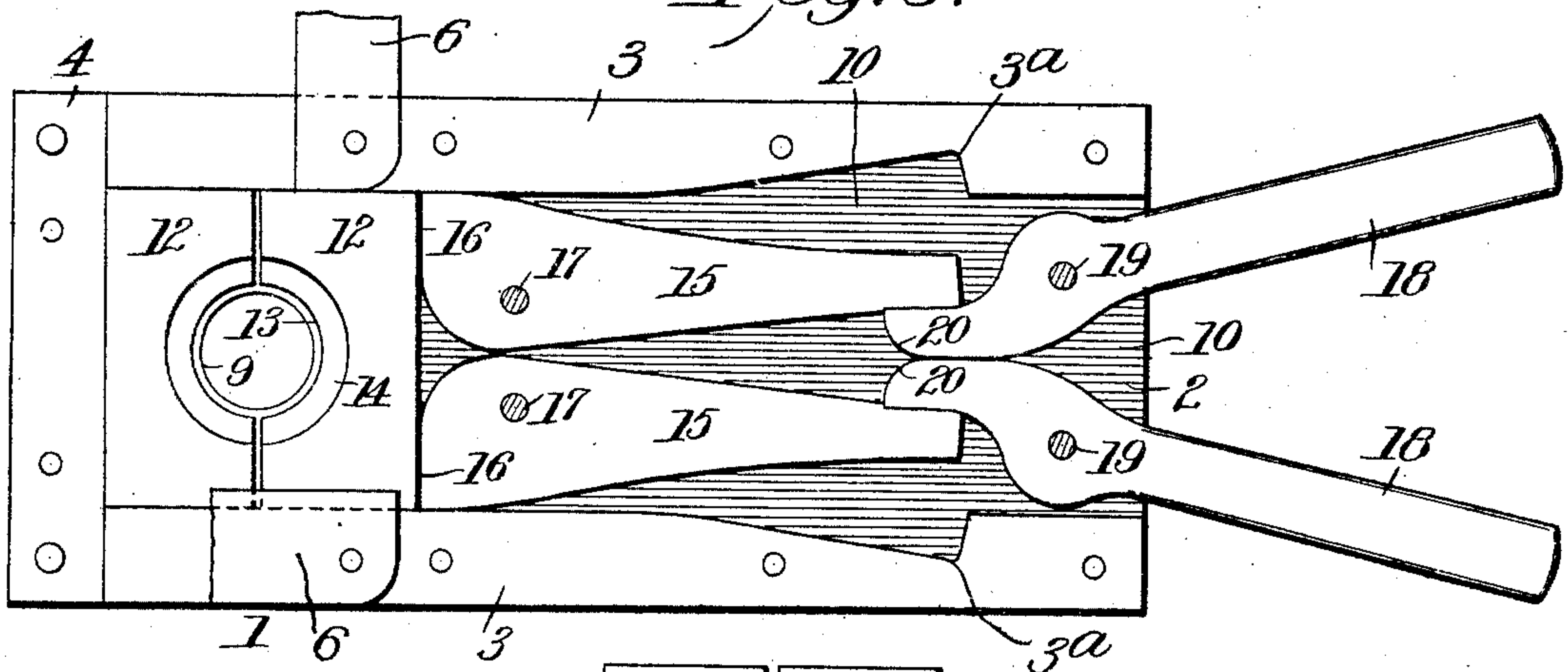
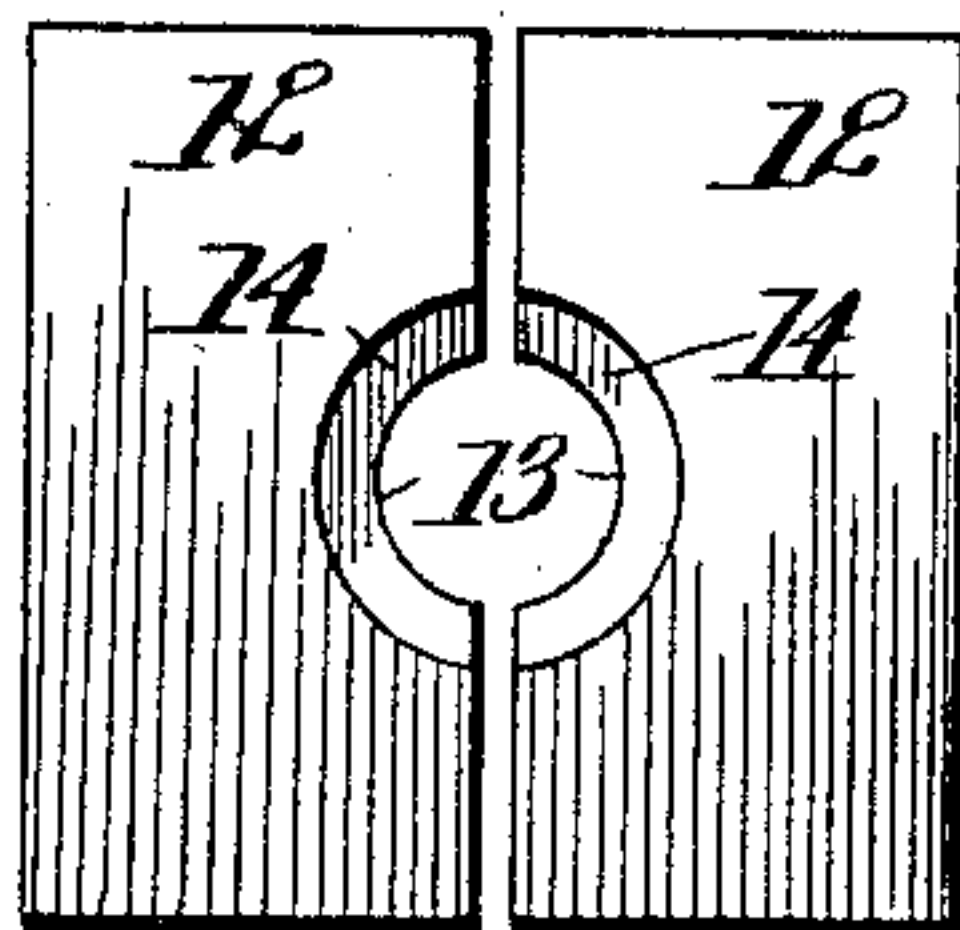


Fig. 4.



Witnesses

C. M. Walker,
J. T. Walker

By

Inventors

F. H. Oakman
Henry A. Axtell
E. B. Clark
Attorneys

UNITED STATES PATENT OFFICE.

FRANK H. OAKMAN AND HENRY A. AXTELL, OF SHELBURNE FALLS, MASSACHUSETTS.

TOOL FOR HOLDING DISKS FOR DRILLING.

No. 928,275.

Specification of Letters Patent.

Patented July 20, 1909.

Application filed August 1, 1907. Serial No. 386,539.

To all whom it may concern:

Be it known that we, FRANK H. OAKMAN and HENRY A. AXTELL, citizens of the United States, residing at Shelburne Falls, in the county of Franklin and State of Massachusetts, have invented certain new and useful Improvements in Tools for Holding Disks for Drilling, of which the following is a specification.

10 This invention relates to tools for gripping and holding disks while being drilled or otherwise worked upon; and the object is to provide a tool, in the nature of jig, which is simple in construction, convenient and effective in operation, and adapted to
15 securely hold disks of different sizes for the purpose of drilling or performing other work thereon.

In the accompanying drawings, Figure 1
20 represents a top plan view of the tool containing a disk. Fig. 2 represents a longitudinal vertical section. Fig. 3 represents a top plan view with the cover plate of housing removed. Fig. 4 represents a top plan view
25 of a pair of detached holding jaws.

The tool 1 is provided with a suitable housing for containing the operating parts and is constructed of a comparatively thick bottom plate 2, having side flanges or strips
30 3, and an upper end flange or strip 4, an outer end strip 5, a cover plate 8 and two swinging keeper strips 6, having rounded lower outer corners 6^a. The strips 6 overlap the strips 3 being wider than the latter as
35 indicated by dotted lines in Fig. 1 and by full lines in Fig. 3, and form guide-ways for the detachable holding jaws 12, being pivotally connected to strips 3 by pins 6^b and held in place by removable pins 7. By removing
40 pins 7 the strips 6 may be swung outward, as shown in Fig. 3, for permitting the jaws 12 to be detached from, or placed in chamber 10 of the housing. The cover-plate 8 slightly overlaps the lower jaw when in place as
45 shown in Fig. 2. Evidently the flanges, or strips 3 and 4 may be applied or made integral with the bottom plate of any suitable material. The cover-plate 8 and piece 5 will be secured to the bottom plate by screws, as
50 indicated, or by any other suitable means. The bottom plate 2 is provided at its upper end with an opening 9 in position to be concentric with the opening in the jaws for admitting a drilling tool. The jaws 12 are
55 preferably made rectangular and provided centrally at their meeting edges with semi-

circular openings or notches 13 having semi-circular shoulders 14, serving as a seat for supporting a disk, as 22, Fig. 1, while being drilled or bored. Different sets of jaws, hav-
60 ing openings and seats of different diameters may be provided as indicated in Figs. 3 and 4.

In the chamber 10 are pivoted a pair of levers 15, by pins 17, with their short, out-
65 wardly turned arms 16 in position to bear against the lower edge of the lower jaw 12, and with their long arms extending downward in position to be thrust outward into the recesses 3^a in the flanges 3. At the lower
70 end of the housing are connected a pair of hand levers 18 by pins 19 and having inwardly curved short arms 20 projecting between the ends of levers 15. Evidently, the operation of these hand levers in connection
75 with levers 15 will impart a powerful thrust upon the lower jaw 12 and a very slight movement will suffice to grip and securely hold a disk in the jaws. The operation of
80 engaging, or disengaging a disk can be quickly performed.

A disk being placed on the semicircular shoulders 14 and supported thereby, the hand-levers 18 will be contracted, causing the slidable jaw to grip and securely hold
85 the disk. It will now be subjected to the action of a boring bit, which will pass through it into the opening 9. The disk having been drilled or bored will be released but still supported by the shoulders, and by a turn of the
90 tool may be deposited in any desired receptacle.

The device may be modified in details of construction without departing from our in-
95 vention.

Having described our invention, what we claim and desire to secure by Letters Patent is:—

The combination with a housing having a guide-way, of a pair of jaws therein, one of
100 which is slidable, for holding an article, a pair of pivoted levers bearing at their short arms on the slidable jaw and a pair of hand-levers for actuating said jaw-levers, substantially, as described.
105

In testimony whereof we affix our signatures in presence of two witnesses.

FRANK H. OAKMAN.
HENRY A. AXTELL.

Witnesses:

G. W. HALLIGAN,
H. G. HOYT.