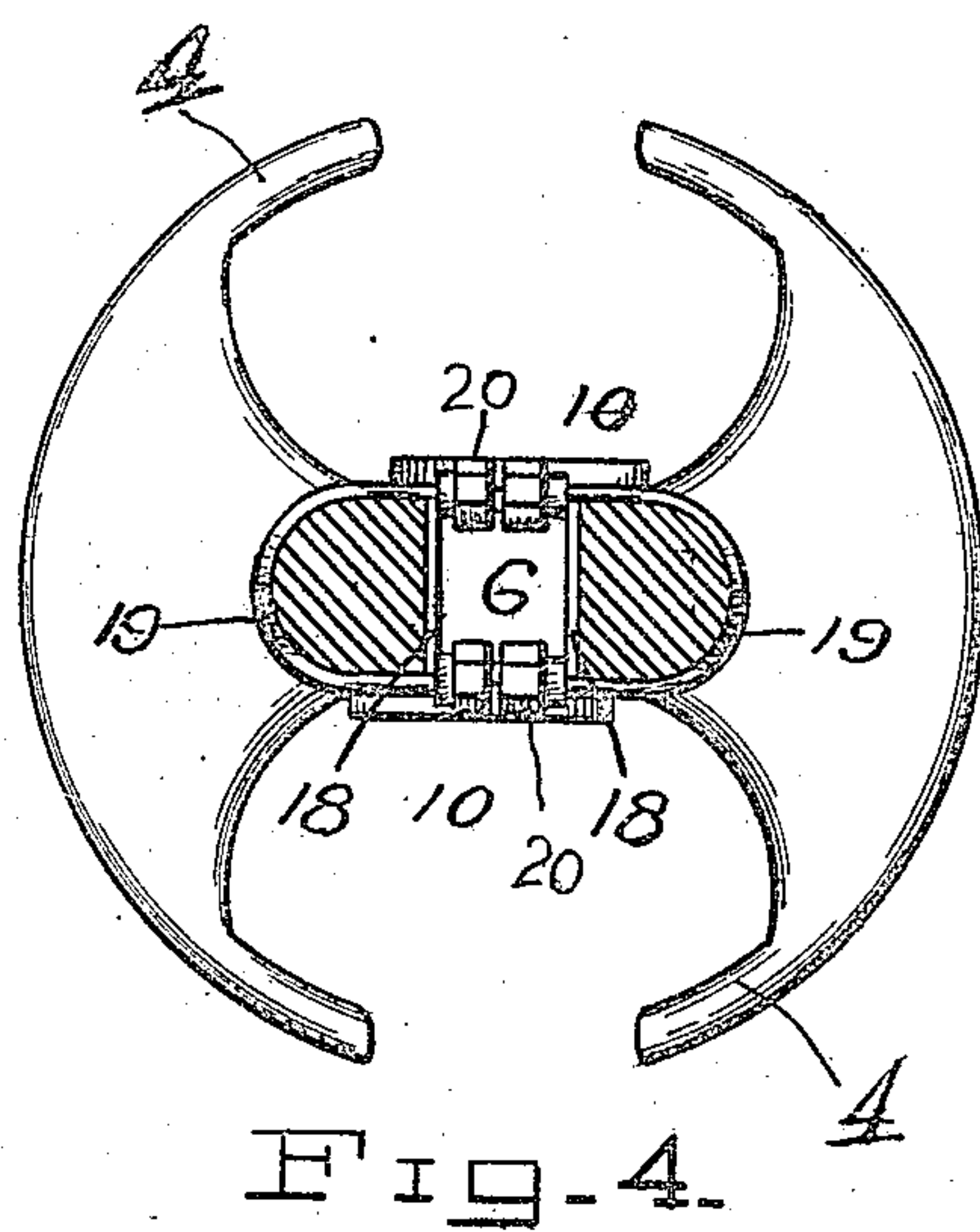
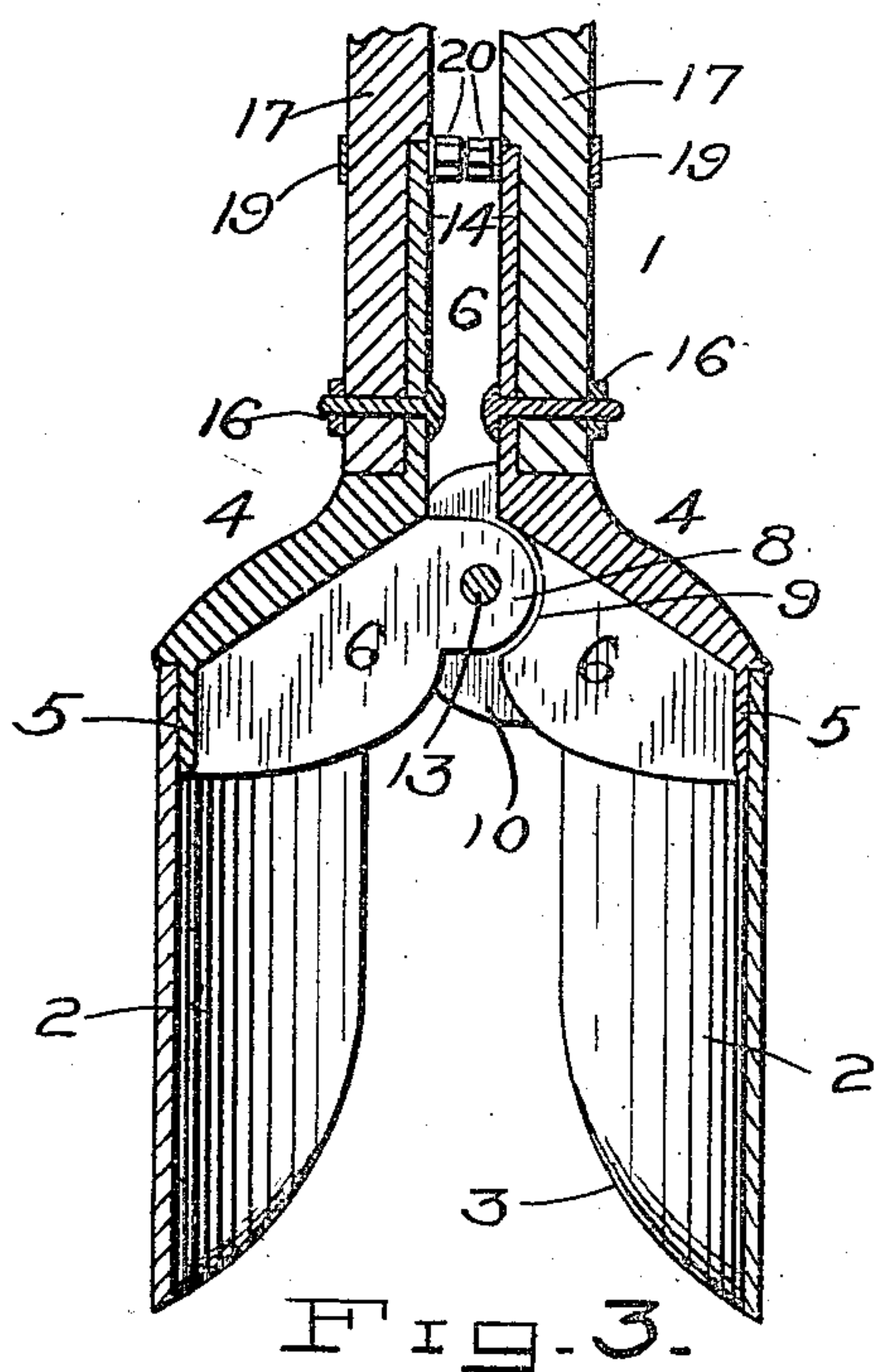
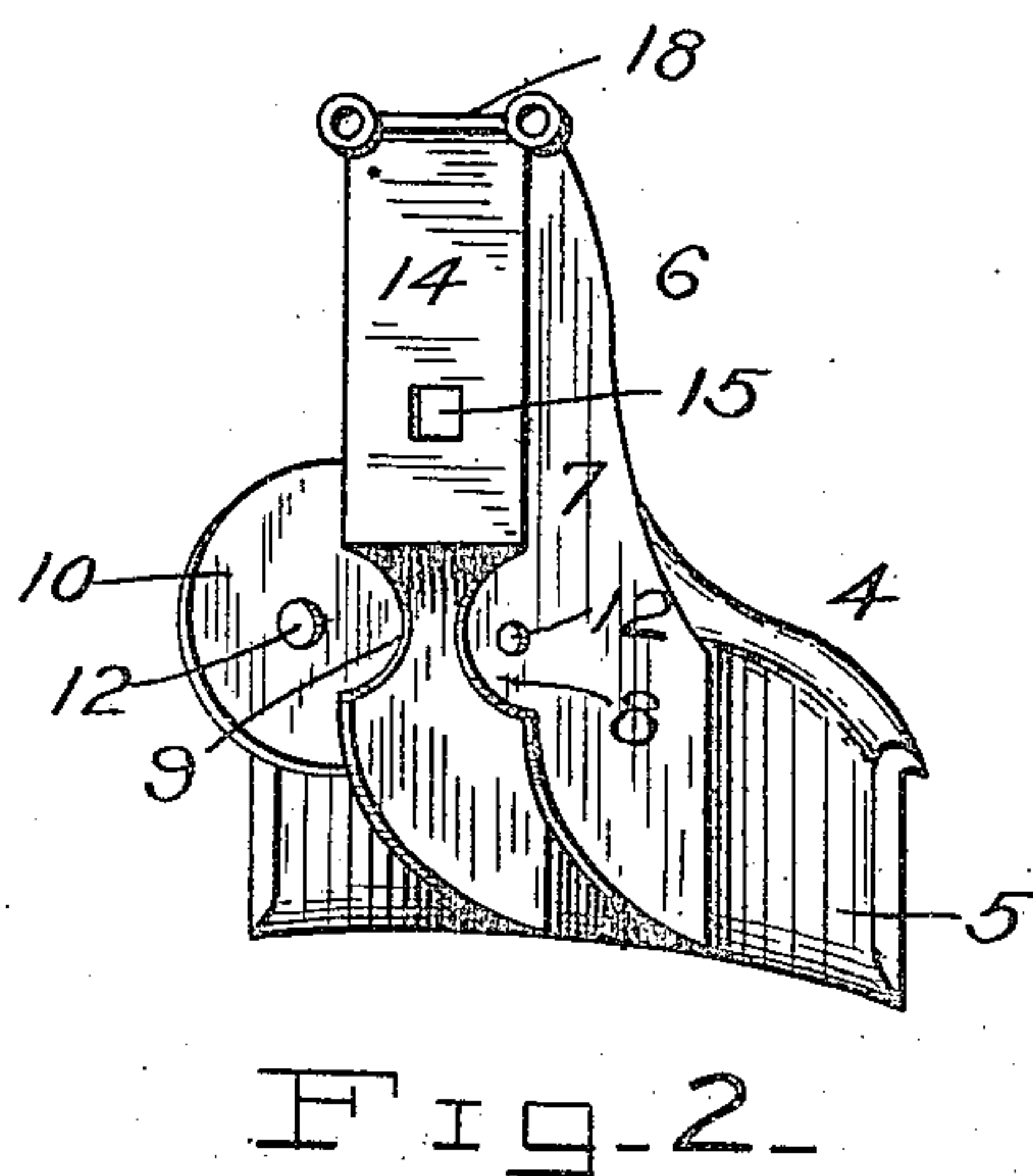
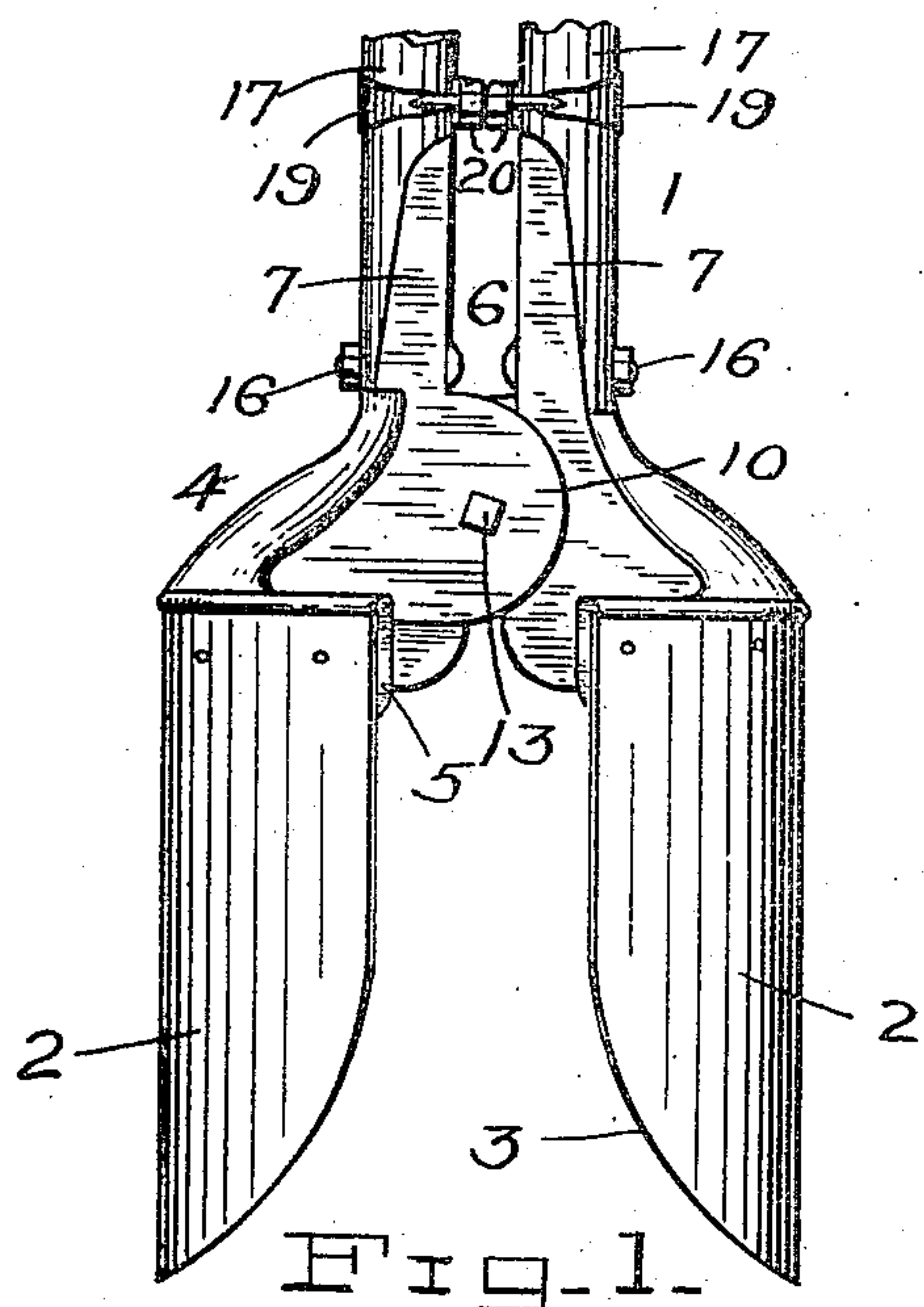


No. 843,765.

PATENTED FEB. 12, 1907.

W. B. NICHOLSON.
POST HOLE DIGGER.

APPLICATION FILED JULY 26, 1906.



Witnesses

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UNITED STATES PATENT OFFICE.

WAYLAND B. NICHOLSON, OF HOLLY, MICHIGAN.

POST-HOLE DIGGER.

No. 843,765.

Specification of Letters Patent.

Patented Feb. 12, 1907.

Application filed July 26, 1906. Serial No. 327,869.

To all whom it may concern:

Be it known that I, WAYLAND B. NICHOLSON, a citizen of the United States, residing at Holly, in the county of Oakland and State of Michigan, have invented certain new and useful Improvements in Post-Hole Diggers; and I do 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.

This invention relates to improvements in post-hole diggers.

The object of the invention is to provide a post-hole digger having an improved construction of blade attaching and supporting devices and an improved hinged connection for said supporting devices, whereby a strong and durable joint is formed to permit the digging-blades to be opened and closed for the removal and discharge of the dirt from the hole being dug, means being provided whereby the knuckles of the operator will be prevented from striking when the handles of the digger are brought together in opening the blades.

With the above and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side view of a post-hole digger constructed in accordance with the invention. Fig. 2 is a perspective view of the inner side of one of the blade-supports, showing the construction of the joint and the handle-attaching shank. Fig. 3 is a central vertical sectional view through the lower ends of the handles, the blades, and their supporting or attaching devices, showing the manner in which the parts of the joint are assembled; and Fig. 4 is a horizontal sectional view taken through the handles above the shank-attaching clip.

Referring more particularly to the drawings, 1 denotes the digger, which comprises a pair of curved or semicylindrical digging-blades 2, the lower ends of which are rounded or curved, as shown at 3. The blades 2 are riveted or otherwise attached at their upper ends to supports or attaching devices 4.

The attaching devices or supports 4 consist of segmental plates 5, to which the upper ends of the blades are riveted. The plates 5 have formed thereon midway between their ends inwardly and upwardly projecting han-

dle-engaging shanks 6, said shanks consisting of parallel side plates 7, one of which has formed on its inner edge an inwardly-projecting segmental hinge member 8, while the opposite side is provided with a segmental recess 9 to receive the segmental lug 8 of the shank on the opposite plate-support. On the side of the shank having the recess 9 is formed an inwardly-projecting semicircular side plate or flange 10, adapted to overlap the adjacent side of the shank on the opposing blade-support. Through the segmental lugs 8 and the side plates or flanges 10 of each of the shanks 6 are formed aligned bolt-holes 12, through which is adapted to be inserted a hinge-bolt 13, by means of which the blade-supports of the digger are pivotally connected together.

The upper portions of the side pieces 7 of the attaching-clamps are connected together by an integrally-formed base-plate 14, in which near its lower end is formed a centrally-disposed square aperture 15 to receive the squared end of bolts 16, which are passed therethrough and through the lower ends of the handles 17, which are inserted into said shanks between the side pieces 7 thereof, as shown. On the upper ends of each of the shanks 6 are formed clip-ties 18, in the opposite ends of which are formed apertures through which are adapted to project the threaded ends of clips 19, which are passed around the handles 17 at the upper ends of the shanks 6. The inwardly-projecting threaded ends of the clips have screwed thereon nuts 20, by means of which the shanks 6 are firmly secured to the handle without the necessity of passing bolts through the latter, and thereby weakening or decreasing the strength at the points where the greatest strain is located, thus greatly increasing the strength of the digger. The nuts 20 on the opposite shanks are adapted to engage when the handles are brought together to open the blades, thereby forming bumpers which limit the inward movement of the handles, and thereby prevent the knuckles of the operator from striking together when gripping the handles.

A post-hole digger having a double knuckle-joint formed as herein shown and described will be strong and durable, and by providing the joint with overlapping side plates any lateral movement of the shanks on which the joint is formed will be obviated, thus preventing any wobbling or lost motion

of the handles or of the digging-blades, and by providing the blade-supports with attaching devices such as herein shown and described the strength of the digger is materially increased.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention as defined by the appended claims.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A post-hole digger comprising a pair of attaching-supports, blades secured to said supports, handle-engaging shanks formed integral with the latter, a double knuckle-joint arranged on said shanks, means to prevent a lateral movement of the latter, and means to securely clamp the handles of the digger thereto, substantially as described.

2. A post-hole digger comprising a pair of digging-blade supports, consisting of segmental blade-attaching plates, inwardly and upwardly projecting handle-engaging shanks, said shanks comprising parallel side plates, one of which has formed thereon a segmental lug forming a hinge member, the companion plate having formed therein a segmental recess to receive the segmental lug of the shank of the opposing blade-support, a pivot-bolt arranged in alined apertured in said lugs, means to prevent lateral movement of said shanks and handle-engaging clips arranged on the upper ends of the latter, substantially as described.

3. A post-hole digger comprising a pair of digging-blade supports consisting of segmental blade-attaching plates, inwardly and upwardly projecting handle-engaging shanks, said shanks comprising parallel side plates, one of which has formed thereon a segmental lug forming a hinge member, the companion

plate having formed therein a segmental recess to receive the segmental lug of the shank of the opposing blade-support, semicircular side plates formed on the recessed side plate of the shanks to overlap the engaging side plate of the opposing shank, a pivot-bolt arranged through alined openings in said lugs and overlapping plates, a socket formed in the upper ends of said shanks to receive the lower end of handle-bars, bolts to secure the lower ends of said handles in said sockets, and means to clamp the upper ends of the shanks to the handles, substantially as described.

4. A post-hole digger comprising a pair of digging-blade supports consisting of segmental blade-attaching plates, inwardly and upwardly projecting handle-engaging shanks, said shanks comprising parallel side plates, one of which has formed thereon a segmental lug forming a hinge member, the companion plate having formed therein a segmental recess to receive the segmental lug of the shank of the opposing blade-support, semicircular side plates formed on the recessed side plate of the shanks to overlap the engaging side plate of the opposing shank, a pivot-bolt arranged through alined openings in said lugs and overlapping plates, integrally-formed base-plates to connect the inner edges of the sides of said shank thereby forming a handle-engaging socket, said base-plates having formed therein near their lower ends centrally-disposed bolt-holes, securing-bolts passed through said holes and the lower ends of the handles of the digger, clip-ties formed integral with the upper ends of said shanks, handle-engaging clips arranged in said ties, and nuts adapted to be screwed onto the threaded ends of said clips, said nuts forming bumpers to limit the inward movement of the handle-bars, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

WAYLAND B. NICHOLSON.

Witnesses:

HOMER L. HALSTEAD,
H. W. NICHOLSON.