G. W. & J. B. GERHART.

CRANE AND BLOCK FOR DREDGE BOATS.

APPLICATION FILED OCT. 18, 1904.

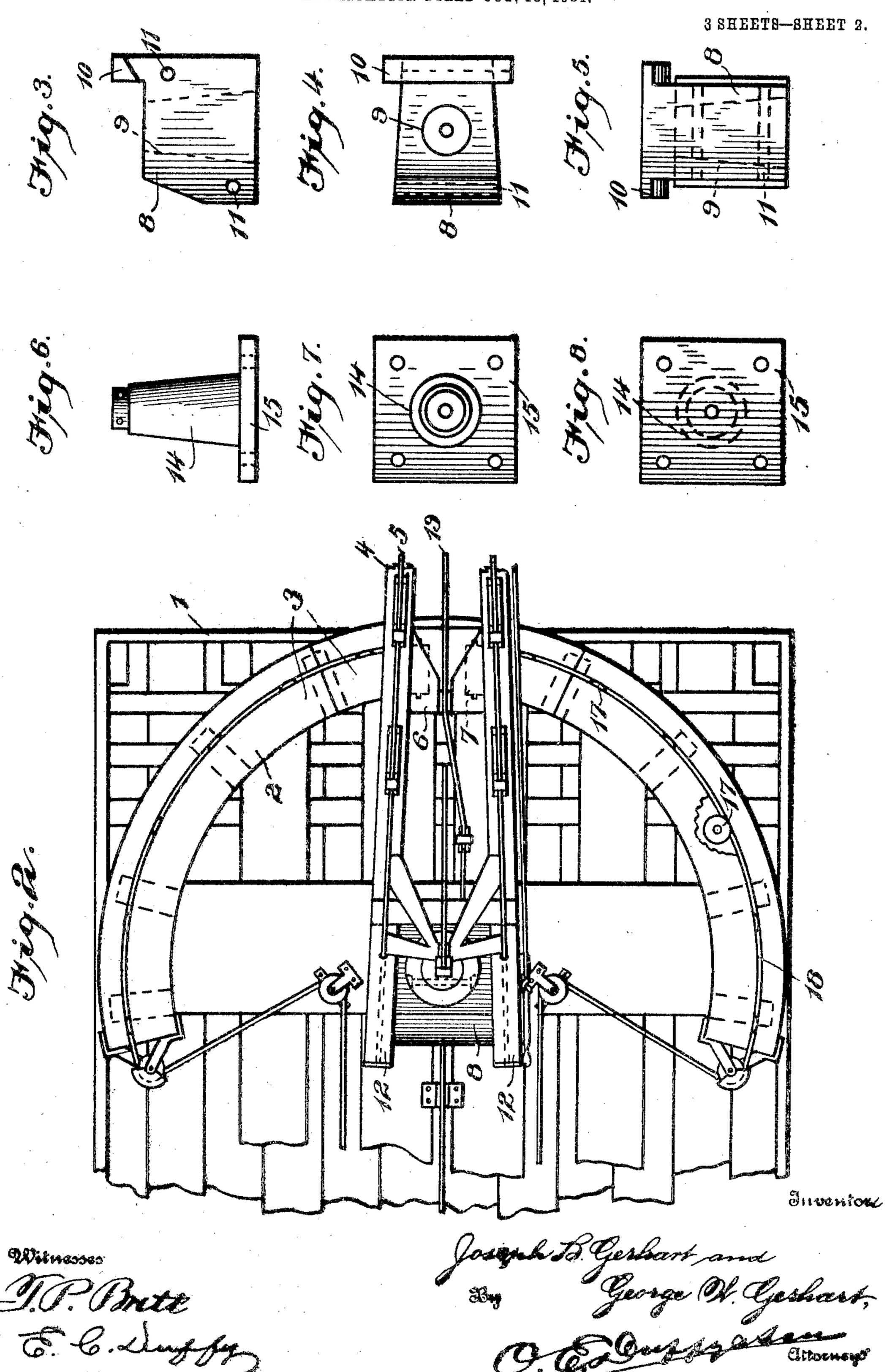
3 SHEETS-SHEET 1.

PHOTO-UTPOGNAPHED MY SACHETTA WILHELMS LITHO & FT 3.00 DEW YORK

G. W. & J. B. GERHART.

CRANE AND BLOCK FOR DREDGE BOATS.

APPLICATION FILED OCT, 18, 1904.

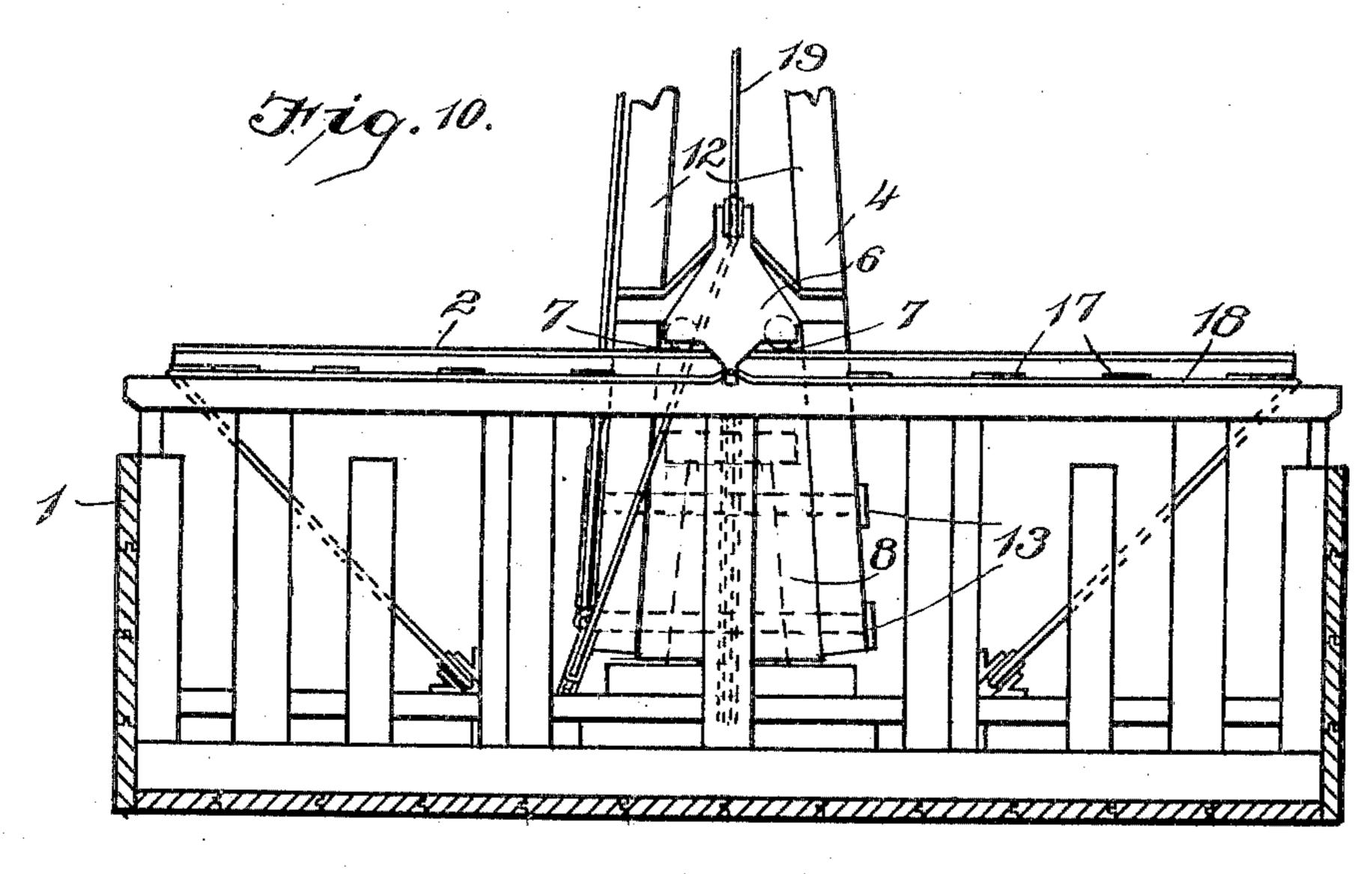


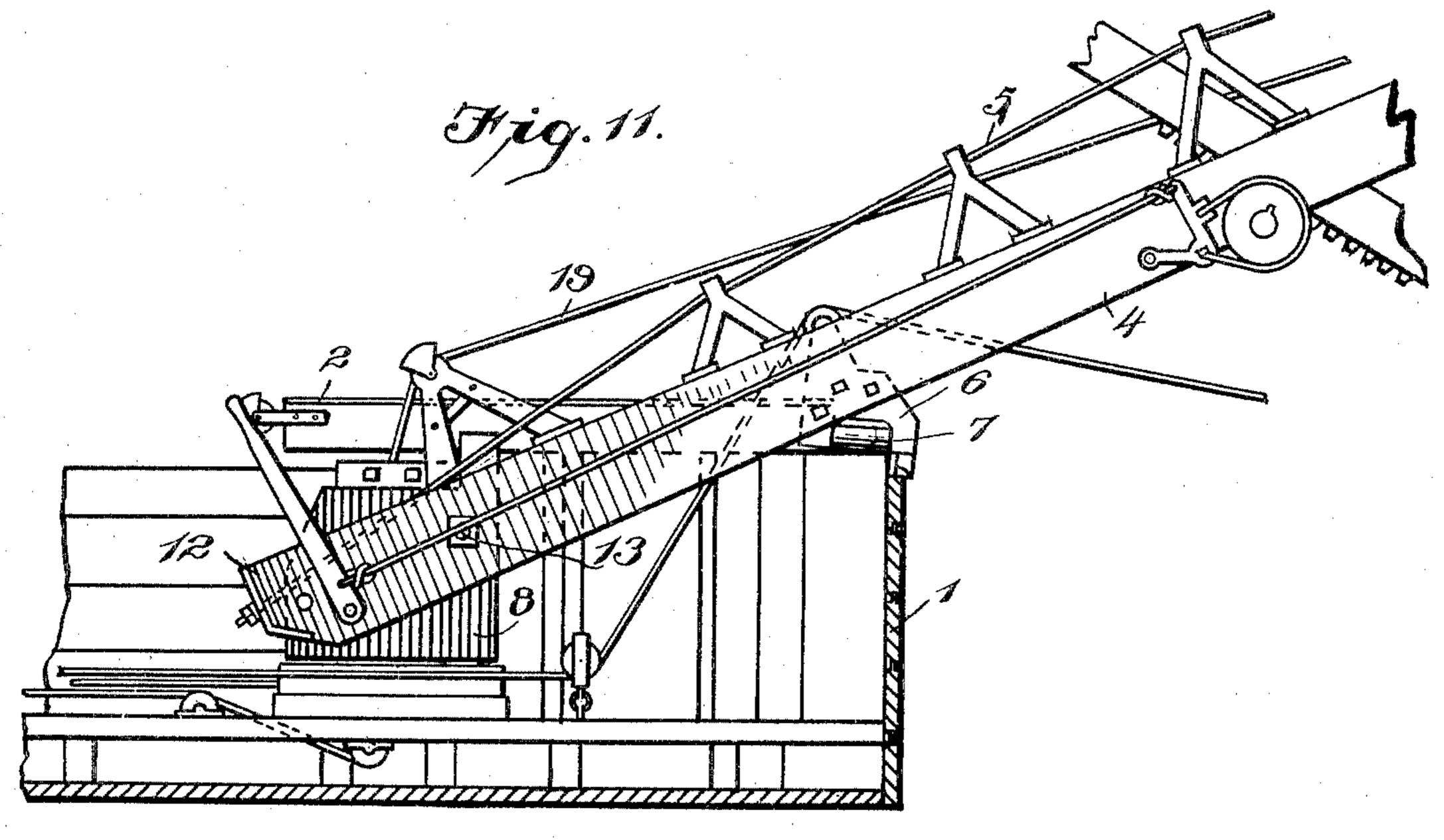
PROTO LITHOGRAL RED BY SAC CATA WICHELMS LITHO & PTG.CO. NEW YORK

G. W. & J. B. GERHART. CRANE AND BLOCK FOR DREDGE BOATS.

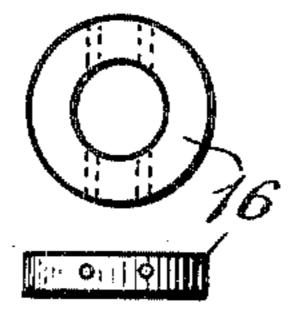
APPLICATION FILED OCT. 18, 1904.

3 SHEETS-SHEET 3.





Hig.3.



Witnesses

United States Patent Office.

GEORGE W. GERHART AND JOSEPH B. GERHART, OF LAWRENCE COUNTY, ILLINOIS.

CRANE AND BLOCK FOR DREDGE-BOATS.

SPECIFICATION forming part of Letters Patent No. 789,322, dated May 9, 1905.

Application filed October 18, 1904. Serial No. 229,022.

To all whom it may concern:

Be it known that we, George W. Ger-HART and JOSEPH B. GERHART, citizens of the United States, residing in Lawrence county, 5 State of Illinois, have invented a new and useful Crane and Block for Dredge-Boats, of which the following is a specification.

Our invention relates to cranes for dredgeboats, and has for its object to provide a deto vice of the class wherein the crane can be lowered at will in order to pass under ob-

structions, such as bridges, &c.

A further object of our invention is to provide a crane for dredge-boats in which the 15 crane travels on and is supported by a segmental track.

A further object of our invention is to do away with the A-frame commonly used on dredge-boats to support the weight of the

20 crane.

With these objects in view our invention consists in the novel construction of the crane-supporting parts and also in certain combinations of parts, which will be first 25 fully described and afterward specifically pointed out in the appended claims.

Referring to the accompanying drawings, Figure 1 is a side elevation of the crane, the boat and track being shown in section. Fig. 30 2 is a top plan view of same. Fig. 3 is a side elevation of the crane pivot-block. Fig. 4 is a top plan view of same. Fig. 5 is a front elevation of same. Fig. 6 is an elevation of the crane-block pivot-pin. Fig. 7 is a 35 top plan of same. Fig. 8 is a bottom plan of same. Fig. 9 is a top plan and side elevation of the crane-block-holding ring; and Fig. 10 is a front elevation of crane and track, the front or bow of the boat being removed. Fig. 40 11 is a side elevation showing crane dropped down.

Like numerals of reference indicate the same parts throughout the several figures, in

which—

1 indicates the boat, and 2 indicates a segmental track, which is suitably supported in the front or bow of the boat. Said track is made up of sections 3, any one of which may be removed, and the sections may be covered | isting conditions, and we do not wish to be

with a suitable sheet metal, or, in fact, the 50 sections themselves may be constructed of metal, if desired.

4 indicates the crane, which may be of any desired construction, but preferably as shown

and having a truss 5.

A suitable bracket 6 is secured to the crane, and rollers 7 are carried in said bracket, said rollers being designed to travel on the track 2, as shown.

8 indicates the crane pivot-block, which, 60 as shown in Figs. 3, 4, and 5, is provided with a tapered bore 9, two projecting crane-supporting lugs 10 on the top thereof, and 2 preferably transverse bolt-holes 11. The two arms 12 of the crane straddle this block and 65 are bolted thereto by through-bolts 13, as shown in Fig. 1.

14 indicates the crane-block pivot-pin, which, as shown in Figs. 6, 7, and 8, is tapered and formed with a base 15, constructed 7° so as to be bolted to the bottom timbers of the boat. A securing-ring 16 is provided for securing the crane pivot-block on the pivotpin by transverse bolts passing through the pivot-pin and securing-ring.

Located in the track 2 are a series of rollers 17, over which the crane-controlling cables 18 pass, said cables being secured to the bracket 6 on the crane, said controlling-cables leading aft to be operated in any suit- 80 able manner.

The bucket-operating cable 19 passes through the center of the crane-block pivotpin and leads aft, so that the pull is always

direct. Having thus described the several parts of our invention, its operation is as follows: In order to lower the crane, one of the bolts 13 is removed from the crane and crane pivotblock and one of the track-sections 3 is re- 90 moved, which allows the crane to drop down, as shown in Fig. 11; but should this not lower the crane sufficiently the remaining bolt can be removed and the crane carried aft and laid flat on the boat.

The means for operating the crane may be altered or varied at will in order to meet ex-

understood as limiting ourselves to the exact construction as herein set forth, as various slight changes may be made therein by those skilled in the art, and we consider ourselves 5 clearly entitled to all such changes and modifications.

What we claim as our invention, and desire to secure by Letters Patent of the United

States, is—

1. In a crane for dredge-boats, the combination with the crane and pivoting means, of a segmental track for supporting said crane, said segmental track being made up of removable sections, substantially as described.

2. In a crane for dredge-boats, the combination with the crane and pivoting means, of a segmental track for supporting said crane, said track being constructed so as to allow the crane to be lowered, substantially as de-20 scribed.

3. In a crane for dredge-boats, the combination with the crane and pivoting means, of a segmental track, for supporting said crane, and rollers carried on said crane to run on said track, substantially as described.

4. In a crane for dredge-boats the combination with the crane, of a crane pivot-block to which said crane is secured, and a craneblock pivot-pin constructed to receive said grane pivot-block, substantially as described. 30

5. In a crane for dredge-boats, the combination with the crane, of a crane pivot-block to which said crane is secured and a craneblock pivot-pin constructed to receive said crane pivot-block and provided with a cen- 35 tral opening through which the bucket-operating cable passes, substantially as described.

In testimony whereof we have signed our names in the presence of two subscribing wit- 40 nesses.

> GEORGE W. GERHART. JOSEPH B. GERHART.

Witnesses: I. E. Townsley, THOMAS B. COULTER.