

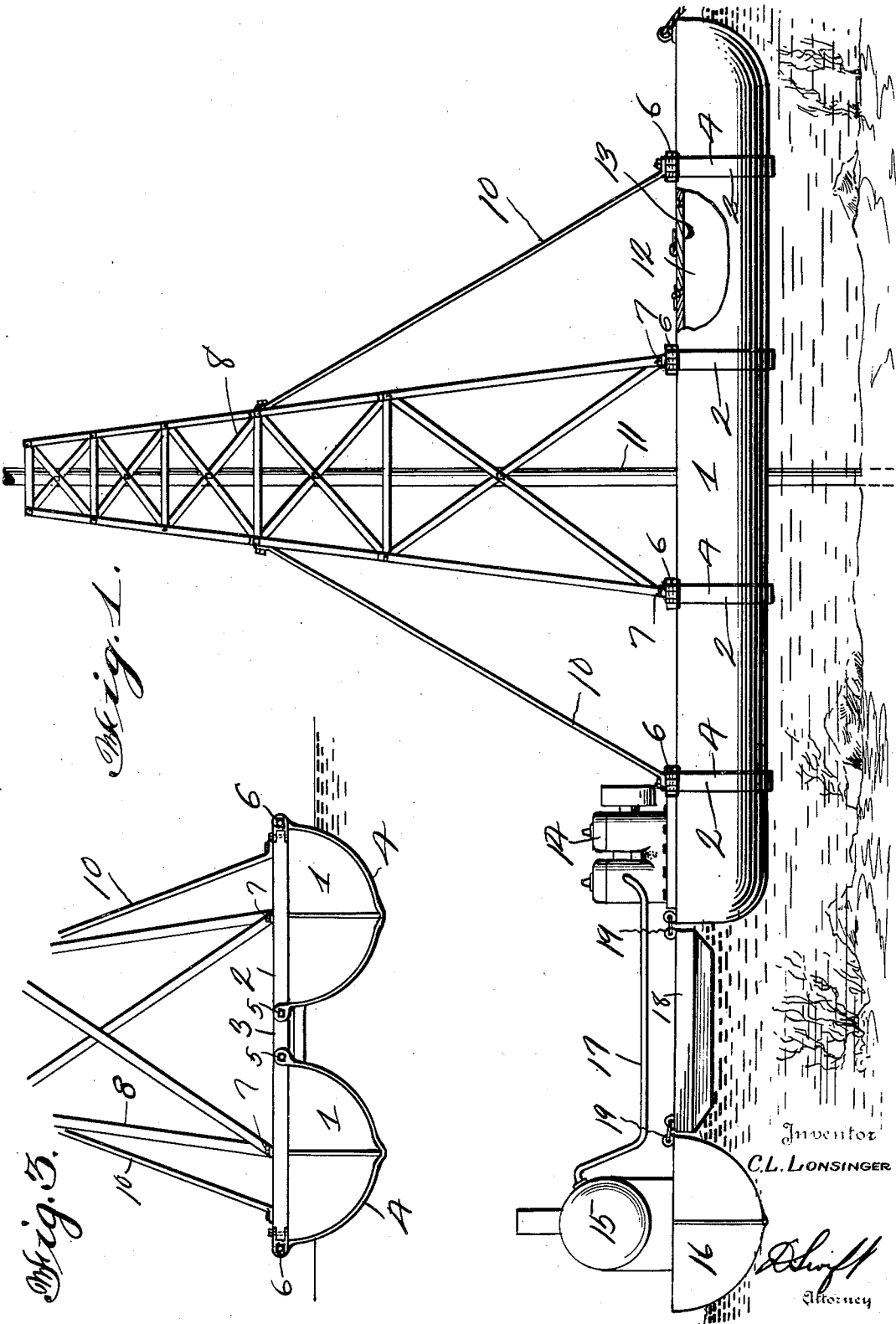
Oct. 9, 1923.

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PONTON SUPPORTED DERRICK

Filed Aug. 22, 1922

2 Sheets-Sheet 1



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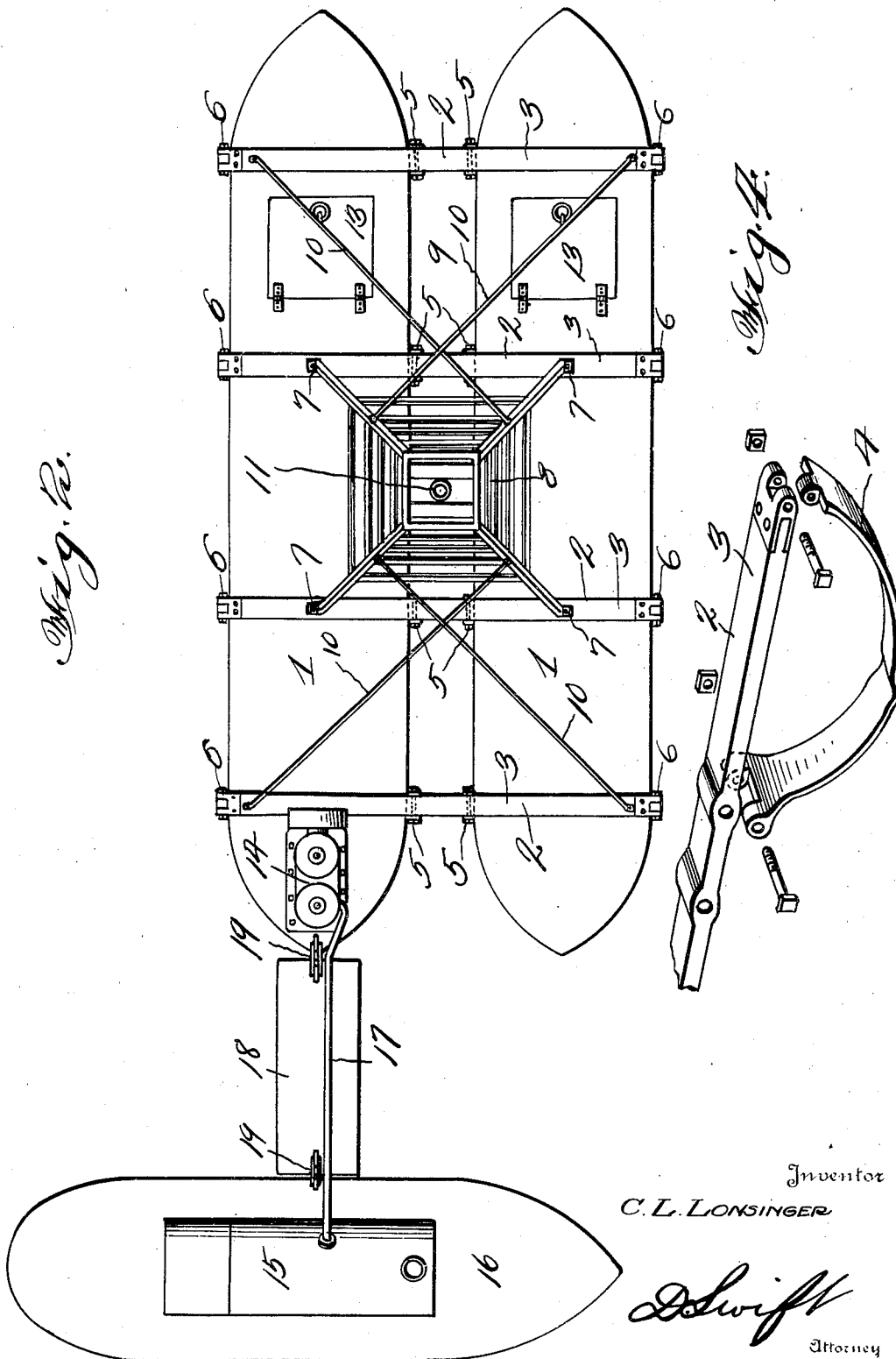
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UNITED STATES PATENT OFFICE.

CHARLES L. LONSINGER, OF WALHONDING, OHIO.

PONTOON-SUPPORTED DERRICK.

Application filed August 22, 1922. Serial No. 583,547.

To all whom it may concern:

Be it known that I, CHARLES L. LONSINGER, a citizen of the United States, residing at Walhonding, in the county of Coshocton, State of Ohio, have invented a new and useful Pontoon-Supported Derrick; 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.

The invention relates to pontoon supported derricks, and has for its object to provide a derrick particularly adapted for use for drilling oil wells, said derrick being of a knock-down type, thereby allowing the same to be stored within the pontoon.

A further object is to provide a derrick support comprising spaced pontoons in parallel relation to each other, said pontoons being provided with yoke members for rigidly connecting the pontoons together. The derrick is supported centrally between the pontoons with its supports and braces attached to the upper sides of the yokes. The pontoons form means for preventing swaying of the derrick during the drilling or casing driving operation and also forming a support for the derrick, which when the derrick is disassembled, and the pontoons separated, may pass through narrow places such for instance as canals, under bridges, or may be easily shipped over land.

A further object is to provide one end of one of the pontoons with an engine adapted to be utilized during a well drilling operation. The power for said engine is obtained from a pipe leading to a boiler located on a separate pontoon located at a remote point from the derrick, thereby obviating explosions and fire incident to the well drilling operation.

With the above and other objects in view the invention resides in the combination and arrangement of parts as hereinafter set forth, shown in the drawings, described and claimed, it being understood that changes in the precise embodiment of the invention may be made within the scope of what is claimed without departing from the spirit of the invention.

In the drawing:—

Figure 1 is a side elevation of the pontoon supported derrick, showing a boiler supported on a separate pontoon.

Figure 2 is a top plan view of the device.

Figure 3 is an end view of the pontoon showing a portion of the derrick.

Figure 4 is a detail perspective view of one end of one of the yokes.

Referring to the drawings, the numeral 1 designates spaced pontoons which are in parallel relation to each other. The pontoons 1 are held in spaced parallel relation by means of yokes 2, which extend transversely of the pontoons. Each yoke 2 comprises a transversely disposed bar 3, which engages the upper sides of the pontoons 1 and segmentally shaped members 4, which engage under the bottoms of the pontoons and have their ends detachably connected at 5 and 6 adjacent the inner and outer sides of the pontoons, thereby rigidly holding the pontoons in spaced parallel relation. Detachably connected at 7 to the central transversely disposed bars 3 is a derrick 8 of a knock-down type, which derrick is centered over the space 9 between the pontoons 1 and is also centered in relation to the ends of the pontoons, thereby preventing listing of the pontoons and consequent leaning of the derrick. The derrick is braced by brace rods 10, which are detachably connected to the derrick and to the outer bars 3. It will be seen that by providing spaced pontoons for supporting the derrick that vibrations of the derrick will be reduced to a minimum during the drilling operation, or when a casing 11 is being driven, thereby facilitating the operation. It will also be seen that a wide supporting base is formed for the derrick, which supporting base will prevent swaying of the derrick, and at the same time when the derrick is disassembled and placed in one of the holds 12 of the pontoons through the hatches 13 that is, after the yokes 2 have also been disassembled and stored in the holds 12, the pontoons may be easily moved through narrow places, such for instance as canals, or under bridges, and particularly through shoal water, and if so desired shipped over land.

Disposed on one end of one of the pontoons 1 is a steam engine 14, which engine may be utilized for operating mechanism during the drilling or casing driving or pulling operation. The engine 14 is supplied with steam from a boiler 15 located on a pontoon 16, which is remote to the derrick 8, thereby preventing ignition of gases and consequent explosion and fire, the ignition of the gases being caused by fire under

the boiler 15. Steam passes from the boiler 15 to the engine 14 through the pipe 17, which pipe passes over a small pontoon 18 which is connected at 19 to the pontoon 16 and to one of the pontoons 1. Pontoon 18 forms a walkway over which workmen may pass to and from the pontoon 16.

From the above it will be seen that pontoon supported derrick is provided which is simple in construction, and that may be easily shifted or moved bodily as a whole from place to place or may be easily disassembled for shipping or storage purposes, and that the pontoon will prevent swaying or moving of the derrick, and at the same time when the derrick is disassembled and stored within the pontoons, said pontoons may be passed through canals and other narrow waterways.

The invention having been set forth what is claimed as new and useful is:—

1. The combination with a well derrick, of means for supporting said derrick on water, said means comprising a base, said base being formed from spaced pontoons in parallel relation to each other, said pontoons having their upper sides flat and their under sides convexed, transversely disposed yokes connecting said pontoons together, said yokes

comprising bars engaging the upper flat sides of the pontoons, segmentally shaped members arching the undersides of the pontoons, the ends of said segmentally shaped members being detachably connected to the bars adjacent the sides of the pontoons.

2. A well drilling derrick adapted to be supported on water, spaced pontoons in parallel relation to each other, the upper side of the pontoons being flat, transversely disposed bars disposed on the upper flat sides of the pontoons and extending across both pontoons, U-shaped bands arching the undersides of the pontoons and having their ends detachably connected to the bars adjacent the opposite sides of the pontoons, said derrick being centrally disposed on the base formed by the pontoons and detachably connected to the transversely disposed bars, and brace members detachably connected to the derrick and to the transversely disposed bars adjacent the derrick.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES L. LONSINGER.

Witnesses:

EDWARD W. MILLER,
RUSSELL L. HAYS.