

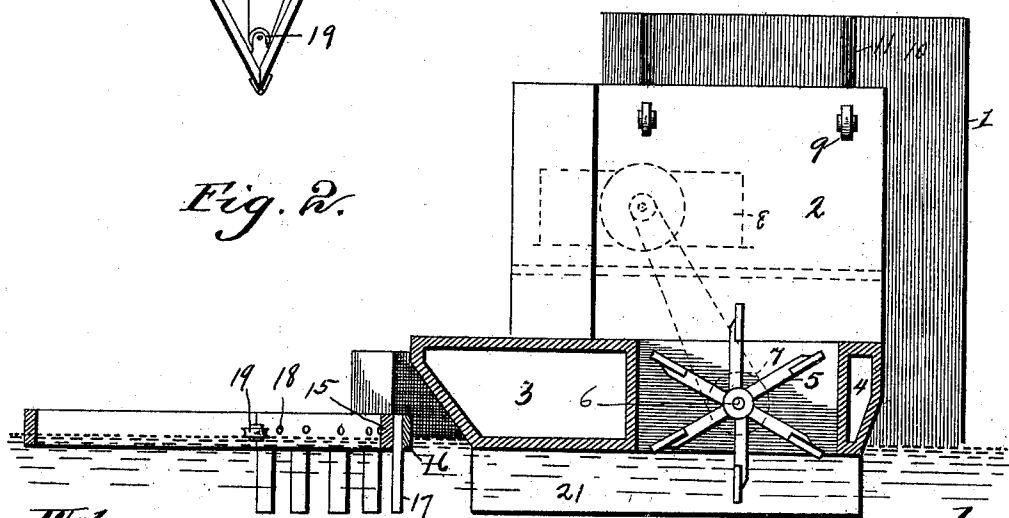
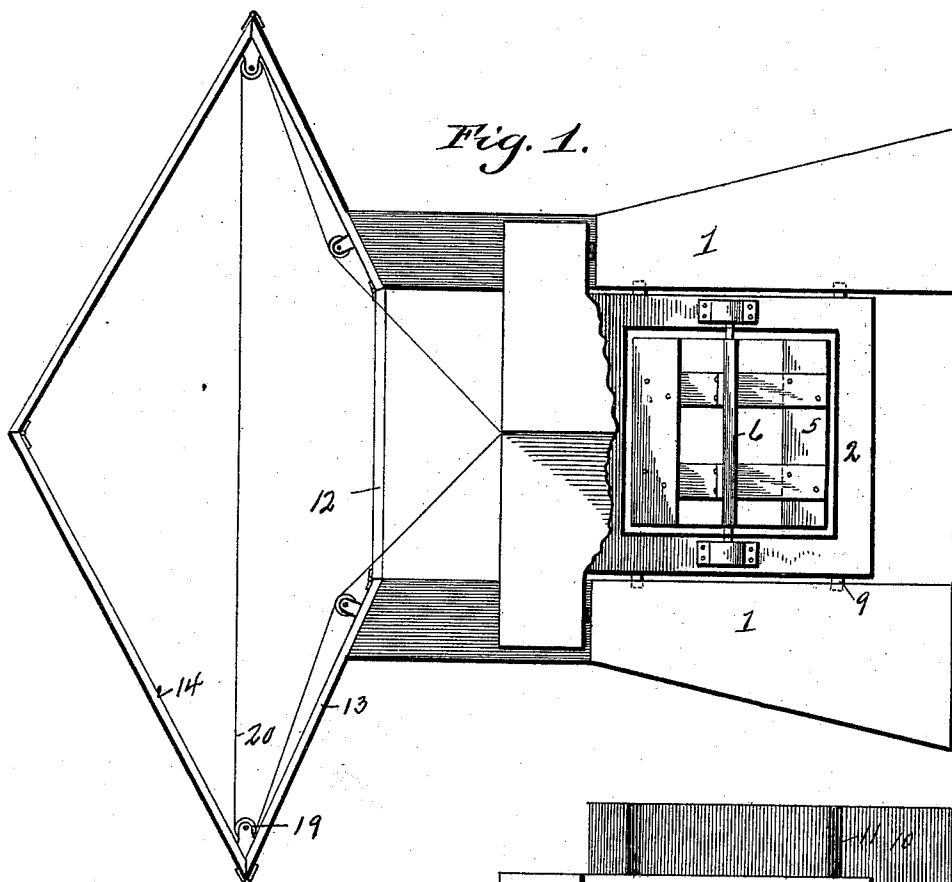
(No Model.)

2 Sheets—Sheet 1.

J. STICKEL.
FLOATING POWER HOUSE.

No. 603,929.

Patented May 10, 1898.



Witnesses:
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H. Appuman

Inventor
Jacob Stickel

(No Model.)

2 Sheets—Sheet 2.

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Fig. 3.

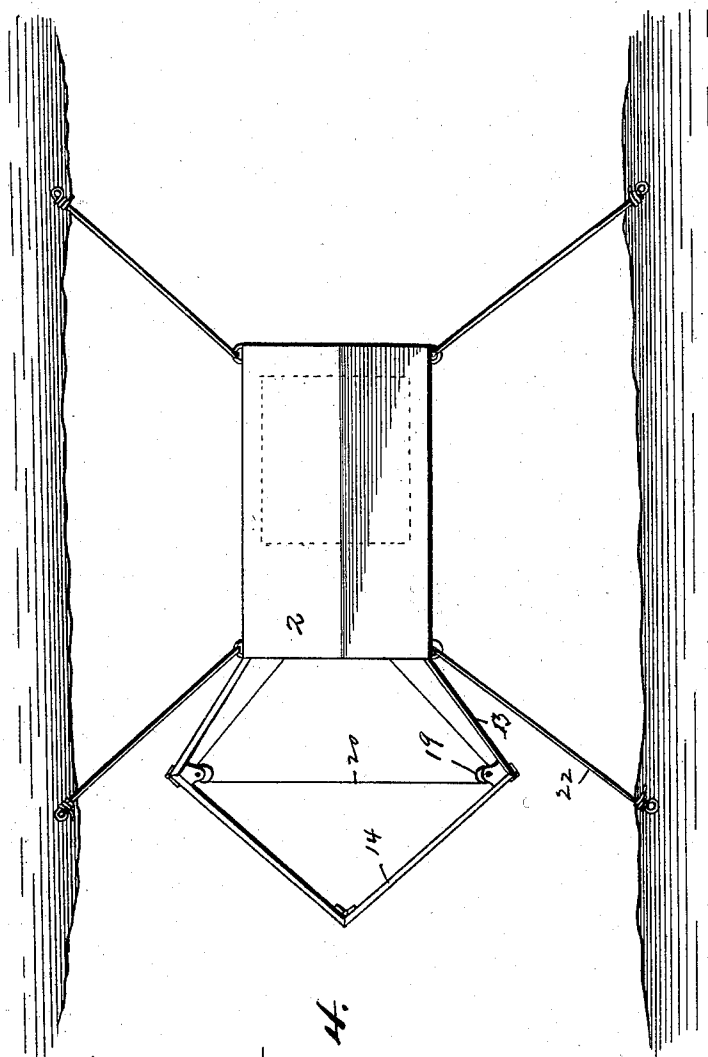
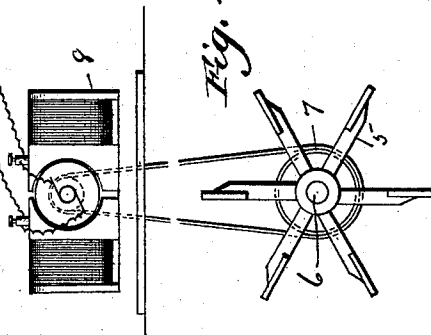


Fig. 4.

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UNITED STATES PATENT OFFICE.

JACOB STICKEL, OF WILLIAMSPORT, PENNSYLVANIA.

FLOATING POWER-HOUSE.

SPECIFICATION forming part of Letters Patent No. 603,929, dated May 10, 1898.

Application filed November 14, 1895. Renewed April 5, 1898. Serial No. 676,592. (No model.)

To all whom it may concern:

Be it known that I, JACOB STICKEL, a citizen of the United States, residing at Williamsport, in the county of Lycoming and State of Pennsylvania, have invented certain new and useful Improvements in Floating Power-Houses; 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.

This invention relates to improvements in power-houses, and especially to that class known as "floating" power-houses, the object being to arrange the same in a stream where the best water-power is obtainable for turning an undershot water wheel or turbine, whereby the construction of a dam and race is obviated.

A further object of the invention is to so arrange the said power-house and its supports that a minimum resistance is offered to the flow of the stream, this house and its supports being designed especially for the purpose of overcoming obstructions to the current, and, furthermore, in providing means for controlling and varying the flow, whereby a greater or less volume of water may be directed to the power-wheel.

Finally, the object of the invention is to produce a power-house of the above-referred-to class which shall possess advantages in points of simplicity, durability, and efficiency, being at the same time comparatively inexpensive to produce and sustain.

With these and other objects in view the invention consists in the novel details of construction, arrangement, and combination of parts to be hereinafter more fully set forth, and specifically pointed out in the claims.

In describing the invention detail reference is had to the accompanying drawings, forming part of this specification, wherein like characters of reference denote corresponding parts in the several views, in which—

Figure 1 is a top plan view showing one embodiment of my invention. Fig. 2 is a longitudinal sectional view taken centrally of Fig. 1. Fig. 3 is a plan view showing a power-house anchored from the bank. Fig. 4 is a view in elevation, showing the power-wheel and dynamo connected.

In the drawings, 1 denotes piers of masonry, which are arranged longitudinally of the stream, the ends pointing upstream being tapered, that the current may not be obstructed. The inner walls are parallel, and between them a floating power-house 2 is stationed, having air-compartments 3 and 4. Between the compartments a water-wheel 5 is arranged, mounted on a transverse shaft 6, to which is keyed a pulley 7, connected with the pulley of a dynamo 8. Antifriction-rollers 9 are secured in the sides of the house to bear against the walls 10 in the slots 11, the wheels serving to prevent the house coming in contact with the walls and serving also to hold the house in proper position with relation to the piers, as an anchorage is thereby provided.

The front of the house is provided with a sheer consisting of a transverse supporting-beam 12, with diverging arms 13 hinged thereto, and these arms in turn have other connecting-pieces 14, which are joined in a line centrally of the house by a hinge, that the whole, constituting a frame, may be adjusted to sheer the water and regulate the supply to the wheel, the front section 14 riding on the surface of the water to ward off drifts or the like which would injure the wheel, while the arms 13 consist of two pieces 15 and 16, with interposed strips 17, all connected by bolts 18. The strips 17 extend downward and form a partition to direct the water toward the wheel, and it will be understood that the said strips may lie side by side to produce a solid wall, or it may be arranged as shown in the drawings, such construction being a matter of detail. Pulleys 19 and rope 20 are connected with the several sections to enable the operator to adjust the sheer according to the requirements of the wheel.

In Fig. 3 I have shown a floating house, built as illustrated in Fig. 1, having a sheer duplicating that heretofore described; but in this construction I anchor the said house by cables 22, extending to the bank of the stream or bed of the stream. Thus the expense occasioned by building piers is obviated, and the location of the house may be readily changed by releasing its cables and allowing it to float, when it may be towed up or allowed to float downstream and be again anchored at will.

To the power-houses are secured bottom boards 21, longitudinally arranged at either side of the wheel and extending below the periphery of the wheel, that these boards may
5 act as supports for the house and prevent the wheel coming in contact with the bed of the stream when the water is low, and they also form a channel to direct the water to the wheel.

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

15 1. In combination with a floating power-house, a sheer consisting of a supporting-beam, formed of duplicate members, suitably-connected arms hinged to the supporting-beam, connecting-rails 14, hinged together and to the arms, downwardly-extending strips secured between the members of the arms,

suitable pulleys and a rope for varying the width of the sheer, as and for the purpose described.

2. In combination with a floating power-house, a frame in front thereof, arms hinged to the frame and having depending partitions extending into the water and an inverted-V-shaped screen hinged or pivoted to the arms and floating on the surface of the water, pulleys secured to the arms and screen and a rope for adjusting the arms as and for the
30 purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

JACOB STICKEL.

Witnesses:

WM. RUSSELL DEEMER,
I. E. PFEIFFER.