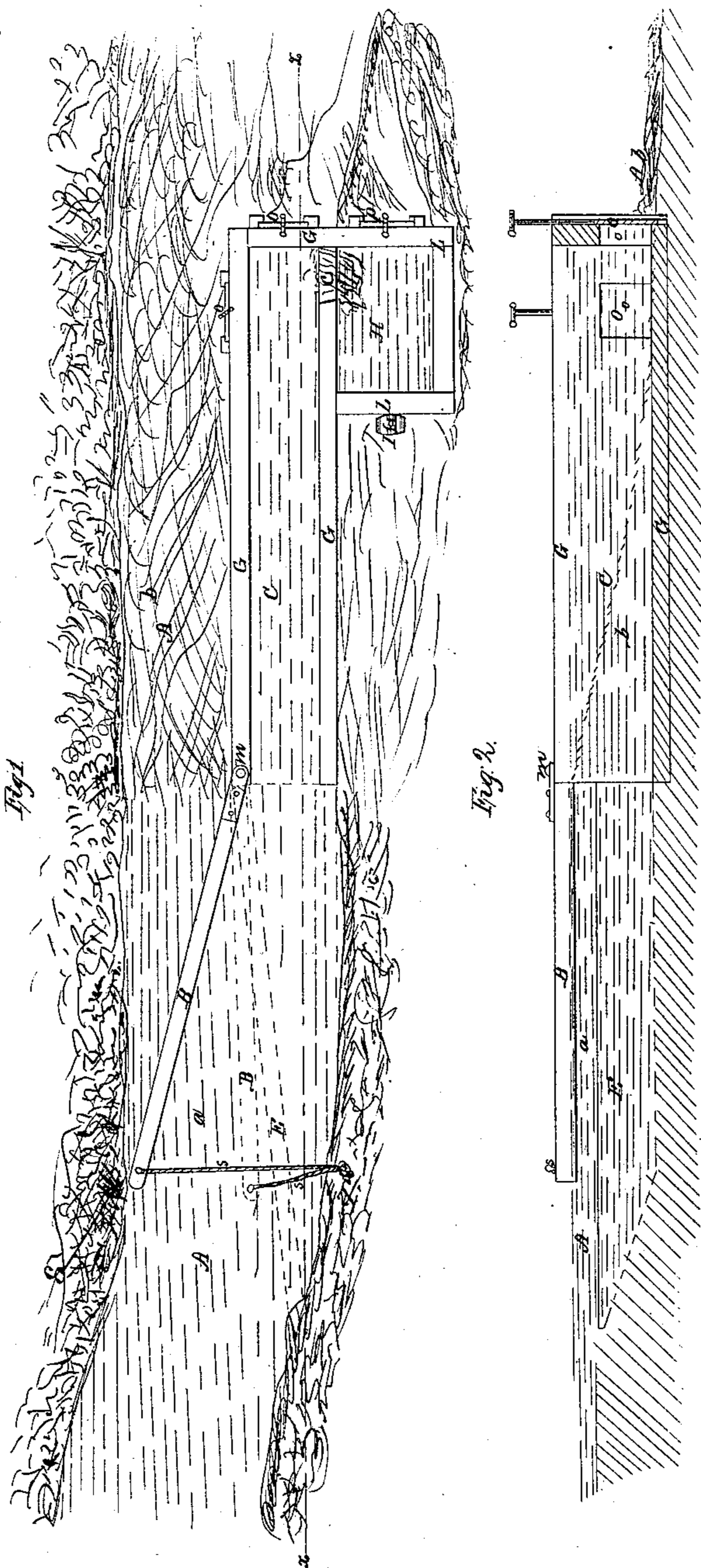


T. S. Scoville

Oil-Collecting Pump

N^o 48,841.

Patented July 18, 1865.



Witnesses.

*J. Ashford,
M. H. Wright,*

*Inventor
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UNITED STATES PATENT OFFICE.

THADDEUS S. SCOVILLE, OF WILLIAMSPORT, PENNSYLVANIA.

IMPROVEMENT IN APPARATUS FOR OBTAINING OIL FROM RUNNING STREAMS.

Specification forming part of Letters Patent No. 48,841, dated July 18, 1865.

To all whom it may concern:

Be it known that I, THADDEUS S. SCOVILLE, of Williamsport, in the county of Lycoming and State of Pennsylvania, have invented a new and Improved Apparatus for Collecting Oil from the Surfaces of Streams; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification—

Figure 1 being a plan or bird's-eye view of—or representing a portion of a stream with my improved apparatus applied thereto; Fig. 2, a vertical section in a plane indicated by the line *x x*, Fig. 1.

Like letters designate corresponding parts in both figures.

The object of my invention is to save the oil which, in the petroleum regions, wastes from the wells and tanks, and which, finally finding its way to the streams, is carried away floating on the surface thereof. The greater part of this oil, by accumulation, is found on navigable rivers, and in order to produce a practicable invention for its collection the apparatus must be so arranged as not to impede nor interfere with the navigation of the streams.

I select a portion of any stream, *A*, where there are rapids *b*, or a descent in the stream of sufficient depth—say a foot or more. At the head or in the upper part of the rapids a sort of dam or head-race, *G*, is constructed on one side of the stream, so as to leave the other side or main part of the stream open for free navigation. This head-race reaches up to still or smooth water *a*, above the rapids, substantially as shown in the drawings.

From the upper end, *m*, of the stream side of the head-race extends a sunken bar, *E*, (shown by red lines in Fig. 1,) generally to the side of the stream on which the head-race is constructed, close up to the bank, or sufficiently near thereto, and reaching down, or near enough to the bottom to control or stop the under current of the stream toward the race. The top of the bar may reach up within, say, from six inches to a foot of the surface of the water, so that as little of the water will run into the race with the oil as practicable.

The bar *E* and the head-race *G* may be made

of wood or of any other suitable material. Also, from the upper outer end, *m*, of the head-race an oil-gathering bar or boom, *B*, extends up on the smooth portion *a* of the stream far enough to reach over to the opposite bank, *S*, of the stream, substantially as shown in Fig. 1. This oil-gathering bar is most properly and conveniently hinged to the head-race at *m*, so that its upper end can be swung over the stream into any position desired, and a cord, *s*, or its equivalent, is attached to the upper end of the bar, whereby a person standing on the near bank, *T*, of the stream may draw the bar over toward that side of the stream—say into the position shown by dotted lines in Fig. 1—to allow boats to pass up and down the stream. Thus the navigation of the stream is not in the least impeded nor interfered with by the apparatus; but when boats are not passing, and when the oil is to be collected, the gathering-bar is allowed to swing close over to the bank *S*, in which position the current itself holds the bar. The bar, (generally a wooden beam,) by floating on the water, sinks below the surface thereof sufficiently to arrest all the oil on the surface, and thus conducts it into the head-race, where it accumulates on the surface of the water *O* therein.

Near the bottom of the head-race *G* one or more water-gates, *o o*, are located, and by hoisting these gates a little some of the water continually runs away, thereby keeping up a gentle current of water into the head-race from the stream above, so as to float the oil readily into the race; but these water-gates must not be opened so much as to drain or lower the water in the head-race.

From the head-race a spout or chute, *c*, conducts the oil and some of the water at the surface into a tank or reservoir; *H*, as in Fig. 1. A spigot, *f*, enables the oil to be drawn off from the surface of the tank-water into barrels, as at *I*, and another under water-gate, *P*, allows the surplus water to be let out of the tank.

The whole apparatus is simple, cheap, effective, and convenient.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of the swinging or movable oil-gathering boom *B*, oil-collecting race *G*,

with its under gate or gates *o* and chute *c*, and the oil-reservoir *H*, arranged substantially as and for the purpose herein specified.

2. In combination with the oil-gathering bar, the sunken channel-bar *E*, arranged and operating substantially as and for the purpose herein set forth.

The above specification of my improved ap-

paratus for collecting oil from the surface of streams signed by me this 10th day of December, 1864.

THAD. S. SCOVILLE.

Witnesses:

JAMES H. POLLOCK,
GEO. A. CRAMER.