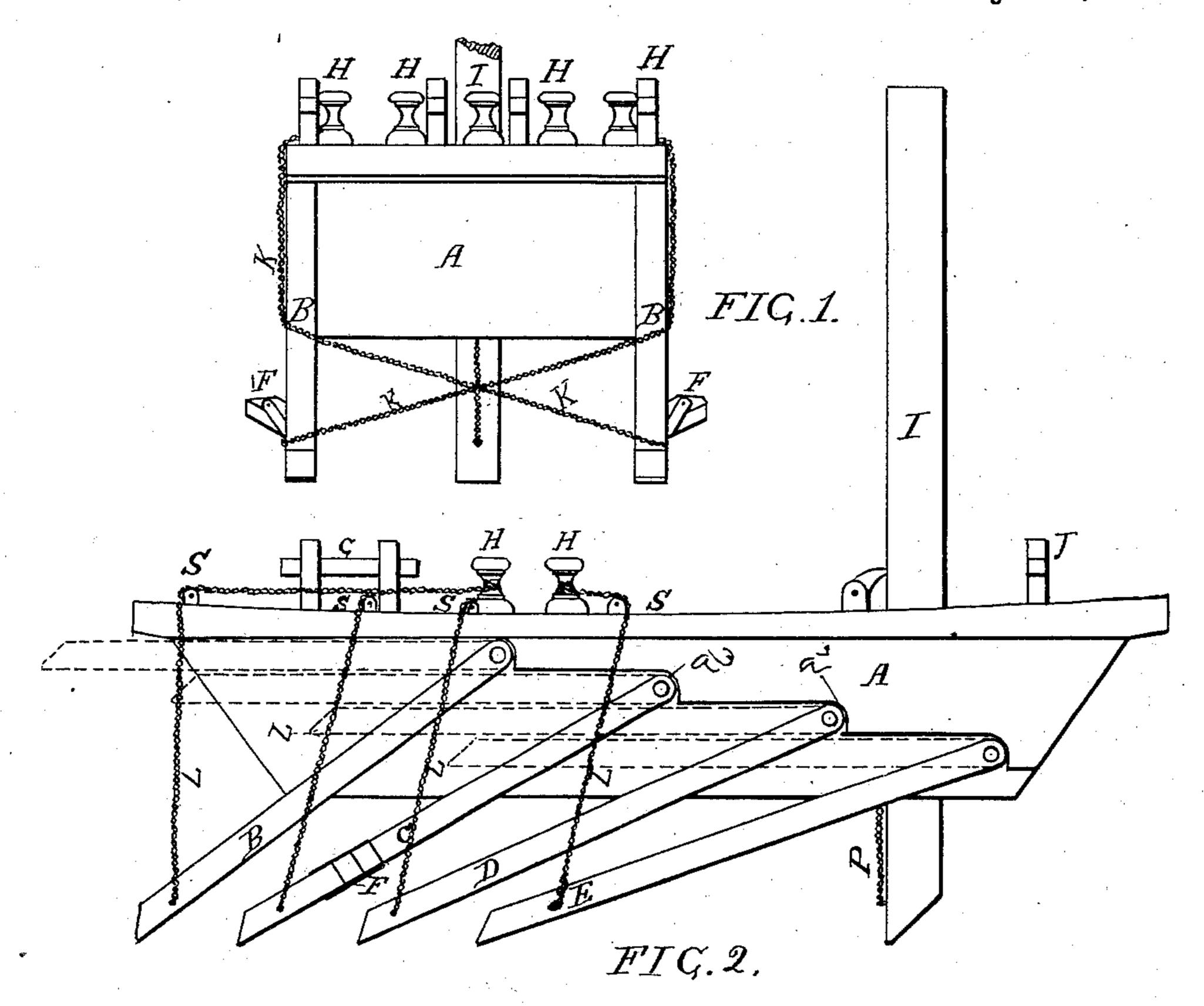
S. NEFF.

WRECKING MACHINE.

No. 363,535.

Patented May 24, 1887.



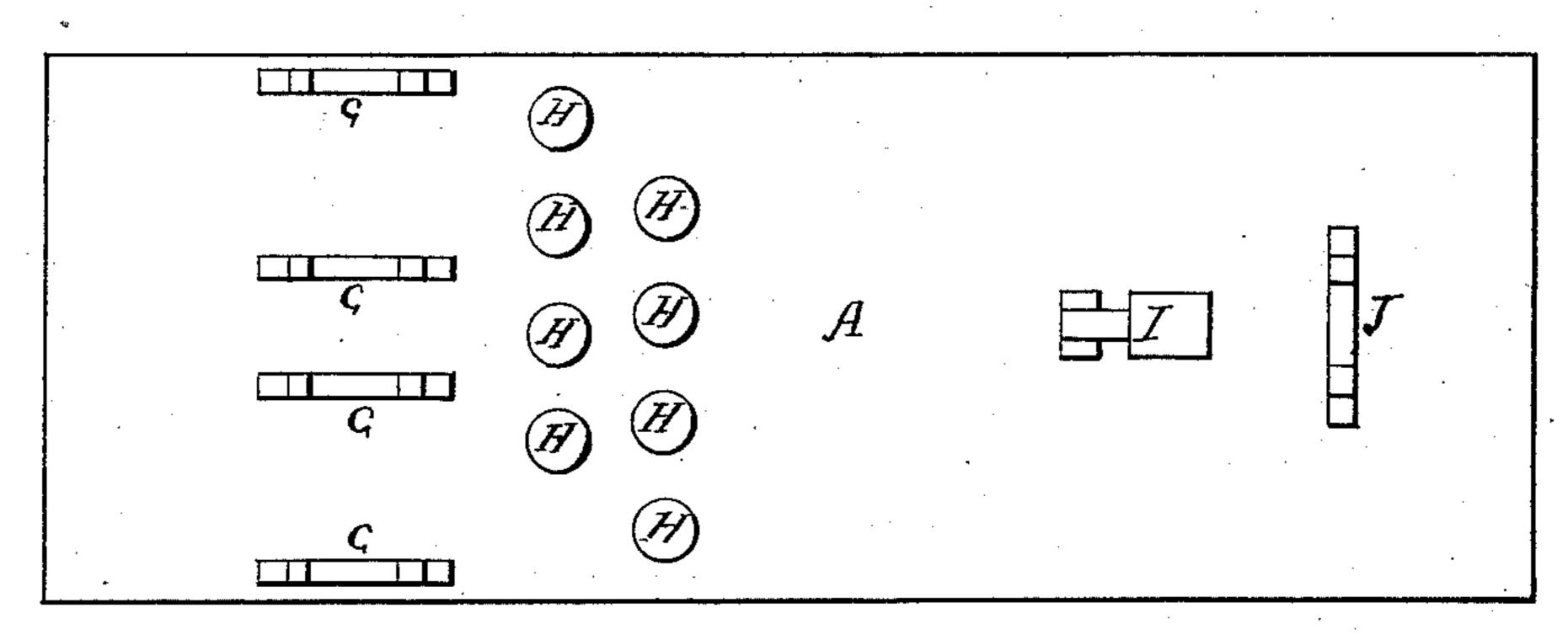


FIG. 3.

Witnesses James H. Morrill Charles Barber Samuel Meff Ser Hell W. Waterhouse Allorney.

United States Patent Office.

SAMUEL NEFF, OF OSHKOSH, WISCONSIN.

WRECKING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 363,535, dated May 24, 1887.

Application filed April 5, 1886. Serial No. 197,788. (No model.)

To all whom it may concern:

Be it known that I, Samuel Neff, a citizen of the United States, residing at the city of Oshkosh, in the county of Winnebago and 5 State of Wisconsin, have invented a new and useful Wrecking-Machine, of which the following is a full description.

My invention is to be fastened to and used in combination with a floating barge; and the 10 object of my invention is to fasten the barge to the bottom of a river, lake, or body of water, so that power can be applied from the barge to pull a wrecked ship off from shore. I attain this object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a rear or stern view; Fig. 2, a

side view, and Fig. 3 a top view.

Similar letters refer to similar parts throughout the several views.

A is the barge, to both sides of which the wooden legs B, C, D, and E are attached by bolts at one end of each, allowing the other end to be raised or lowered. The legs turn upon the bolts, which are very heavy and are 25 fastened very strongly through the end of each leg to the side of the barge, the ends of said legs being rounded and resting in rounded recesses a³ in the side of the barge. Each leg toward the bow of the boat is bolted lower 30 down the side of the boat, so that when raised alongside said legs are parallel and on a plane with each other, so that when the barge is moved they do not impede its motion to any great extent. The legs are a proportionate 35 distance from each other, made of hard wood, and may be of any length in proportion to size of barge and depth of water—should be about the length of barge. The number of legs may vary according to the size of the barge and the 40 requirements of the machine. In ordinary machines four legs on each side are sufficient. These legs B, C, D, and E are raised and lowered by means of the iron chains LLLL, Fig. 2, working through ordinary sheaves or pul-45 leys, SSSS, and around ordinary capstans H, HHH, to which hand-power is applied.

FFF, Figs. 1 and 2, are shoes attached to the lower end of the legs to prevent them from sinking too deeply into sandy or muddy bot-50 tom.

KK, Fig. 1, are cross or stay chains attached from each leg to the opposite side of the barge (running around and under bottom of barge) to keep the legs from swinging sidewise or spreading.

I is an ordinary beam used, by dropping, to first stop the barge before lowering the legs. This beam is used to stop the bow of the barge, and then the stern is swung in direct line with the wreck before the legs are lowered. The 60 beam also aids in holding the boat and is raised by means of the chain P.

J, Figs. 2 and 3, is an ordinary tow-post used to attach the barge to a tug-boat by means of a tow-rope, in order to tow the barge from 65 one place to another.

G G G, Figs. 2 and 3, are bits or cleats to which ropes and blocks or pulleys are fastened in order to pull off a wrecked ship.

The dotted lines, Fig. 2, show the position 70 of the legs when raised alongside of the barge, so the barge can then be easily moved from place to place. The legs being fastened at one end to the barge, it is easier and requires less power to raise the other end alongside 75 than to raise the whole leg in the manner of raising the beam I.

The wreck is intended to be to the left and astern of the barge, Fig. 2, and in a direct line with the line of the barge. The legs, when 80 lowered to the bottom of river, lake, or ocean, if a proper depth of water is selected, are at an acute angle with the bottom of the barge toward the stern and wreck, as indicated in Fig. 2. This will tend to more strongly fasten 85 the barge, because the force applied from the stern to the tackle attached to cleats G G G for the purpose of pulling off the wreck will have a tendency to embed the legs more deeply into the bottom, and not be as liable to drag the 90 barge or break the legs as if they were at right angles with the boat similar to the beam I, and more force can be so applied without breaking the legs or dragging the barge than if said legs were at right angles.

The lower ends of the legs and beam are covered with iron and made sharp, thereby adapting the machine to stony bottoms.

The legs being on both sides of the barge, it is impossible for it to swing around, and there 100 being the same number of legs on each side, it is not necessary to have the barge exactly in a direct line with the wreck.

The legs, working and turning in recesses a^3 ,

as shown in Fig. 2, have a tendency to strengthen the machine and strengthen the fastening of the legs, because when the machine is at work and the force applied to pull off a wreck the head of each leg rests against the timber of the recesses a³, thereby relieving the strain upon the bolt. When the pressure is removed, the legs turn easily on the bolts, allowing them to be raised or lowered, as aforesaid. More force can be applied to the legs working in 'hollow corns' than if they were simply bolted.

After the beam is raised the legs, being at an acute angle toward the stern, are easily pulled out of mud bottom by simply towing

15 the barge. Therefore,

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

In a wrecking-machine, the combination, with a barge, of a series of legs pivotally attached to the sides thereof, each leg toward 20 the bow of the barge being attached lower down than the adjacent leg, shoes F on said legs, chains connected with the free ends of the legs, sheaves over which said chains pass, and capstans A, substantially as set forth.

SAMUEL NEFF.

Witnesses:

JAMES H. MERRILL, CHARLES BARBER.