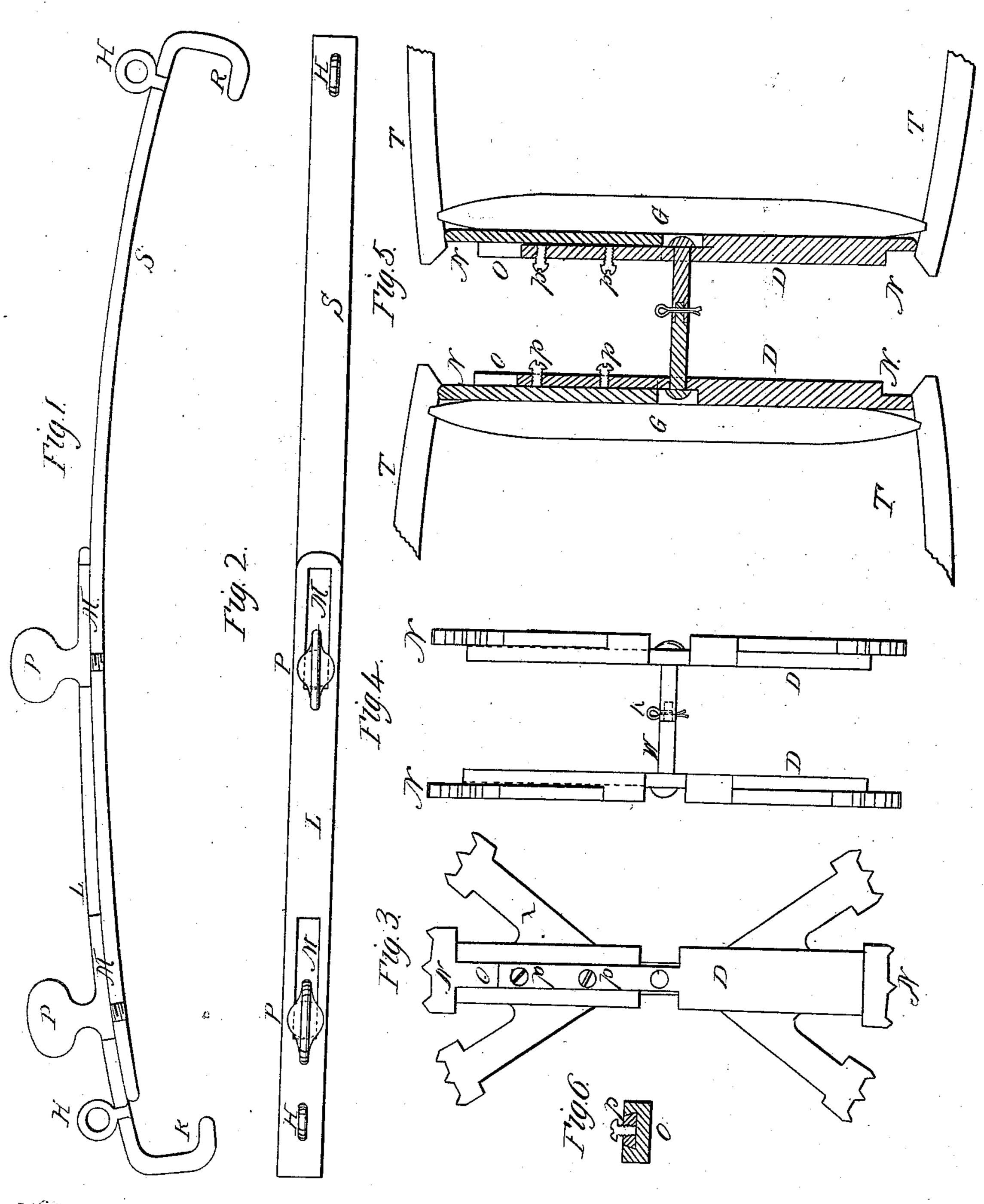
R.N. Park.

Rafking.

Fatented Feb. 23, 1864.

De 1,714.



W1977CSSCS:

Boy ABloom

Inventor. Mille Part

United States Patent Office.

ROBERT W. PARK, OF ALLEGHENY CITY, PENNSYLVANIA.

IMPROVED CONNECTION FOR BARREL-RAFTS.

Specification forming part of Letters Patent No. 41,717, dated February 23, 1864.

To all whom it may concern:

Be it known that I, ROBERT W. PARK, of the city and county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Connections for Floating Barrels; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form part of this specification, and to the letters of reference marked thereon.

The object of my invention is to unite barrels securely together by means of clamps, so as to form them into rafts for the purpose of floating a number of them laden with oil or other light substances safely down creeks and

rivers to their place of destination.

The nature of my invention consists in providing each barrel with an adjustable clamp, so constructed as to fit different sizes and support an eye or ring over the "chine" of each barrel large enough to admit of a rope being passed through for holding them together side by side, and in addition thereto an adjustable "crab," fitting against the head of each barrel for holding them together endwise.

To enable others to make and use my invention, I will proceed to describe its construction and operation by reference to the

accompanying drawings, in which-

Figure 1 represents a longitudinal vertical section of my improved clamp. Fig. 2 shows a top view of the same. Fig. 3 represents a front view of the crab. I ig. 4 is an edge view of two crabs joined together by a swivel-bolt. Fig. 5 represents a vertical section of the crabs attached to the heads of two barrels. Fig. 6 is a cross-section of a crab near its center.

All the drawings are lettered, and similar letters indicate like parts on all the figures.

I construct my improved clamp, as represented by Figs. 1 and 2, of two wrought-iron bars, one-fourth of an inch thick and one inch broad. One of these bars is cut the length of the barrel, the other only half as long. On one end of these bars is turned a hook, R, of sufficient depth to catch over the chine, when through the bars so cut and turned is riveted an eye or ring, H, directly over the point of the hook, for purposes hereinafter to be stated. Through the short bar L is punched a couple of slots, M M, and in the long bar S, so as to

come directly opposite the slots in the short bar, are screw-holes. The bars are now slightly bent or curved, to suit the bilge of the barrel, when the thumb-screws P P are passed through the slots in the short bar and screwed into the long one, the slots being of sufficient length to admit of the clamp being lengthened or shortened to suit different-sized barrels, and also to facilitate adjusting them when in place.

The crab, Fig. 3, I intend to make of wrought or malleable cast-iron, and is formed of two bars, D and X, one of which slides in a groove or channel, o, cut in the other. The outer ends of these bars are forked, so as to give several bearings against the chine of the barrel, and are furnished with teeth N N, to catch in the wood to prevent slippage and to hold the crab secure. They are also provided with set-screws p p, which enables the crab to be contracted or expanded, as the case may re-

quire.

The operation of my clamps and crabs is as follows: The bars of the crab are contracted by loosening the pinch-screws pp, (as more particularly illustrated in Fig. 6,) when the parts can be shoved together. They are then placed against the head of the barrel, G, Fig. 5, first putting through a hole in the center of the crab, made for that purpose, the swivel-bolt W, with the head next that of the barrel. The crab is then extended until the teeth N N fit tightly under the chine or overhang of the staves T T, when the pinch-screws p p are tightened down, which holds the crabfirmly in place. To fasten two barrels together endwise the bolt in one of the crabs is made hollow at its end, so as to allow the opposite bolt to pass into it, as shown at Fig. 5. A small key, K, is now to be placed through both bolts, a hole having been made for that purpose. A series of barrels having been fastened together by the crabs, end to end, a clamp, Fig. 1, is placed on each barrel by loosening or unscrewing the thumb screws P P and expanding the clamp sufficiently to admit of the hooks R R being passed over the chine. The bars L and S are now to be contracted or slid together, so as to keep the hooks in place, when, by means of the thumb screws, the clamp is kept to the barrel.

To form a raft, the barrels, being secured end to end by means of the crabs, are rolled

together side by side and a rope passed through the eyes or rings on the ends of the clamps, keeping the barrels together in a strong, substantial manner, the bolts between the crabs holding them at the proper distance

to prevent "chawing."

Having thus described my invention, I will state that I am aware that floating barrels have been held together by means of clamps having hooks to catch over the chines and adjustable by means of a screw and nut. I am also aware that barrels have been held together by swivels attached to their heads. Therefore I do not claim either of these plans; but

What I do claim is—

1. Combining the bars forming the can-hook by means of the thumb-screws P P, operating in the slots M M, when said bars are provided with eyes H H at or near their ends, in the manner as herein shown and set forth.

2. The adjustable crab, Fig. 3, having several bearings against the chine of the barrels, for holding them endwise while in the water, and prevent abrasion, by means of the crab and swivel-bolts, substantially in the manner as hereinbefore stated.

R. W. PARK.

Witnesses:
J. W. Ells,
BENJ. F. BLOOD.