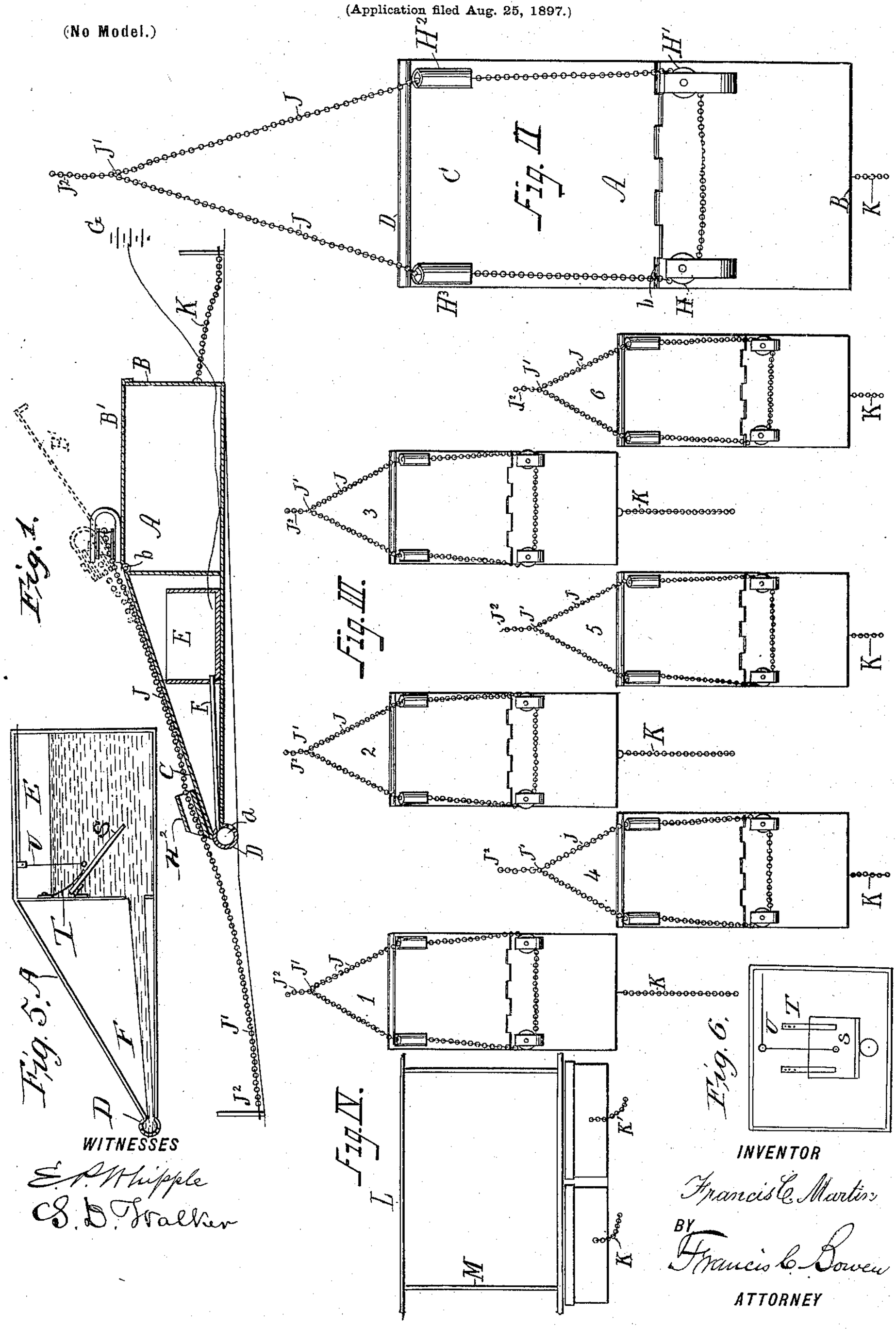
No. 639,179. Patented Dec. 12, 1899.

# F. C. MARTIN.

## DEVICE FOR PREVENTING SEA BEACHES FROM WASHING AWAY.

(Application filed Aug. 25, 1897.)

(No Model.)




WITNESSES

E. P. Whipple

S. D. Walker

INVENTOR

Francis C. Martin

BY

Francis C. Bowen

ATTORNEY

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

FRANCIS C. MARTIN, OF NEW YORK, N. Y.

## DEVICE FOR PREVENTING SEA-BEACHES FROM WASHING AWAY.

SPECIFICATION forming part of Letters Patent No. 639,179, dated December 12, 1899.

Application filed August 25, 1897. Serial No. 649,415. (No model.)

*To all whom it may concern:*

Be it known that I, FRANCIS C. MARTIN, a citizen of the United States, and a resident of New York, (Brooklyn,) county of Kings, and State of New York, have invented certain new and useful Improvements in Devices for Preventing Sea-Beaches from Washing Away, of which the following is a specification.

My invention has relation to a certain new and useful improvement in a device for protecting and preventing the sea-beach from being washed away by storms or the tide; and it consists in the construction and novel arrangement of the parts, as hereinafter more fully described, illustrated in the accompanying drawings, and pointed out in the appended claims.

The object of my invention is to provide automatic devices that may be placed on any sandy beach and provided with means adapted to always present a front to the breast of the incoming wave, whereby the force of the wave is spent on the series of devices and not on the beach; further, in so constructing and arranging a series of devices alongside of each other that a platform is formed thereby which may be used for promenading or for other purposes; also, by novel construction of the tanks they are adapted for still-water bathing, and, further, in arranging an oil-receptacle in a suitable place in the tank and connecting an electric battery thereto to discharge a spray of oil through a perforated pipe or otherwise to abate the violence of the water in a storm.

In the accompanying drawings, Figure 1 represents a longitudinal vertical section of a device as will suffice to illustrate the application of my invention. Fig. 2 is a plan view of my invention. Fig. 3 represents a top view of a series of my novel tanks arranged in an alternate or zigzag position ready for use. Fig. 4 represents a rear view showing the awning mounted on the tank. Figs. 5 and 6 represent detail views of the valve S and concomitants, shown open, for controlling the flow of oil from tank E.

Similar letters and numerals of reference indicate corresponding parts in all the figures of the drawings.

The letter A designates the tank, made of any suitable material, such as iron, and of an approximately wedge shape—that is to say, with a square rear portion B and a tapering front C—with a pipe D on its front portion, provided with perforations *a* therein for the discharge of oil when necessary. To the square portion B, I hinge a cover B′ by means of hinges *b* to permit access to the interior of the tank or to the oil-receptacle E, which may be placed in said square portion B or in the tapering portion C, as shown in the drawings. The oil-receptacle E is connected to the perforated pipe D by a pipe F to permit the oil to pass from the oil-receptacle to the perforated pipe, which is done by any suitable means, such as a clap-valve S with springs T in each oil-receptacle to be opened and closed with a wire U by an operator, the valve being shown open to permit the oil to flow to the perforated pipe D through tube F, as shown in Figs. 5 and 6.

The letters H H′ designate two pulleys, in this example secured to the cover B′, and $H^2$ $H^3$ two guideways on the tapering portion C, through which pulleys H H′ and guideways $H^2$ $H^3$ passes a double chain J, which is united, as at J′, with an extended portion $J^2$, by means of which the tank is anchored or secured to the beach, and by means of said chains and pulleys the tanks are permitted to make the necessary adjustment to always present the tapering front of the tank to the breast of the incoming wave of the sea, and in the event that the violence of the wave is not spent on the first series of tanks, as 1 2 3, I arrange in an alternate or zigzag way a second series of tanks 4 5 6 behind the first series to positively destroy the violence of the wave thereon. The tanks are secured to the shore by means of ropes K or otherwise attached to the rear portions of the tank to hold them to the shore.

In order to make them a platform for promenading or the sale of articles, I arrange a series of the tanks alongside of each other and spread an awning L over the same by means of uprights M on the tanks.

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

1. In a device for protecting the sea-beach from washing away, a tank constructed with a square rear portion and a tapering front portion and provided with a chain passing

through pulleys and guideways arranged on the tank and means to secure the tanks to permit automatic adjustment of the tanks to the breast of the incoming waves, substantially as shown and described.

2. In a device for protecting the sea-beach from washing away a series of tanks with square rear portions and tapering front portions and provided with chains passing through pulleys and guideways arranged on the tanks and means to secure the tanks alongside of each other to form a permanent platform, substantially as shown and described.

3. In a device for protecting the sea-beach from washing away a series of tanks with square rear portions and tapering front portions and provided with chains passing through pulleys and guideways arranged on the tanks and means to secure the tanks alongside of each other to form a permanent platform and having an awning arranged thereon, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two witnesses.

FRANCIS C. MARTIN.

Witnesses:
FRANCIS C. BOWEN,
E. P. WHIPPLE.