

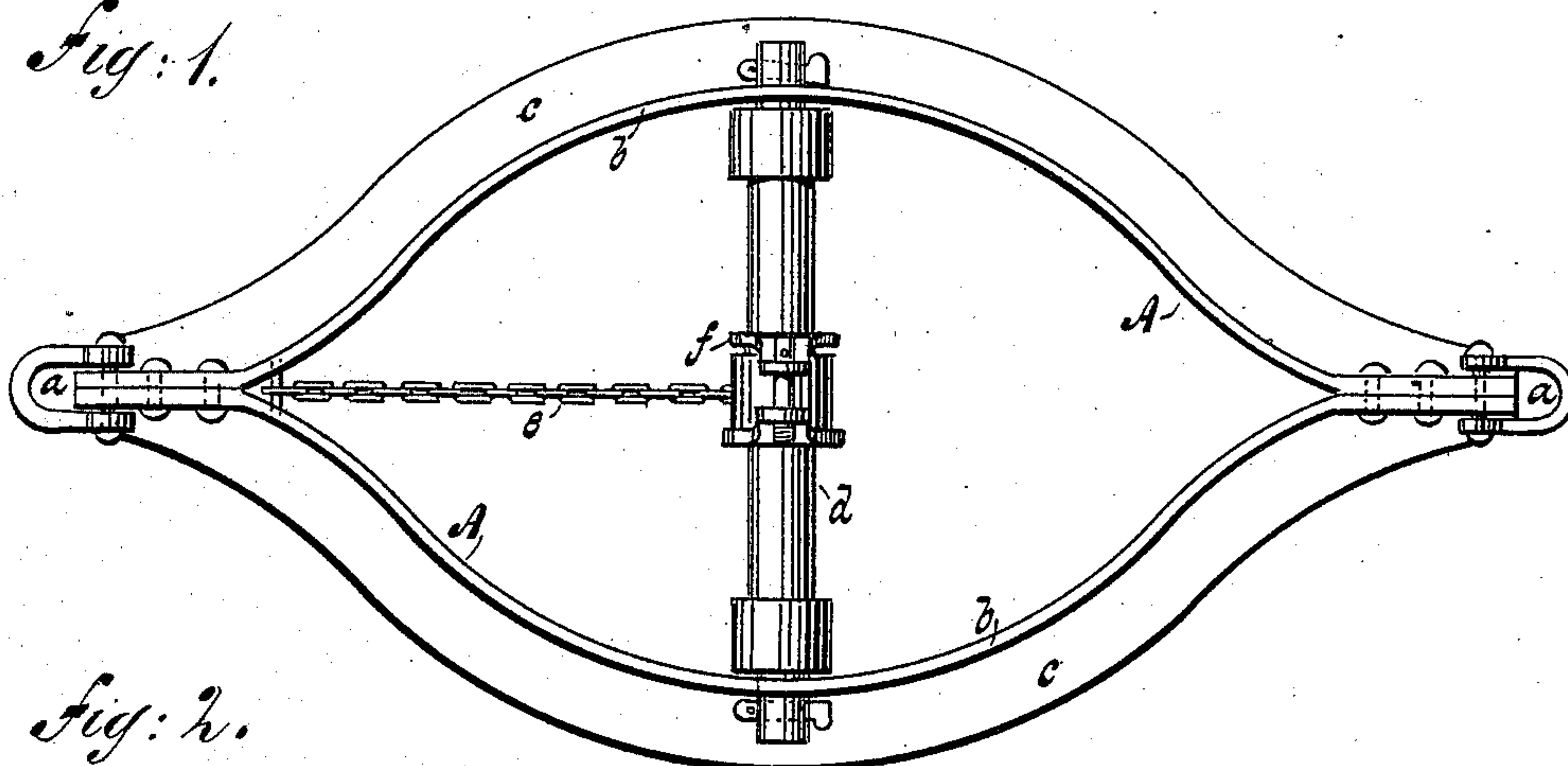
(No Model.)

T. POTTER.  
DREDGING SCRAPER.

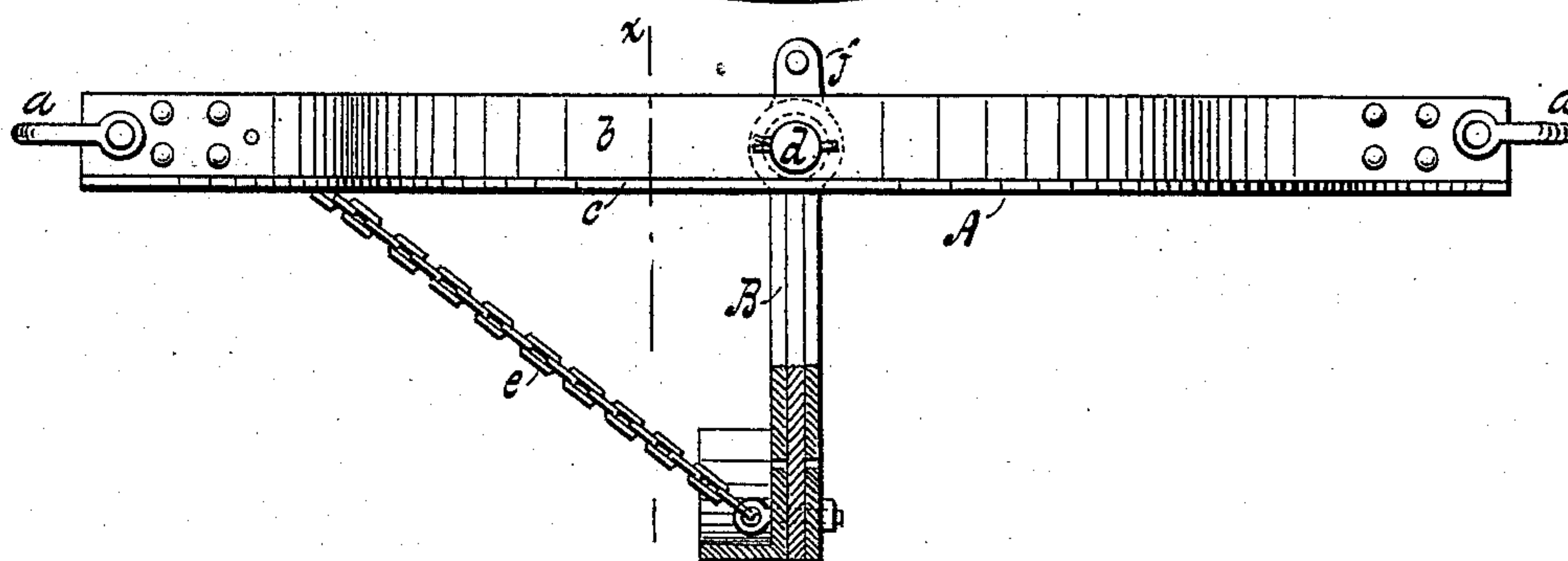
No. 412,538.

Patented Oct. 8, 1889.

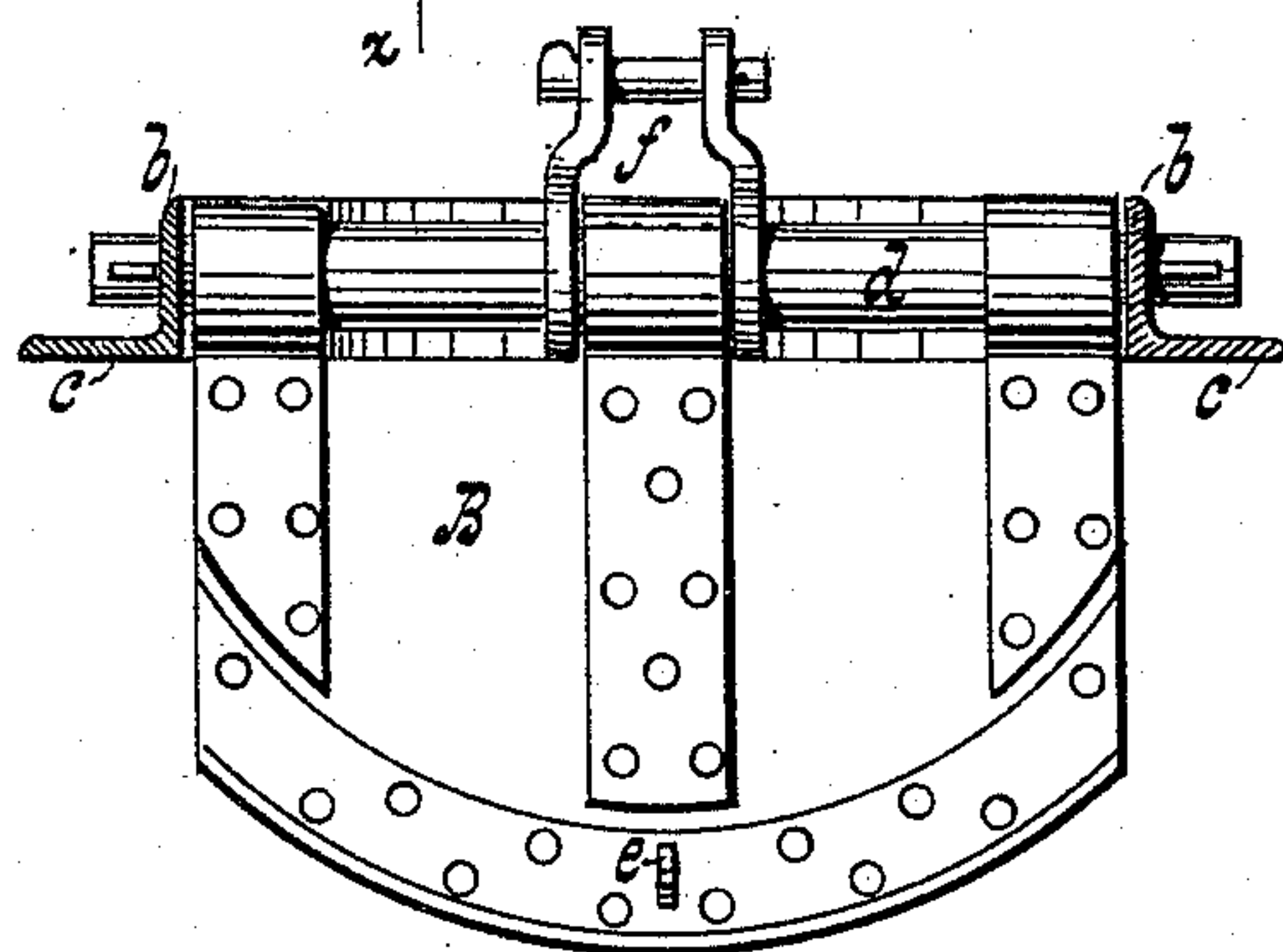
*Fig: 1.*



*Fig: 2.*



*Fig: 3.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

THOMAS POTTER, OF JERSEY CITY, NEW JERSEY.

## DREDGING-SCRAPER.

SPECIFICATION forming part of Letters Patent No. 412,538, dated October 8, 1889.

Application filed July 24, 1889. Serial No. 318,580. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS POTTER, of Jersey City, in the county of Hudson and State of New Jersey, have invented a certain new and useful Improvement in Dredging-Scrapers, of which I declare the following to be a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to improvements in dredging-scrappers which are particularly designed for use between or close to rows of piles; and the invention consists of a dredging-scraper constructed substantially in the manner herein described and claimed.

In the accompanying sheet of drawings, Figure 1 is a plan view of the scraper; Fig. 2, a side elevation of the same, partly in section; Fig. 3, a view, partly sectional, in the plane *x x*, Fig. 2.

Similar letters of reference indicate like parts in the several views.

The object of this invention is to provide a scraper better adapted to the purpose of dredging beneath piers and wharves, where sewers frequently empty, and in other spaces bordered by piles and irregular surfaces. The rows of piles are so irregular, or when driven close together form such an uneven wall, that the ordinary scraper cannot be used to advantage where it must come in contact with the piles, since the corners and other prominent parts of the scraper-frame are liable to be frequently caught by the opposing faces of the piles, and the progress of the scraper being thus obstructed the operation of dredging is rendered in many cases extremely troublesome and in some even impracticable. The difficulty of operating an ordinary scraper is especially serious when the space to be dredged is narrow and crooked and confined between two rows of piles. By means of the present invention all trouble of this kind may be avoided, so that dredging can be conveniently and thoroughly done as well under piers and in other similar places as elsewhere.

This scraper is composed like others of a frame and a leaf or scoop hinged thereto. The frame A has approximately the shape of an ellipse and is provided at each end with a clevis *a*. Two pieces of angle-iron are properly bent and bolted together at their ends to form the frame, each side thereof having the

vertical section *b* and the horizontal section *c*; yet, obviously, other material may be used for this purpose, though angle-iron is particularly well adapted to the requirements of the frame, as will presently appear. Across the middle of the frame extends a shaft *d*, whose ends are journaled in the vertical sections *b b*, but do not reach beyond the outer edges of the horizontal sections *c c*, and to this shaft is secured the scoop B, whose lower end is connected by a chain *e* with the front of the frame, so that the scoop is prevented from swinging too far backward. On the shaft *d* is a link *f*, to which tackle may be conveniently attached.

It will be seen that this scraper can readily be drawn either forward or backward under piers or wharves and in crooked as well as straight passages bordered by piles, for in case the frame should come in contact with these the scraper cannot be seriously obstructed by them, as the curved and smooth sides of its frame enable it to be hauled steadily along past any of the piles which it may happen to strike, only the horizontal sections *c c* being permitted to touch the piles at any time.

It will be understood by a glance at the drawings that the scraper is to be hauled forward and backward by chains attached to the clevises *a a*, and that the operation of the scoop is like that in other scrapers of the same class.

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

1. A dredging-scraper consisting of the combination of the elliptical frame and the scoop B, hinged thereto, substantially as and for the purpose described.

2. A dredging-scraper consisting of the combination of the elliptical frame A, made of angle-iron, having on each side the vertical section *b* and the horizontal section *c*, and the scoop B, hinged to the vertical sections *b b* of the frame, the outer edges of the horizontal sections constituting the outermost portion of the frame, substantially as and for the purpose described.

THOMAS POTTER.

In presence of—

FRANK POTTER,  
JOSEPH M. POTTER.