

No. 635,165.

Patented Oct. 17, 1899.

H. C. W. WEYHE, Dec'd.

A. P. ELTEN, Administrator.

MODE OF CONSTRUCTING PIERS OR DAMS.

(Application filed Dec. 30, 1897.)

(No Model.)

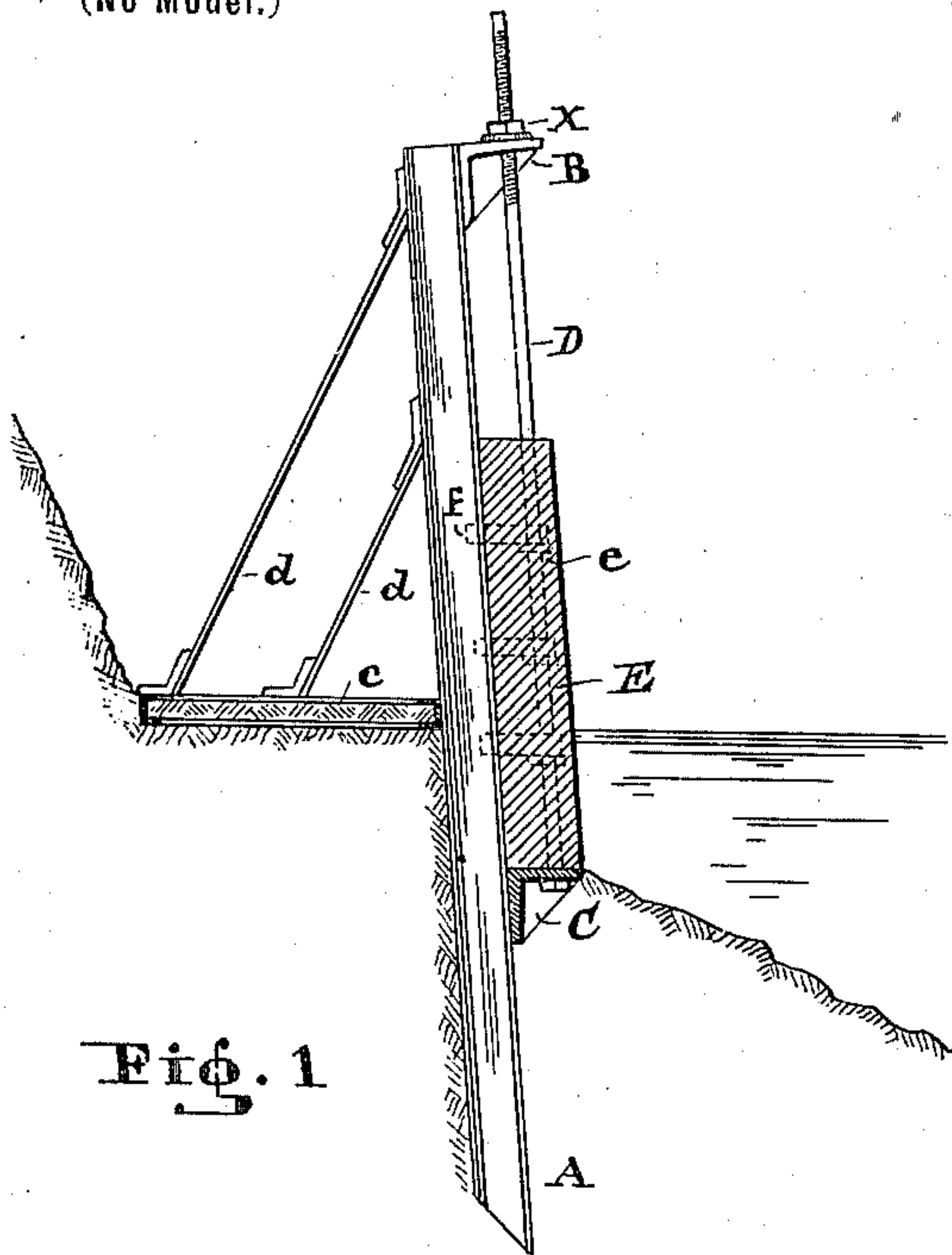


FIG. 1

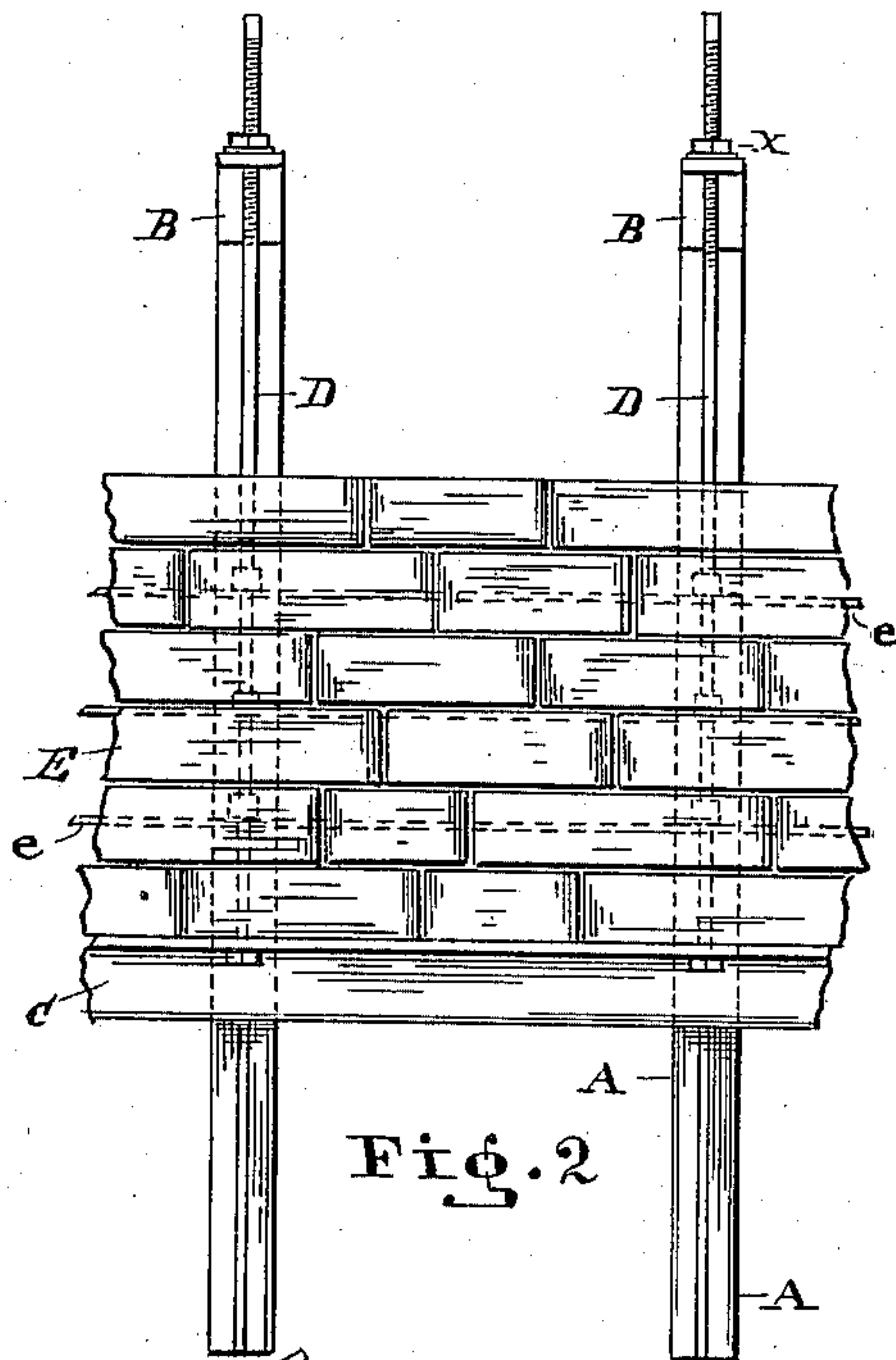


FIG. 2

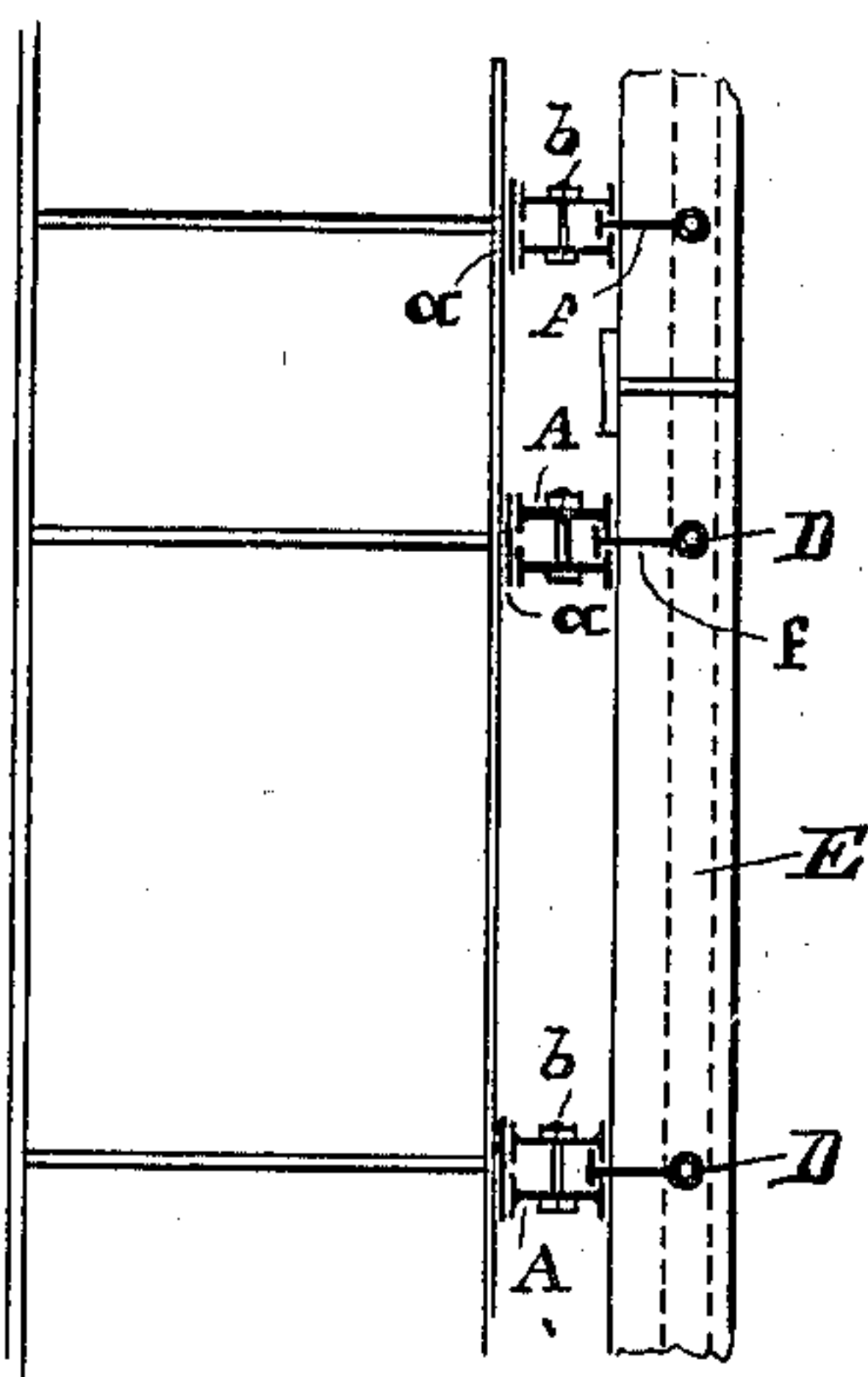


FIG. 3

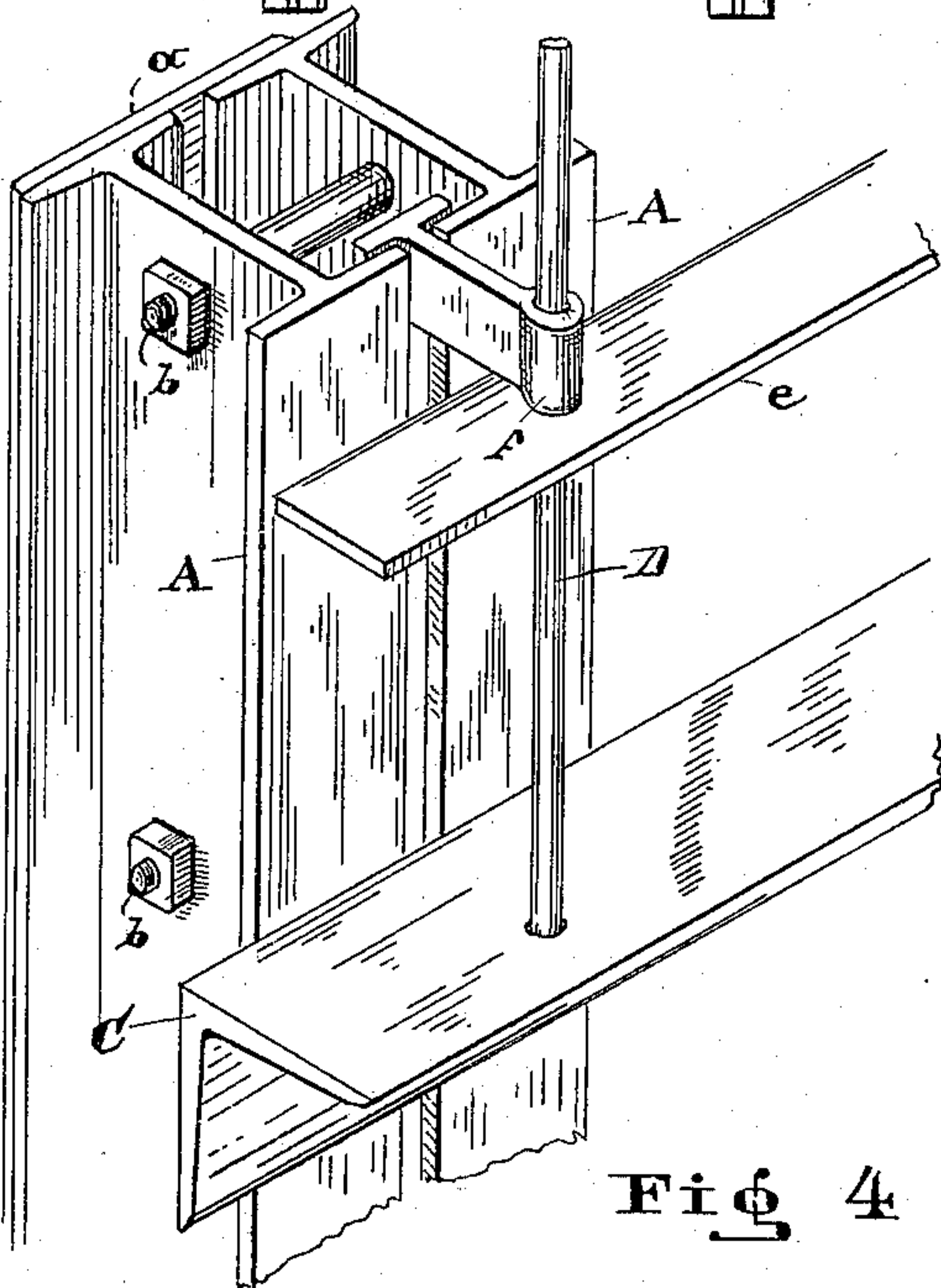


FIG. 4

WITNESSES

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UNITED STATES PATENT OFFICE.

ALFRED P. ELTEN, OF CLEVELAND, OHIO, ADMINISTRATOR OF HERMANN CHRISTIAN WILHELM WEYHE, DECEASED, ASSIGNOR TO CARL B. T. WILCKENS, OF BREMEN, GERMANY.

MODE OF CONSTRUCTING PIERS OR DAMS.

SPECIFICATION forming part of Letters Patent No. 635,165, dated October 17, 1899.

Application filed December 30, 1897. Serial No. 664,679 $\frac{1}{2}$. (No model.)

To all whom it may concern:

Be it known that HERMANN CHRISTIAN WILHELM WEYHE, late a citizen and resident of the free hanseatic town of Bremen, in the
5 Empire of Germany, deceased, did invent a new and useful Mode of Constructing Piers or Dams, (patented in Germany July 17, 1896, No. 87,708,) of which the following is a full, true, and exact description.

10 This invention consists in a novel mode of constructing walls for breastworks, breakwaters, or kindred purposes of masonry, stone, concrete, or any other suitable material by providing suitable supports upon which such
15 walls can be built or formed, to be subsequently lowered into final position.

That the invention may be fully understood and seen reference will be had to the following specification and accompanying drawings,
20 in which—

Figure 1 represents a vertical transverse sectional view of a pier construction on the plan outlined above. Fig. 2 is a longitudinal face view of the wall and skeleton upon which
25 said wall is built. Fig. 3 is a plan view of same, and Fig. 4 represents an enlarged detached perspective view of the framework used in connection with such structures.

Like letters of reference denote like parts
30 in the drawings and specification.

The support against and upon which the wall is built consists of the posts A, angle-plates B and C, and rods D. It is preferred to form the posts A by a pair or set of I-beams held united but a certain distance
35 apart by means of a plate *a* and bolts *b*. Posts built up in this manner and set proper distances apart are rammed into the earth, provided with anchor-plates *c* and brace-bars
40 *d*, substantially as shown in Fig. 1, and are permanent supports. Fastened to each post at or near top of same is an angle plate or bracket B for receiving and guiding rod D, to the lower end of which in turn is secured
45 angle-plate C. Upon this angle-plate C wall E is now built. By embedding at certain intervals flat iron bands *e* with perforations through which rods D pass wall E is correspondingly stiffened and strengthened. Be-

sides these flat iron bands *e* bolts *f* are em- 50
bedded in and held by the wall E. These bolts also are perforated at one end, allowing rod D to pass through, while the other end of these bolts is adapted to reach into the hollow space
55 formed by the I-beams constituting the posts and to slide freely in the slot formed by the flanges of said beams. In this manner the bolts, and consequently the wall, are retained or held by the posts, however, so as to admit of moving the wall only up or down along posts, 60
while angle-plate C is the part upon which wall E rests. Angle-plate C, with wall E, being suspended from angle plate or bracket B through the medium of rod D, it is obvious that on the upper end of rod D being threaded and 65
provided with a nut or equivalent the wall E is capable of being lowered by reason of its own weight on turning nut *x* accordingly. Thus angle-plate B forms, primarily, a sup-
70 port for this movable wall until by lowering the wall sufficiently angle-plate C is made to rest on a foundation finally provided for it by dredging or similar means—as, for instance, by hydraulically washing out a bed for such
75 a wall.

Having thus fully shown and described this invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. A wall, comprising a movable support, building materials, perforated bands, perfo- 80
rated bolts, rods or bars connected to all of the said parts, permanent supporting-posts, and means for operatively connecting said posts with said rods, substantially as described.

2. In combination, in a wall construction, 85
permanent posts, building material, and bolts, of which said bolts one end is in operative connection with the said posts while the other end is embedded in the said building material, substantially as and for the 90
purpose set forth.

3. The combination, with permanent posts, of a wall comprising building materials, a movable support therefor, horizontal perfo- 95
rated bands, bolts which at one end are per-
forated and embedded in the building material while the other end is movably connected with said posts, and rods or bars which pass

through the building material, through the perforations of the said horizontal bands and the perforations of the said bolts, and the lower ends of which rods are immovably connected to the said movable support of the said wall while the opposite ends are movably connected to the permanent posts, substantially as described and for the purpose set forth.

In witness whereof I have hereunto set my hand in presence of two subscribing witnesses.

ALFRED P. ELTEN,
*Administrator of the estate of Hermann
Christian Wilhelm Weyhe, deceased.*

Witnesses:

H. L. LILLY,
A. R. BULLOCK.