

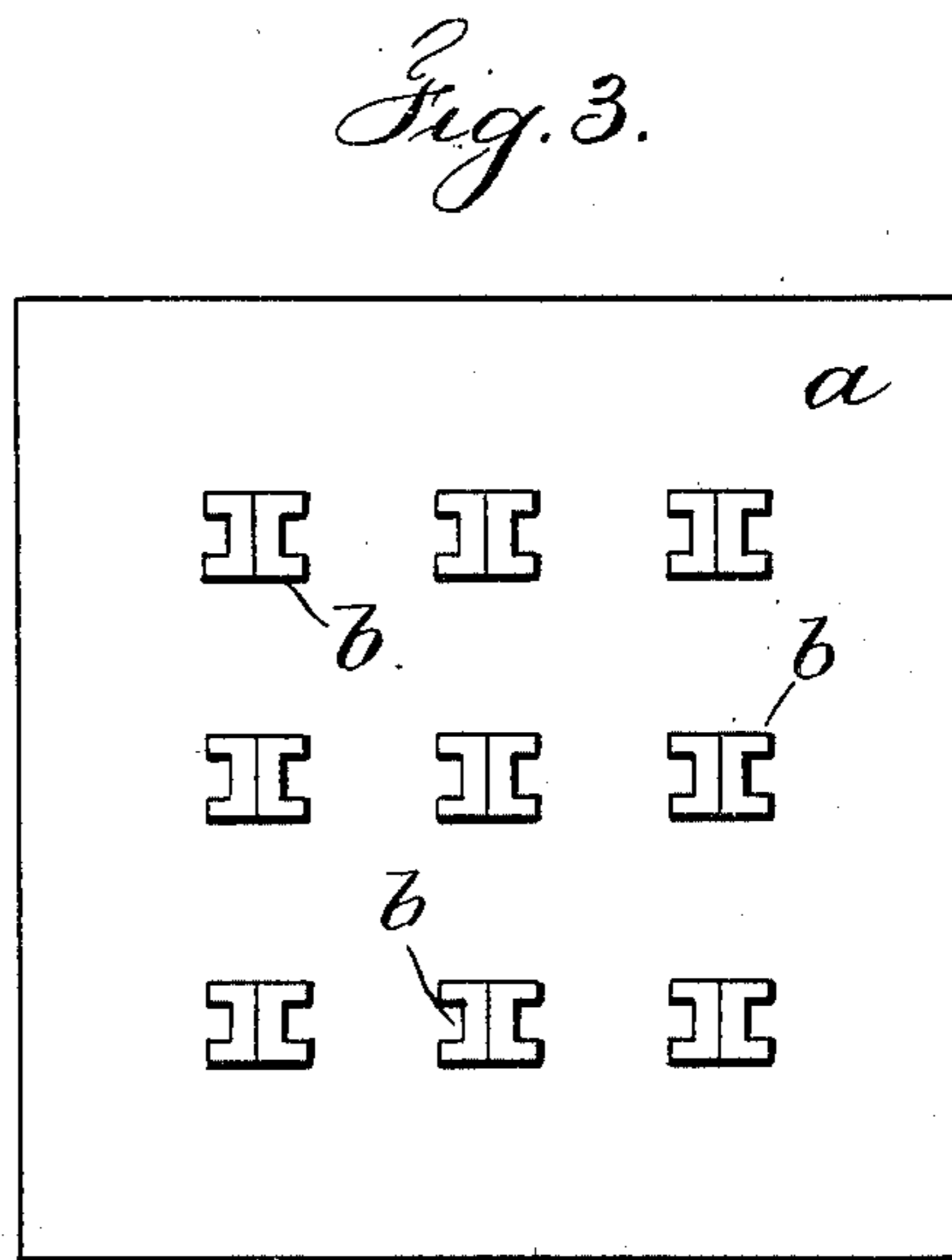
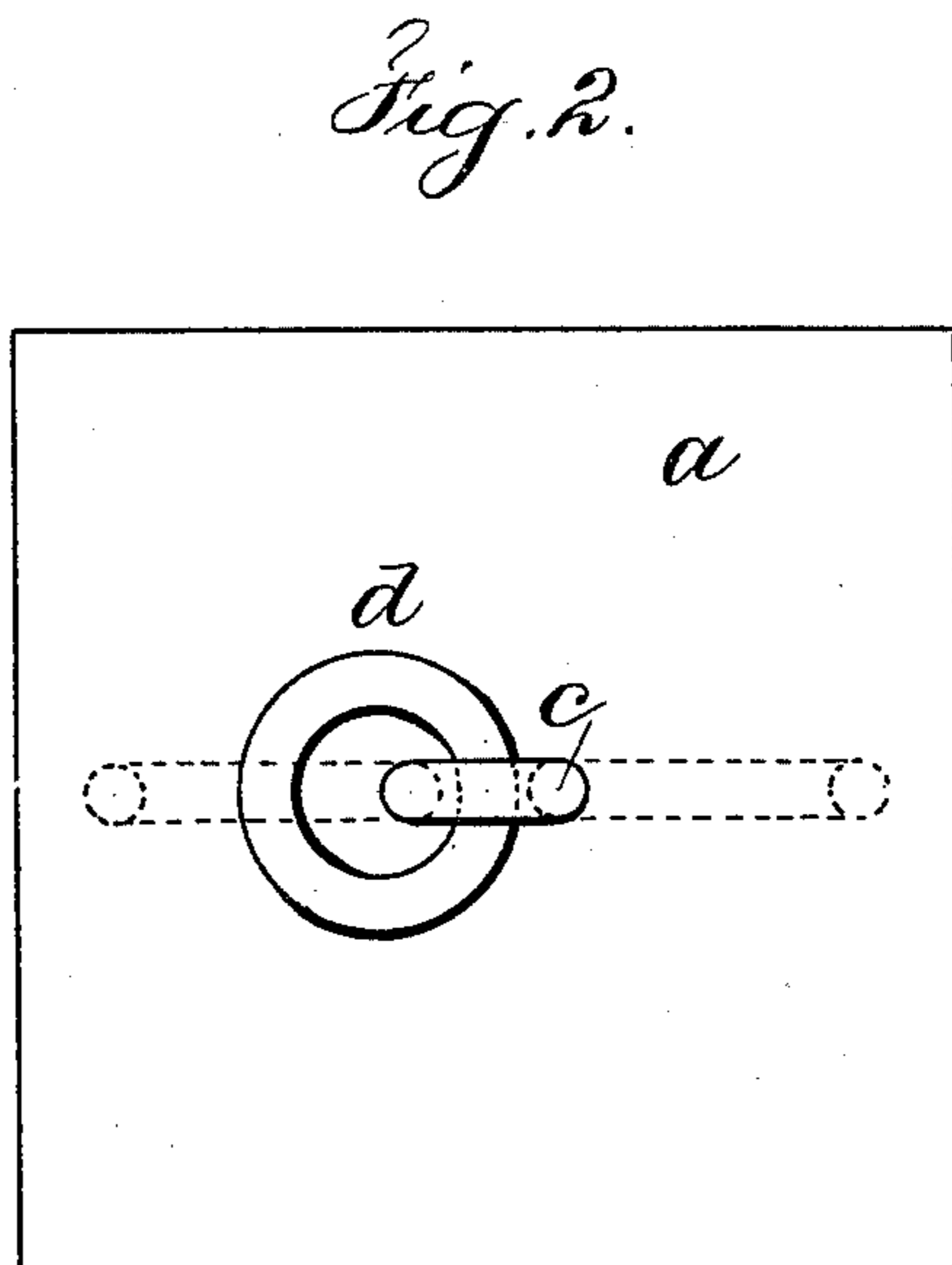
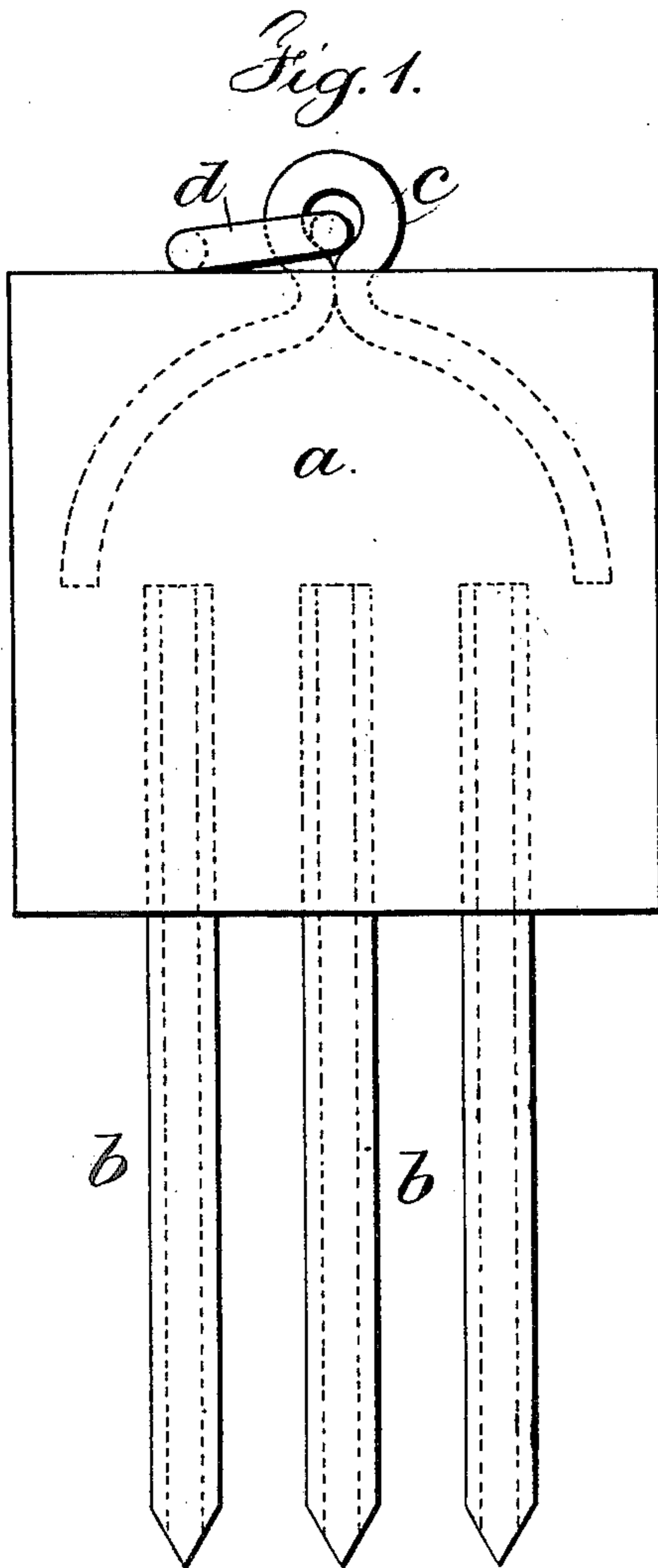
No. 657,263.

Patented Sept. 4, 1900.

E. T. BUNJE.
MOORING ANCHOR.

(Application filed Nov. 13, 1899.)

(No Model.)



Witnesses
Charles Smith
J. Staib

Inventor
Emil Theodor Bunje.
per L. H. Serull & Son attys

UNITED STATES PATENT OFFICE.

EMIL THEODOR BUNJE, OF HONG-KONG, CHINA.

MOORING-ANCHOR.

SPECIFICATION forming part of Letters Patent No. 657,263, dated September 4, 1900.

Application filed November 13, 1899. Serial No. 736,741. (No model.)

To all whom it may concern:

Be it known that I, EMIL THEODOR BUNJE, a citizen of the United States of America, residing at Hong-Kong, China, have invented
5 a new and useful Improvement in Mooring-Anchors, of which the following is a specification.

The object of the present invention is to provide a mooring-anchor, otherwise known
10 as a "ground-tackle," that is simple and of inexpensive construction, that is readily placed in position, and which possesses great holding power.

In carrying out my invention I provide a
15 cast-iron block, preferably cubical, with a series of downwardly-projecting prongs or bars of any desired length. These are preferably pointed at their free ends and are held in
20 said block, the metal thereof being cast around said bars. Into the top of the block is cast an eye holding a mooring-ring.

These mooring-anchors are to be made of various weights and dimensions, according to the strains to which they will be subjected.

25 In the drawings, Figure 1 is an elevation, Fig. 2 a plan, and Fig. 3 an inverted plan, representing my improvement.

The cast-iron block *a* may be of any desired size and shape. I prefer, however, to
30 make the same cubical. A series of pointed prongs or bars are held in the said cast-iron block, the metal of the block being cast around said bars while the bars are held in a suitable mold.

35 Into the top of the block the eye *c* is held, and it is connected to the block in the same manner as are the series of pointed prongs. The eye *c* holds a ring *d*, to which the moor-

ing-chain is connected. The pointed prongs of the series *b* may be railroad rails or eye-
40 bars pointed at the free ends and of sufficient length to project from the block *a* a distance about equal to one side of the block, and they are so spaced as to be about the same distance apart over the surface of the block.
45 These mooring-anchors are especially adapted for use in connection with harbor-buoys, as it is desirable to connect these buoys to an anchor adapted to maintain its position positively at the bottom of the harbor. It is
50 obvious, however, that these mooring-anchors may be adapted for other uses—such, for instance, as anchors for small yachts, carrying a float to designate their location.

In seating the anchor in position it is to be
55 dropped vertically through the water by means of a holding chain or rope, so that the prongs fully penetrate the sand or mud bottom to cause the cast-iron block to rest directly thereon. Such anchors hold equally
60 well in all directions.

I claim as my invention—

A mooring-anchor, comprising a cast-iron block, an eye for a chain or rope and a series
65 of wrought-metal pointed bars connected to the iron block and around which said block is cast, the eye projecting from the upper surface and the bars projecting downward from the under surface, substantially as
70 specified.

Signed by me this 19th day of September,
1899.

EMIL THEODOR BUNJE.

Witnesses:

ROUNSEVELLE WILDMAN,
CHINN POY WOO.