

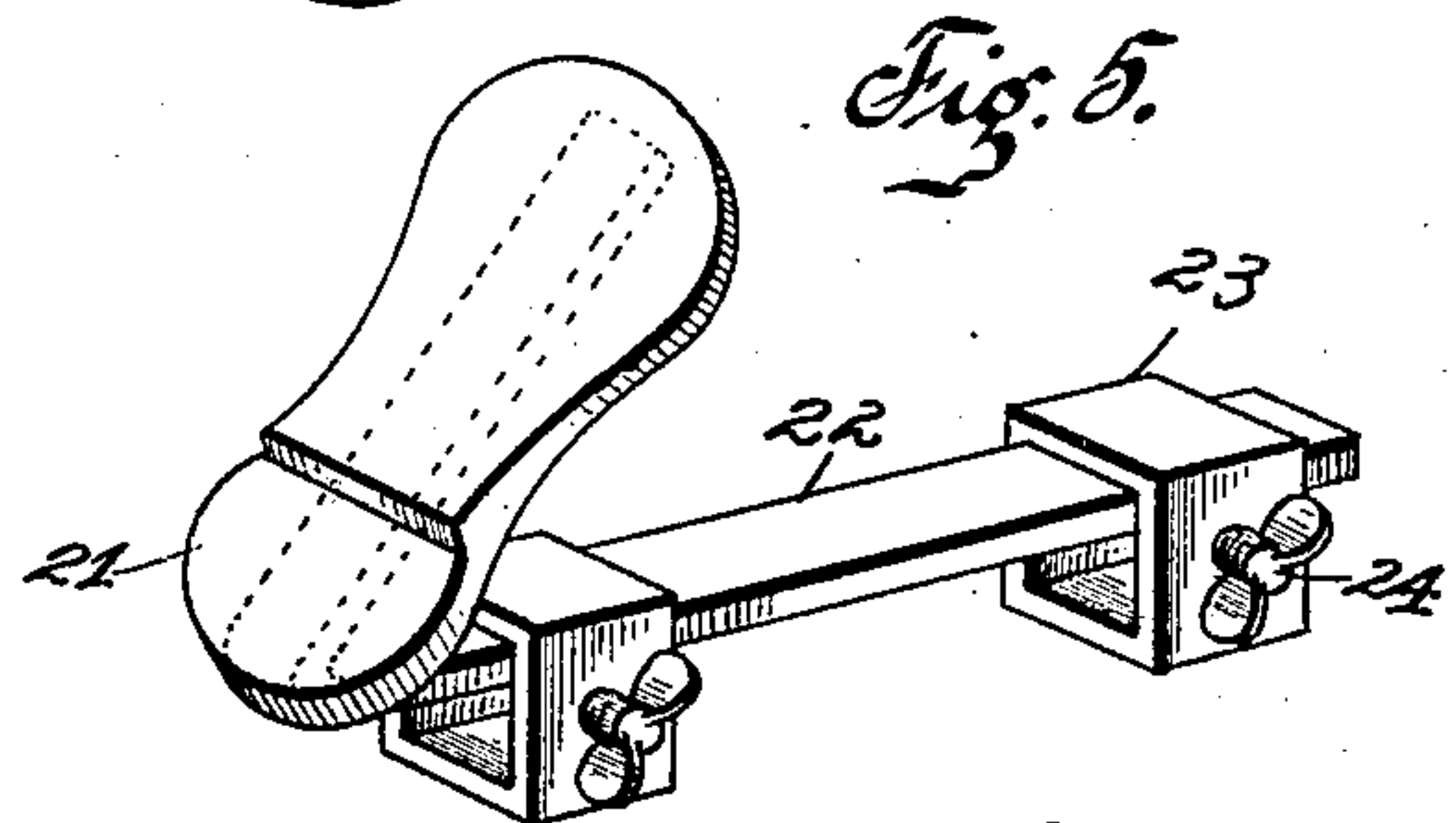
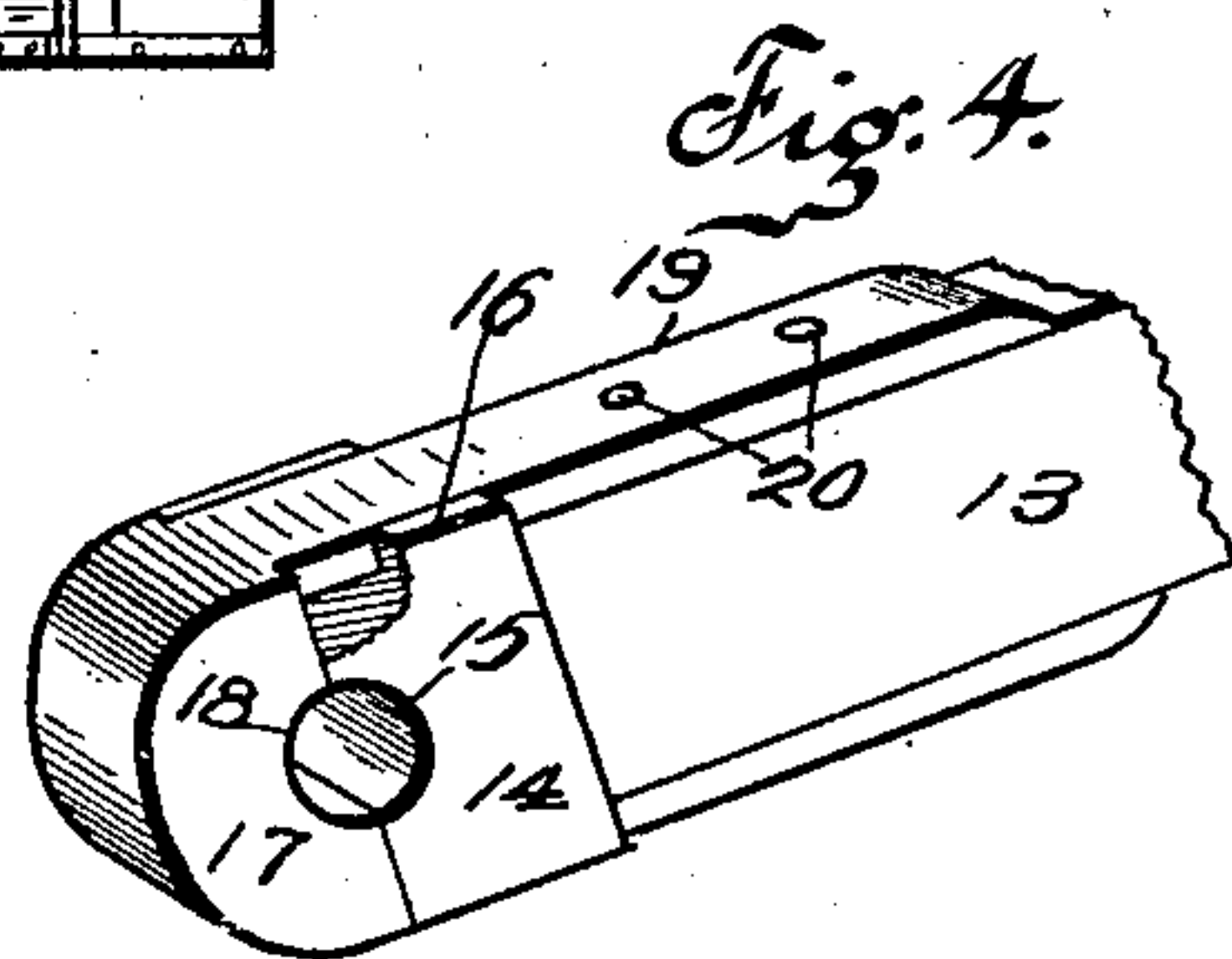
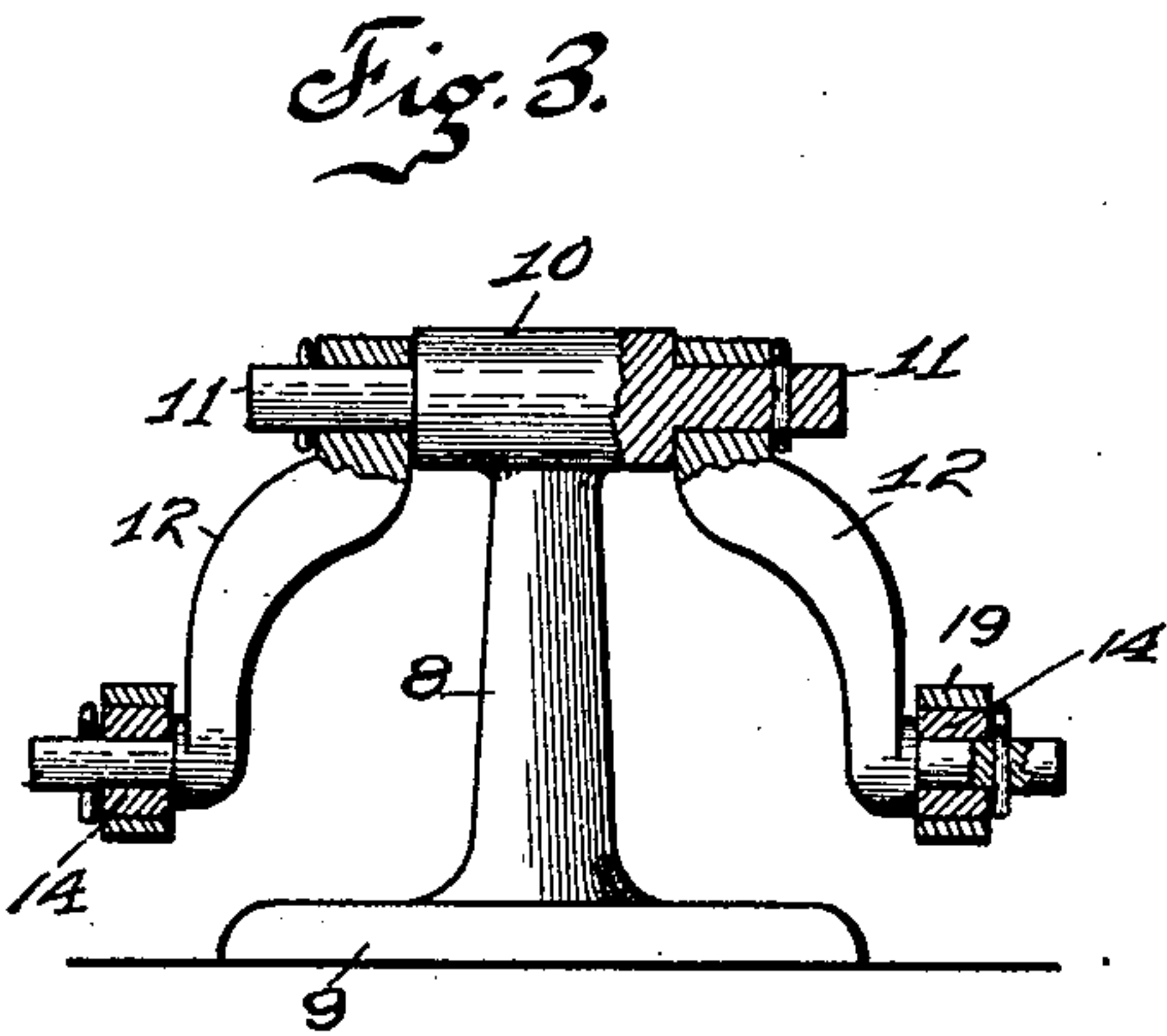
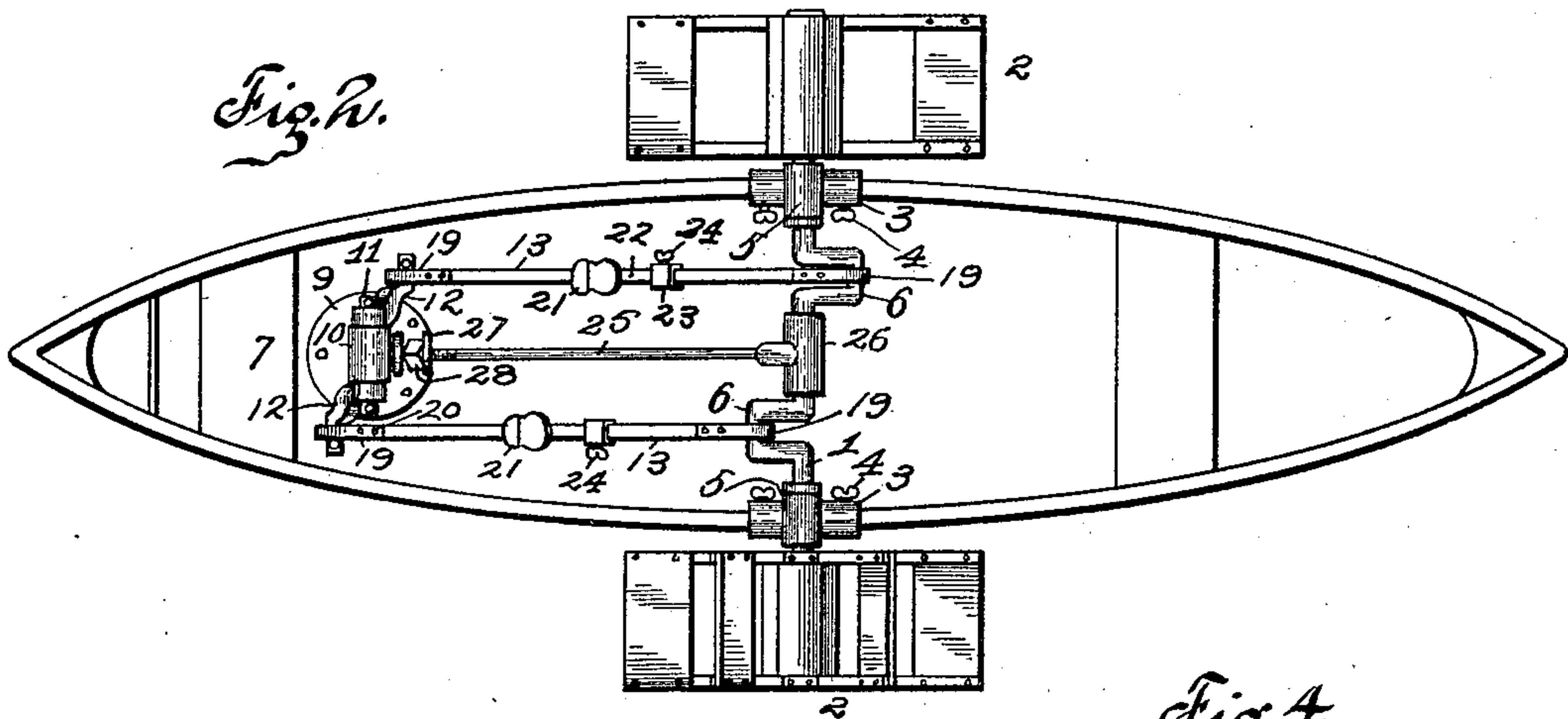
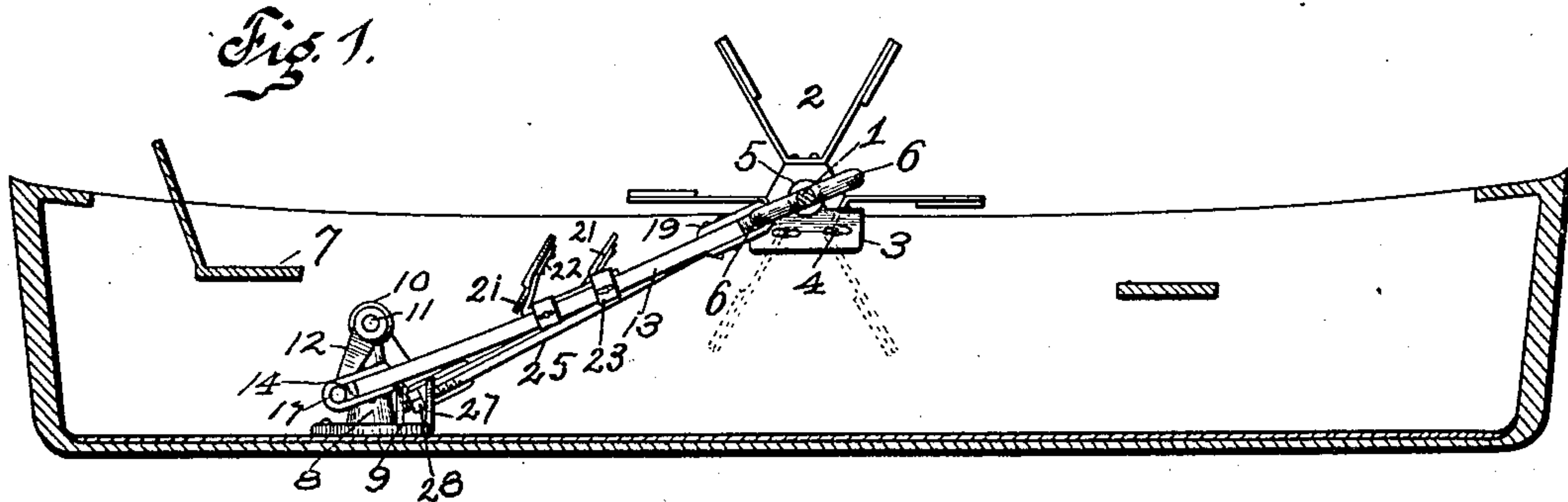
No. 669,294.

Patented Mar. 5, 1901.

F. WELLER.
PROPELLING APPARATUS.

(Application filed Oct. 15, 1900.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

FRANK WELLER, OF ST. LOUIS, MISSOURI.

PROPELLING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 669,294, dated March 5, 1901.

Application filed October 15, 1900. Serial No. 33,123. (No model.)

To all whom it may concern:

Be it known that I, FRANK WELLER, of the city of St. Louis, State of Missouri, have invented certain new and useful Improvements in a Propelling Apparatus, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

This invention relates to a propelling apparatus; and it consists of the novel construction, combination, and arrangement of parts hereinafter shown, described, and claimed.

Figure 1 is a longitudinal sectional view of a boat, showing my improved propelling device secured thereto. Fig. 2 is a plan view of the boat. Fig. 3 is a view of a post and cranks which constitute a part of my invention. Fig. 4 is a perspective view showing one end of a rod made use of in carrying out the invention. Fig. 5 is a perspective view of a footpiece and fastening device whereby it is secured to the rods.

In carrying out my invention I provide a shaft 1 of sufficient length to extend across the boat and project a suitable distance on both sides, and on the ends of the said shaft are carried the paddle-wheels 2. The bearings in which the shaft 1 is mounted consist of the inverted-U-shaped members 3, adapted to engage over the sides of the boat, in which position they are securely held by means of the set-screws 4 and the bearing portion 5, formed integral with the upper sides of the members 3 and in which the said shaft 1 is mounted. Between the sides of the boat the shaft 1 is bent to form the oppositely-formed cranks 6, to which the operating-rods are secured. At a suitable position in the boat is arranged a seat 7, and adjacent thereto and secured to the bottom of the boat is the vertical post 8, provided on its lower end with the broad flange 9, affording a suitable means whereby it may be rigidly retained in position. Integral with the upper end of the post 8 is a horizontal portion 10, provided on each end with a smaller portion 11, mounted upon which are the cranks 12, which are identical in construction.

The connecting-rods 13 connect the cranks 12 with the cranks 6 and afford means for operating the shaft 1 to propel the boat. On

each end of the rods 13 is a block 14, provided in its outer face with a semicircular notch 15, adapted to receive a portion of the crank to which that end of the rod is adapted to be secured. The sides of the block 14 are provided with the ears 16, the purpose of which will presently appear.

17 indicates the outer block, formed in the inner side of which is a recess 18, conforming to the recess 15, and integral with the sides of the block 17 are the projections 19, which, as shown, inclose the ends of the rods 13 and rest between the ears 16 of the block 14. Screws or other fastening devices 20 serve to hold these parts in position and to retain the rods in the required adjustment connecting the cranks 6 and 12.

Secured to each of the rods 13 is a suitable treadle whereby the said rods may be operated to rotate the shaft 1, and thereby the paddle-wheels 2, to propel the boat. The said treadles consist of the foot pieces 21, of ordinary construction and secured to the angle-strips 22, adapted to rest upon the rods 13, in which position they are securely held by suitable fastening devices provided for that purpose. Said fastening devices consist of the squared frames 23, adapted to inclose the said strips 22 and the rods 13, and the set-screws 24, passing through the sides of the frames 23 and engaging against the sides of the rods 13, thereby clamping the said parts rigidly in position.

25 indicates a connecting-rod connected at one end to a sleeve 26, mounted on the shaft 1 between the cranks 6, and the other end of the said rod projects through an opening in an ear 27, integral with the base of the post 8, and the nut 28 is threaded on the end of the rod to retain it in position. The said rod 25 serves as a brace connecting the shaft 1 to the post 8, retaining them in the required relative position.

My improved propelling device may be secured to boats of any preferred construction and may be operated to propel the boat in either direction. The operator to propel the boat places his feet against the foot pieces 21 and operates the treadles in the usual manner, rotating the shaft 1, and thereby the paddle-wheels 2, which will operate the boat, and,

as manifest, the direction in which the boat is propelled may be regulated at will.

When it is not desired to retain the propelling device on the boat, it may be easily and quickly removed by detaching the members 3 and removing the cranks 12 from their supports, thereby allowing all the parts described to be removed except the vertical post 8, which occupies very little space within the boat and which may also be removed, if desired.

I claim—

1. A propelling device consisting of a shaft carrying paddle-wheels, cranks formed integral with said shaft, treadle-rods pivotally attached to said cranks, treadles upon said treadle-rods, means for adjusting the treadles in different positions upon the treadle-rods,

and means for holding them rigidly in the different adjustments.

2. A propelling device for boats, consisting of a crank-shaft carrying paddle-wheels, means for attaching the crank-shaft to the boat, a post mounted in the bottom of the boat and carrying cranks on its upper end, treadle-rods connecting the said cranks and the crank-shaft, treadles carried by said rods, and means for adjusting the said treadles in different positions on the rods, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK WELLER.

Witnesses:

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