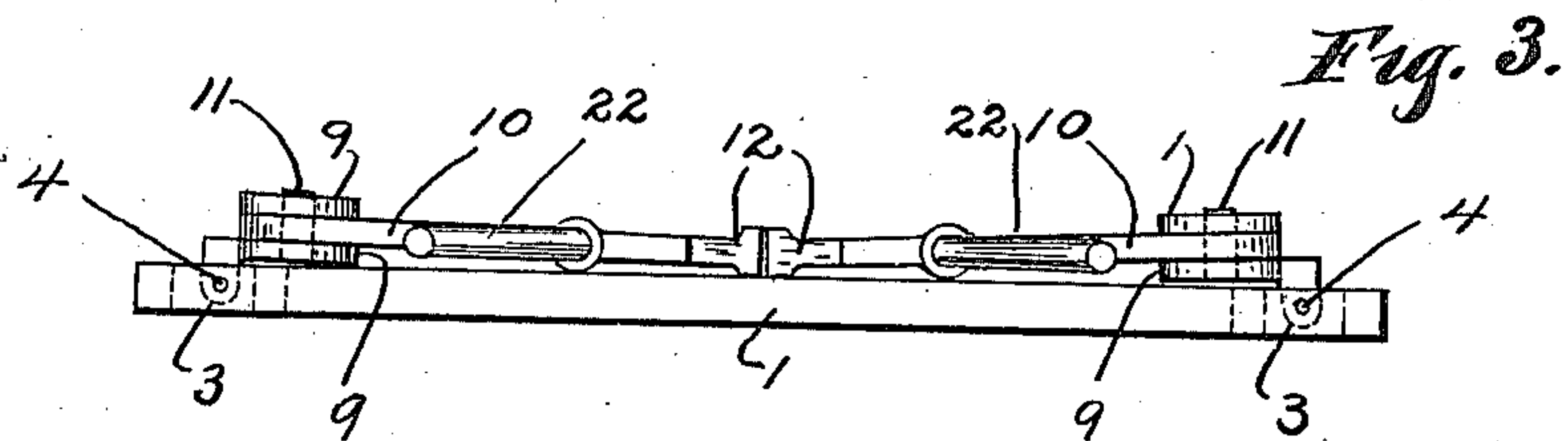
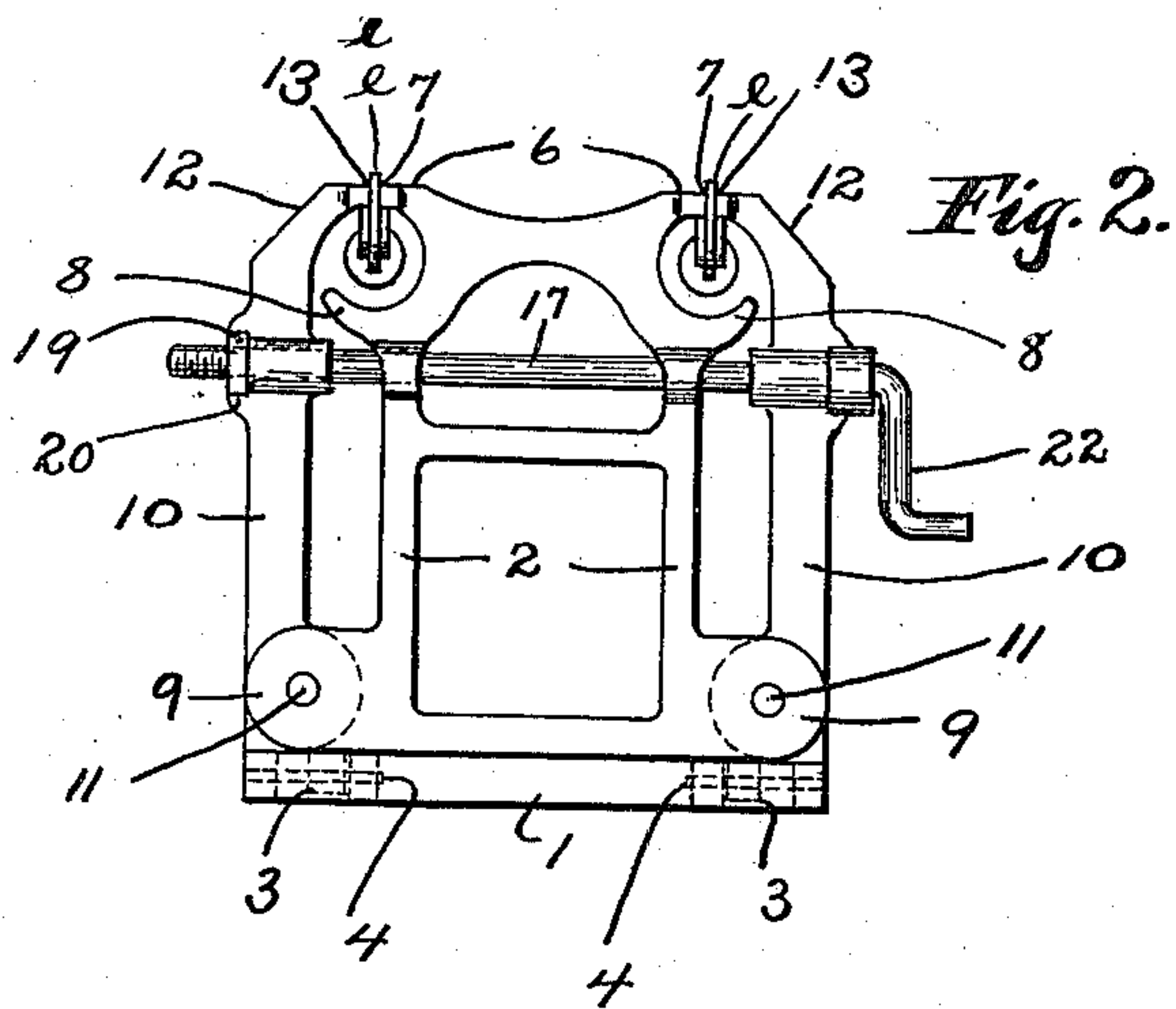
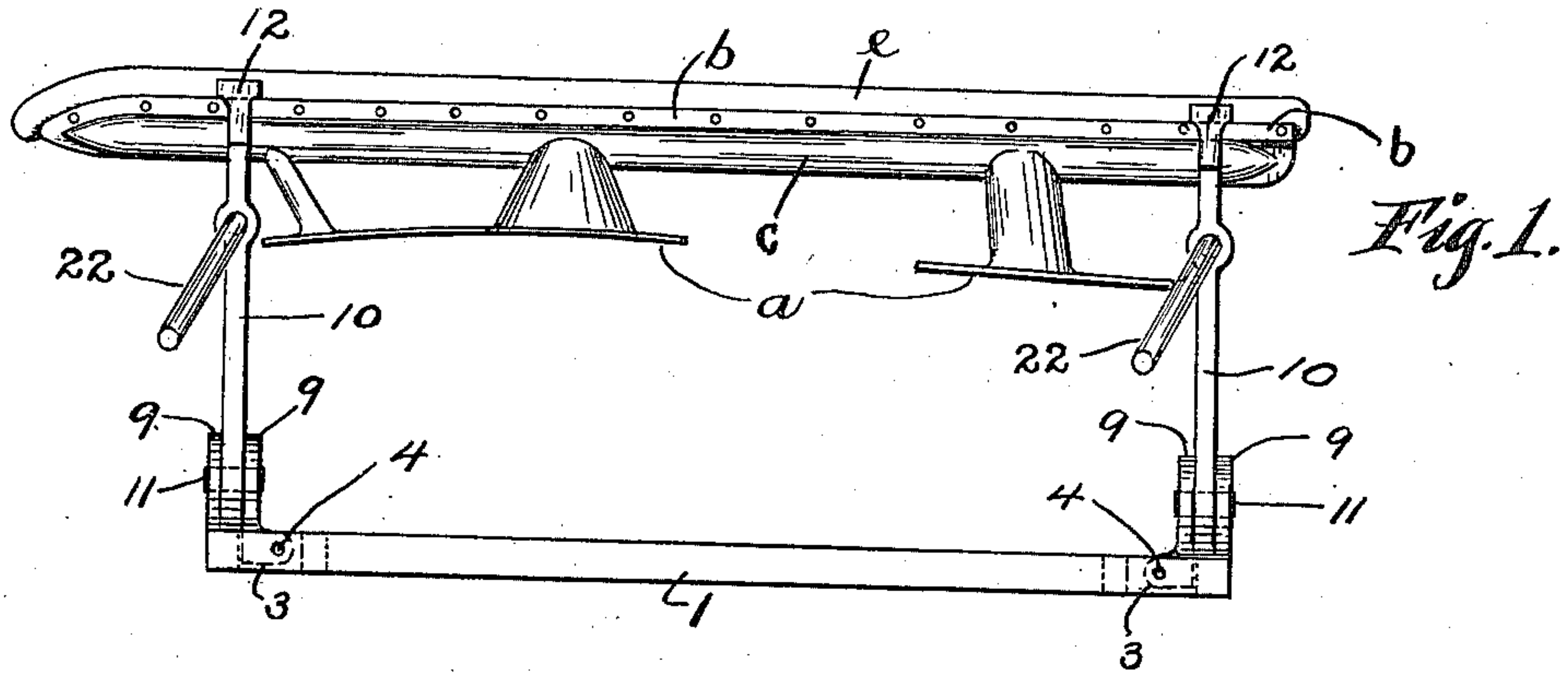


H. C. & E. J. KNUDSEN.
SKATE JIG.
APPLICATION FILED MAR. 21, 1910.

976,186.

Patented Nov. 22, 1910.

2 SHEETS—SHEET 1.



Witnesses:
H. J. Gettins.
W. L. McDermell.

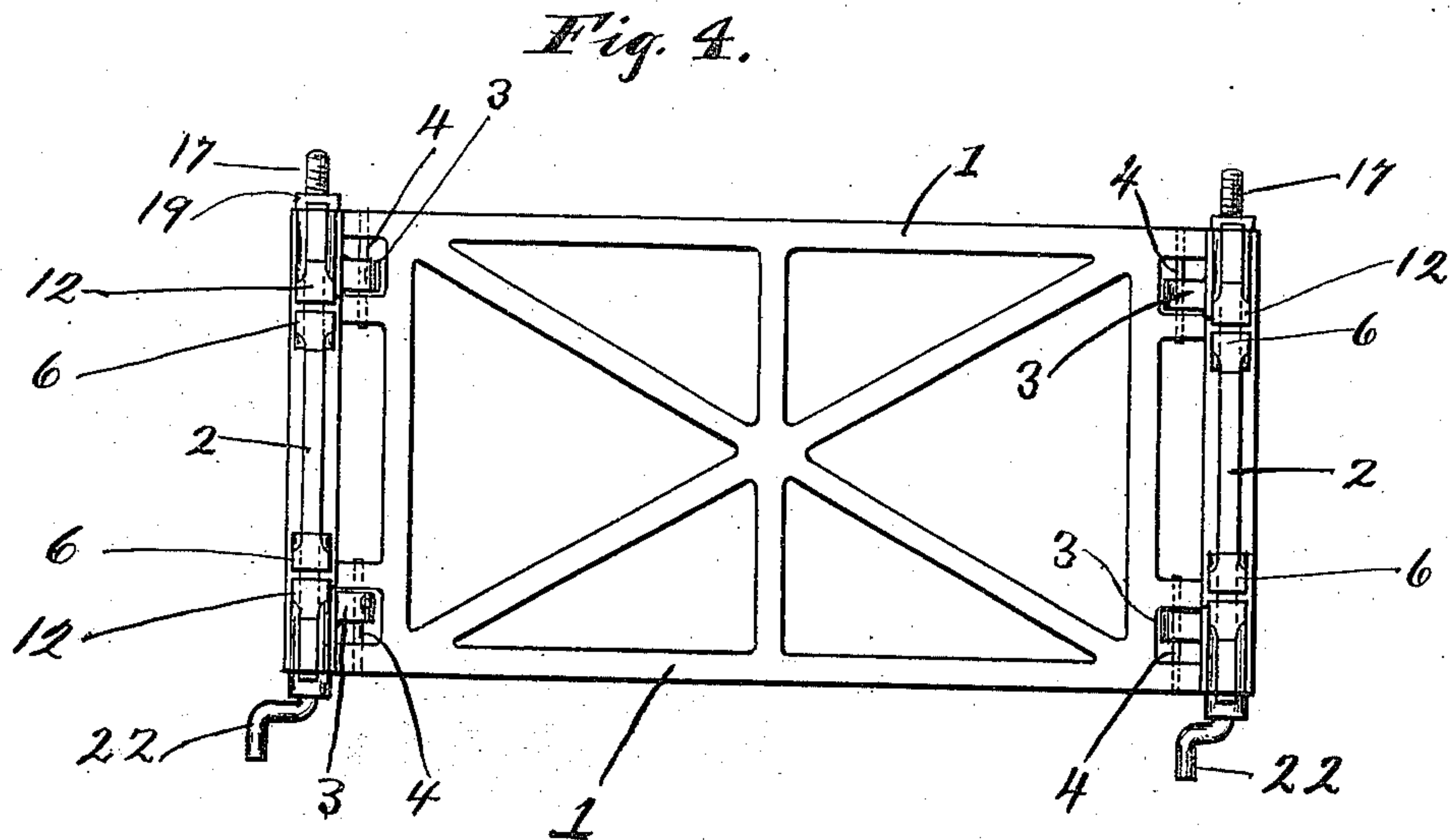
Inventors
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UNITED STATES PATENT OFFICE.

HENRY C. KNUDSEN AND EDWARD J. KNUDSEN, OF CLEVELAND, OHIO.

SKATE-JIG.

976,186.

Specification of Letters Patent. Patented Nov. 22, 1910.

Application filed March 21, 1910. Serial No. 550,604.

To all whom it may concern:

Be it known that we, HENRY C. KNUDSEN and EDWARD J. KNUDSEN, citizens of the United States of America, and residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Skate-Jigs; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

This invention relates to new and useful improvements in skate jigs.

The object of this invention is to provide a device of this character which will hold a pair of skates during the operation of grinding or resharpening the same so that the runners or blades will be held in an absolutely vertical position and with the working surfaces of the two blades in approximately the same horizontal plane.

A further object of our invention is to provide a device of this character which will be very simple in construction and have such an arrangement of parts as will permit the device when not in use to be folded together so as to occupy a very small space so that it may be readily carried.

Our invention also consists in the features of construction and combination of parts, described in the specification, pointed out in the claims and illustrated in the accompanying drawings.

In the accompanying drawings Figure 1 is a side elevation of our jig with a pair of skates held therein. Fig. 2 is an end elevation of same. Fig. 3 is a side elevation of the device with the skates removed and folded for carrying. Fig. 4 is a top plan of the jig open with the skates removed.

Again referring to the drawings 1 represents the base of our device which is preferably made of cast iron. At each end of the base is arranged a standard 2 which is provided with a downwardly extending pair of lugs 3 which form hinge-members therefor. Pins 4 extend through the base and through the lugs 3 on the standard 2 thereby hinging the standards to the base. The standards 2 therefore when not in use may be folded down parallel with the base, as shown in Fig. 3.

Near the upper end of each standard 2, at each side thereof is formed a jaw 6 which has a vertically arranged face, indicated at

7, and below this jaw is provided a support or bracket 8. At the lower end of each standard at each side are formed a pair of ears 9 and between each pair of ears 9 is pivotally secured a member 10 by means of a hinge pin 11. At the upper end of each member 10 is arranged a jaw 12 which registers with the adjacent jaw 6 on the standard 2. Each of the jaws 12 has a flat vertical face, indicated at 13. A rod 17 extends through each standard and through the jaw bearing member 10 at each side thereof. The said rod 17 is screw-threaded at one end and engages a nut 19 which rests in a seat 20 formed on the member 10, through which the threaded portion of the rod 17 passes, to prevent the nut from turning. The opposite end of the rod 17 is provided with a crank handle 22.

The operation of the device is as follows,— The device is particularly designed for use with tubular skates and when it is desired to resharpen a pair of skates one of the skates *a* is inserted between a jaw 6 on the standard 2 and the corresponding jaw 12 on a movable member 10 so that the flange *b* on the tubular portion *c* of the skate abuts against the under faces of said jaws. While one end of the skate is being adjusted the opposite end of the skate is supported in a bracket 8 on the opposite standard. As the distance between the working face of the runner or blade *e* and the top of the flange on the tubular portion is the same at each end it is possible to get a perfect horizontal adjustment of the blade and as the clamping faces of the jaws are absolutely vertical the blade of the skate will be held in a perfectly vertical position during the grinding operation thereby insuring a flat face on the bottom of the blade and absolutely square corners or edges. The other skate is adjusted in the same way on the opposite side of the device and then both are ground together.

What we claim is,—

1. In a skate jig, the combination of a base, a standard pivotally mounted at each end of each base, each standard being provided with a jaw at each side thereof, a movable member arranged at each side of the standard and provided with a jaw adapted to register with the adjacent jaw on the standard and means for causing the jaws on the movable members to approach the jaws on the said standards.

2. In a skate jig, the combination of a

base, a standard mounted at each end of said base, each standard being provided with a jaw at each side thereof, a movable member arranged at each side of the standard and provided with a jaw adapted to register with the adjacent jaw on the standard and means for causing the jaws on the movable members to approach the jaws on the said standards.

10 3. In a skate jig, the combination of a base, a standard mounted at each end of said base, each standard being provided with a jaw at each side thereof, brackets formed on said standards below said jaws, 15 a movable member arranged at each side of the standards and provided with a jaw adapted to register with the adjacent jaw on the standard and means for causing the jaws on the movable members to approach 20 the jaws on said standards.

4. In a skate jig, the combination with a base, a standard pivotally mounted at each

end of said base, said standard being provided with a jaw at each side thereof, brackets formed on said standards below 25 said jaws, a member pivoted to said standards at each side thereof, said member being provided with a jaw arranged to register with the adjacent jaw on the standard and a rod extending through said standard 30 and through both of the pivoted members, said rod being provided at one end with a nut and at the opposite end with a crank handle and means for preventing the turning of said nut. 35

In testimony whereof, we sign the foregoing specification, in the presence of two witnesses.

HENRY C. KNUDSEN.
EDWARD J. KNUDSEN.

Witnesses:

VICTOR C. LYNCH,
N. L. McDONNELL.