

J. KAUTH.
EXCAVATING BUCKET HEAD.
APPLICATION FILED MAR. 14, 1908.

924,791,

Patented June 15, 1909.

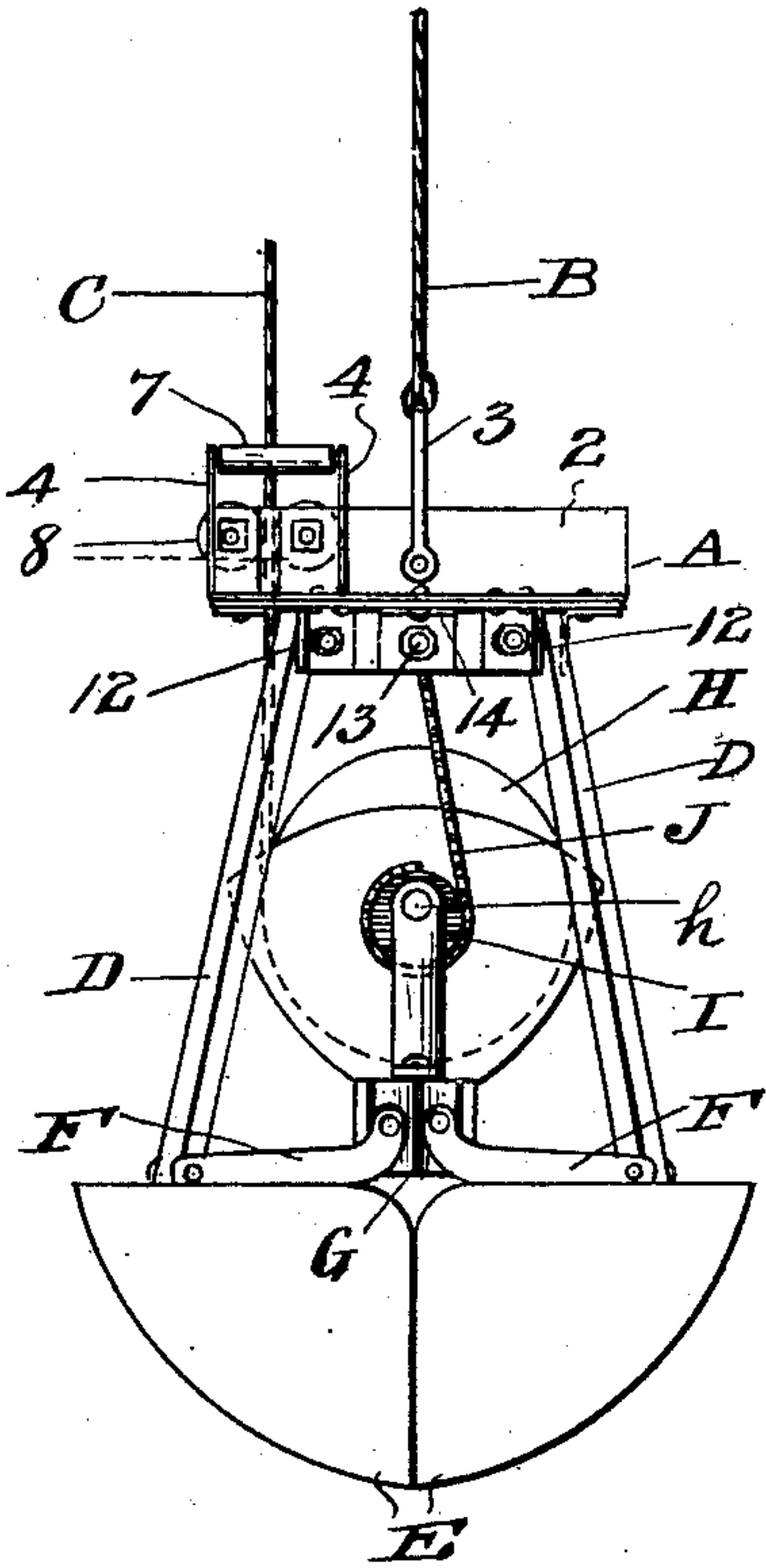


Fig. 1.

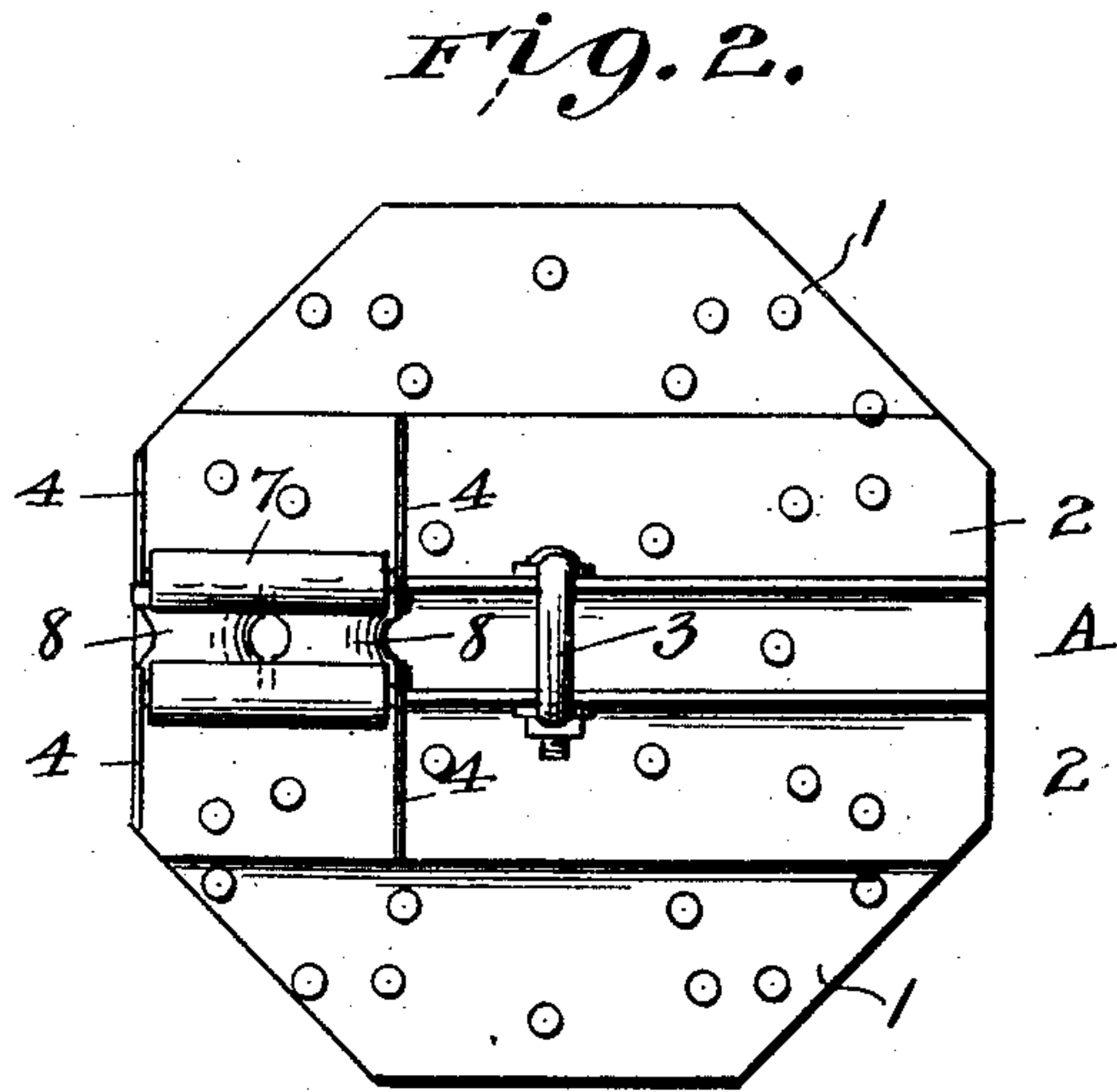


Fig. 2.

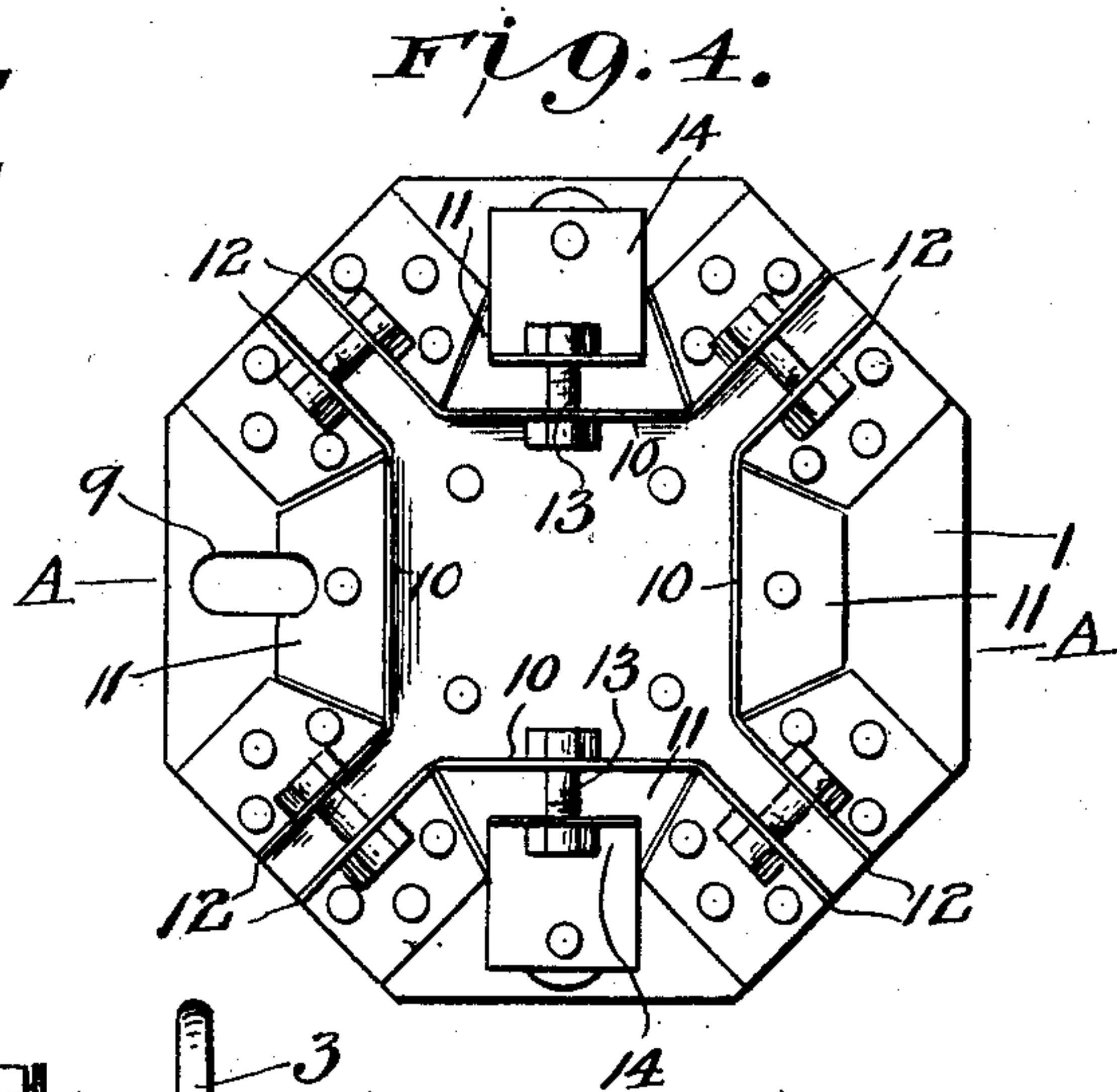


Fig. 4.

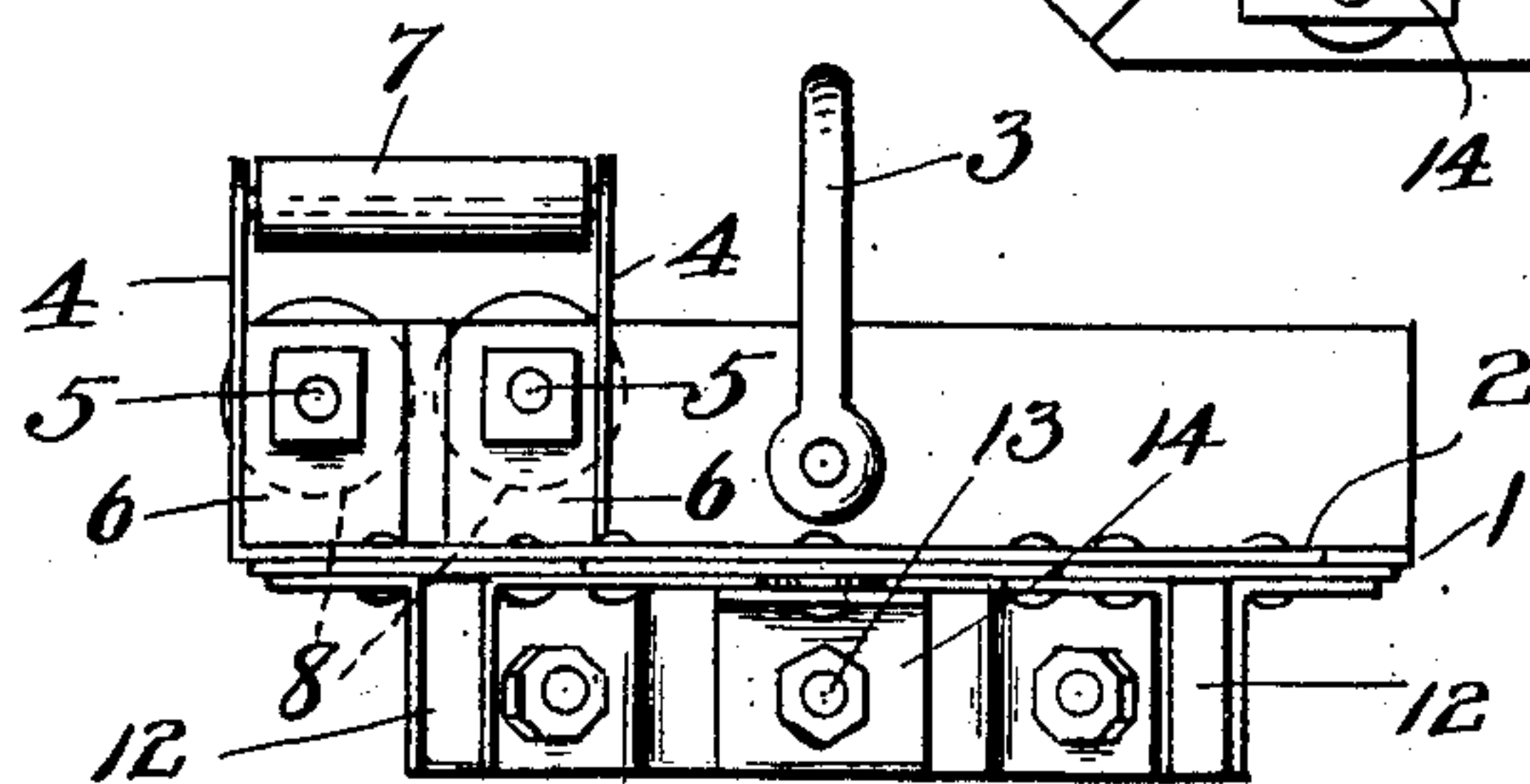


Fig. 3.

WITNESSES:

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JACOB KAUTH, OF ST. CLOUD, MINNESOTA.

EXCAVATING BUCKET-HEAD.

No. 924,791.

Specification of Letters Patent.

Patented June 15, 1909.

Application filed March 14, 1908. Serial No. 421,070.

To all whom it may concern:

Be it known that I, JACOB KAUTH, a citizen of the United States, residing at St. Cloud, in the county of Stearns and State of Minnesota, have invented certain new and useful Improvements in Excavating Bucket-Heads, of which the following is a specification.

My invention relates to the heads of what are known in the art as "orange-peel buckets" and consists in making the head of steel plates held together by removable fastenings so that should any parts wear out or become broken by use they may be replaced. Herebefore the heads used in this class of tool has been cast in one piece so that when it has become worn or broken the whole piece has to be thrown away and replaced with a new one. Also as my device is made of rolled steel plates it is much stronger than the heads made of cast metal.

The construction and operation of my improved bucket head will be described hereinafter and illustrated in the accompanying drawings in which—

Figure 1 is a side view of an orange-peel bucket with my improved bucket head in place thereon, Fig. 2, a top view of my improved head, Fig. 3, a side view, and Fig. 4, a bottom view thereof.

In the drawings similar reference characters indicate corresponding parts throughout the several views.

In Fig. 1 is shown a bucket of the type to which my improved head, designated A, is adapted. Said head consists of a plate 1 shown with eight sides though it may be circular or of any other preferred shape. Secured to the top of plate 1 are two angular plates 2, spaced apart at equal distances from the median line of the plate, and having a link 3 pivotally secured to their middle and in the center of the head A to which the lifting rope B is secured.

4 indicates uprights secured at one end of the angular plates 2 by means of bolts 5 secured through offsets 6 on said uprights.

7 indicates rollers journaled in the upper ends of said uprights, and 8 other rollers journaled on the bolts 5, said rollers 7 and 8 acting as guides for the closing rope C that runs therebetween and through a hole 9 in

plate 1. The function of the closing rope C will be made clear hereinafter.

10 indicates four plates having angular bases 11 secured to the underside of plate 1, said plates 10 having their middle portions forming the four sides of a broken square as shown in Fig. 4 and with their ends 12 extending outwardly parallel to the imaginary lines forming the diagonals of said broken square, said extended ends 12 being spaced apart to receive the upper ends of the arms D that support the bucket blades E pivotally secured to their lower ends.

F indicates arms secured to the blades E which extend under the center of head A and are secured to a frame G carrying a sheave H to which is secured the end of closing rope C.

I indicates cams secured to the ends of the shaft *h* for sheave H and on which are secured one end of chains J the other ends being pivotally secured to bolts 13 secured through angle pieces 14 and two opposite plates 12.

As stated hereinbefore the head A being made of the separate plates and pieces as described permits removal of any worn or broken pieces and replacing them with new pieces so that my invention reduces the cost of operation of excavating buckets of the class described and the head is also, because of its structure, very strong and capable of lifting very heavy loads.

Having thus described my invention what I claim is—

1. A bucket head comprising a plate of rolled steel, rolled steel angle plates on the upper side to which is secured a link for the lifting rope, rolled steel angle plates secured to the under side of the first mentioned plate and having their ends spaced apart, and the supporting arms of the bucket journaled between said angle plates.

2. A bucket head comprising a plate of rolled steel, angle plates secured to the upper side of said plate and spaced apart on each side of the median line of the plate, a link secured to the middle of said angle plates, upright plates secured at one end of said angle plates by means of bolts secured through offsets from said uprights and the angle plates aforesaid, rollers journaled between said uprights, rollers journaled on said

bolts between said angle plates, four angle plates secured on the underside of the first mentioned plate having their middle portions forming the four sides of a broken square and their ends extending outwardly on lines parallel with the diagonals of said square, and angle plates secured outside of two of said plates opposite one another.

In testimony whereof I hereto affix my signature in the presence of two witnesses. 10

JACOB ^{his} X KAUTH.
mark.

Witnesses:

E. N. HAMMEREL,
NICK VOLZ.