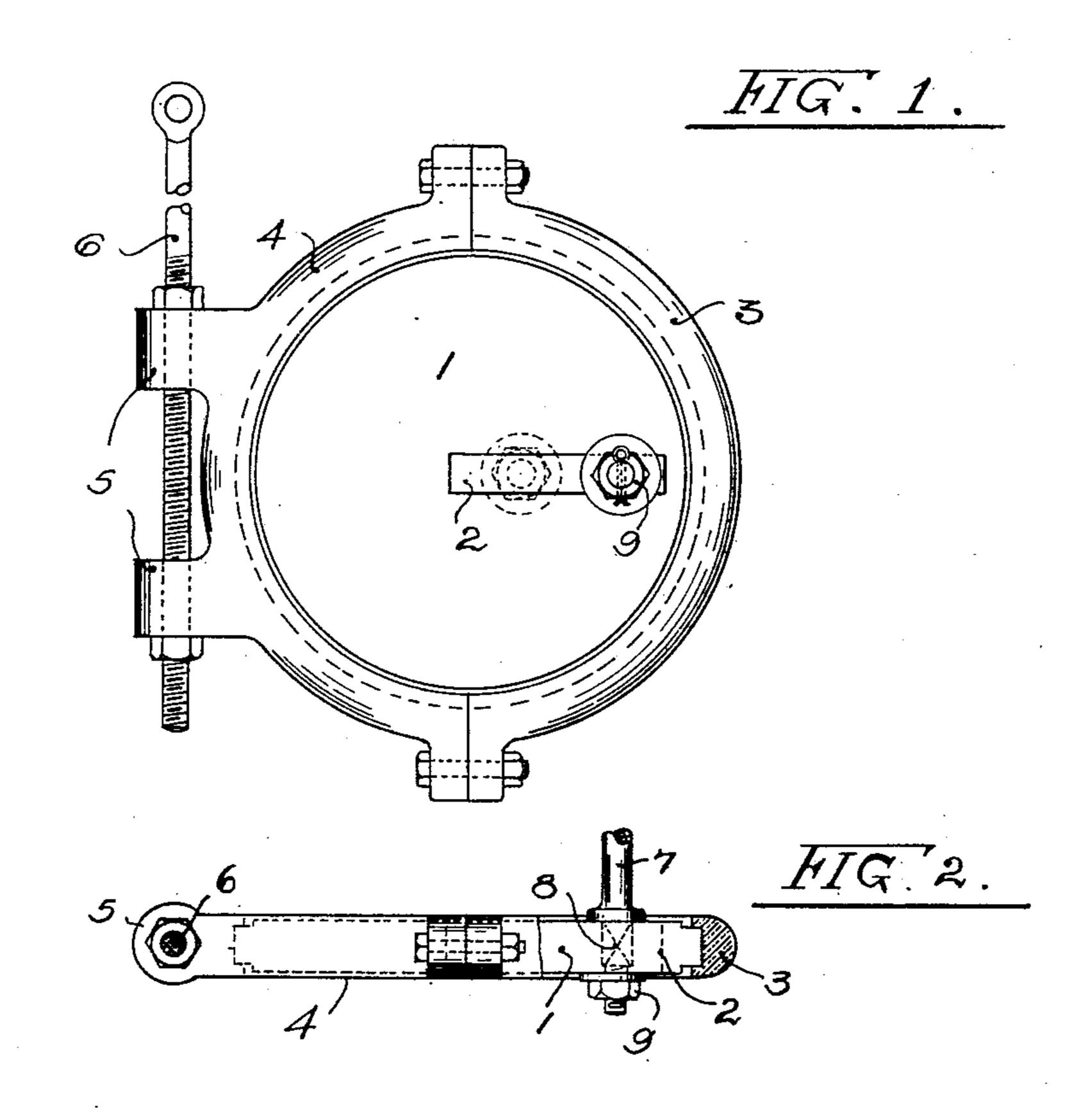
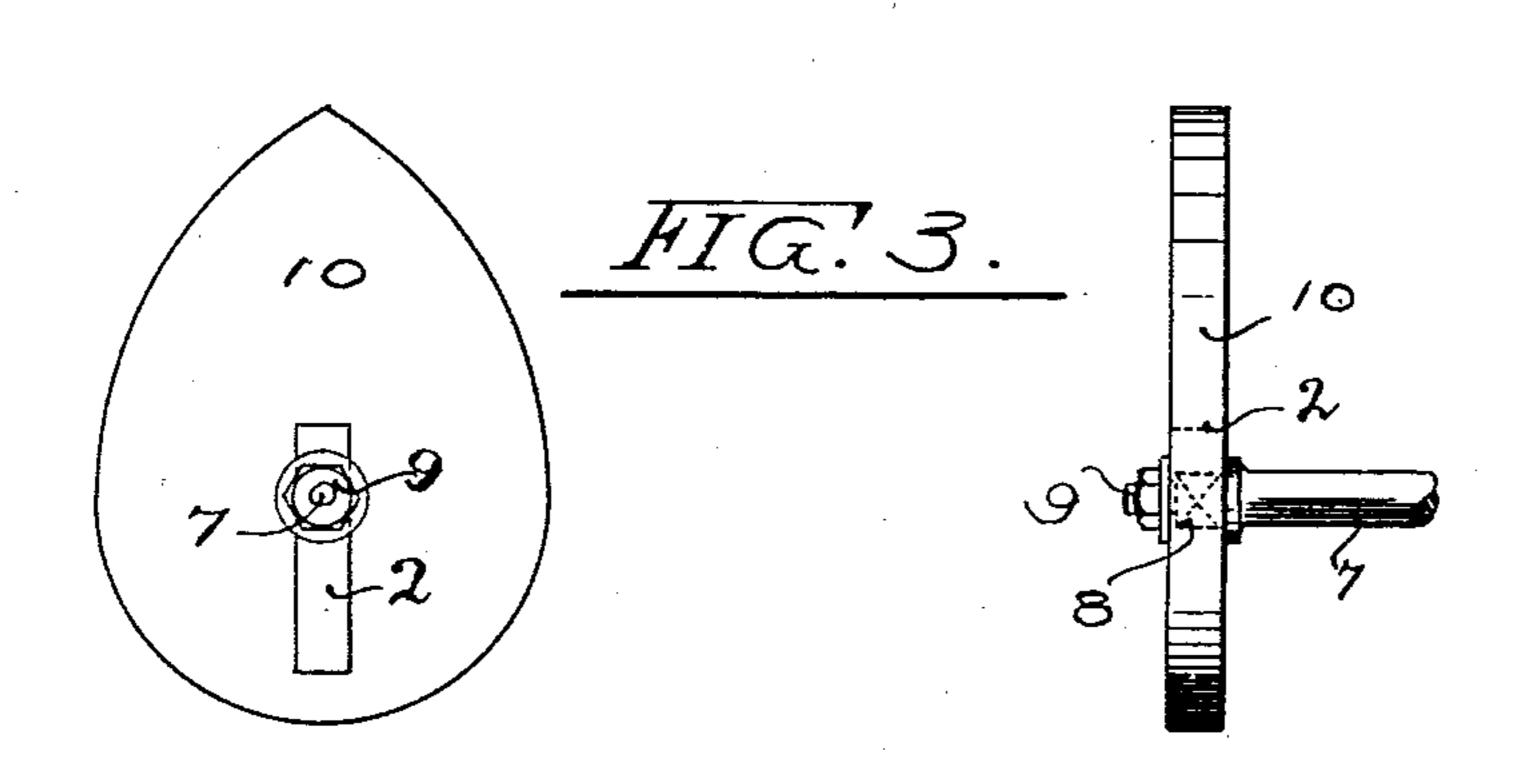
E. VONDERHEYDEN. CAM OR ECCENTRIC.

APPLICATION FILED FEB. 27, 1903.

NO MODEL.





Mitnesses Luc. Lang Minnie L. Dill Towertor Toutheyden Tohn F. Kerry

United States Patent Office.

ERNEST VONDERHEYDEN, OF PATERSON, NEW JERSEY, ASSIGNOR TO THE GRAEF HAT-BAND MFG. CO., A CORPORATION OF NEW JERSEY.

CAM OR ECCENTRIC.

SPECIFICATION forming part of Letters Patent No. 751,577, dated February 9, 1904.

Application filed February 27, 1903. Serial No. 145,366. (No model.)

To all whom it may concern:

Be it known that I, Ernest Vonderheyden, a citizen of the United States of America, residing at Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Cams or Eccentrics, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in cams, and by "cams" I mean and wish to include devices for converting a regular rotary motion into an irregular, fast and slow, intermittent rotary or reciprocating motion.

The object of my invention is to make such devices adjustable, so that the conversion of the rotary motion may be regulated and varied in a simple and effectual manner to suit the emergencies or requirements of the case.

A further object of my invention is to obviate the necessity of changing cams or eccentrics, which is often required in textile industries.

The usefulness and scope of my invention is not, however, limited to the said industries, as it is obviously applicable to all mechanisms where the conversion of a rotary to another motion or the reverse is desired.

I attain these objects by the device illus-3° trated in the accompanying drawings, in which—

Figure 1 is a front view showing my improved cam; Fig. 2, a top plan view of the same, and Fig. 3 a front and side view of a heart-shaped cam embodying my improvements.

My invention consists of a cam provided with an opening in which the cam-shaft may be secured at any desired point by any suitable contrivance to transmit the motion desired.

In Fig. 1 of the drawings an eccentric cam 1 is shown secured to an eccentric-shaft 7 by means consisting of a washer and nut 9, the 45 shaft being shaped square, as at 8, to pass through the opening 2 in the eccentric to re-

volve it within the eccentric-strap. The eccentric-strap shown consists of the separable parts 3 and 4, one part of which is provided with the lugs 5, in which is suitably secured a 50 connecting-rod 6, adapted to be connected by knuckle or universal joint or in any other practicable manner to any mechanism or part to which motion is to be transmitted, according to the exigencies of the case.

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By the adjustment of my cam upon the shaft it is obvious that the transmitting of motion may be controlled and regulated to meet the varied requirements of mechanical operations in the arts and industries.

The opening in my cam may be made straight, longitudinal, angular, or curved for the purposes of adjustment without departing from the scope or spirit of my invention.

My improvement may be embodied in cams 65 and eccentrics of any shape or configuration—as, for instance, the well-known heart-shaped cam shown in Fig. 3.

In the manufacture of textile goods my invention is particularly and especially useful 7° where it is necessary to impart a quickly-changing rising-and-falling motion, or to impart a slow thrust and quick return, a quick thrust and a slow return, or wherever an irregular speed or motion or a rapid recipro-75 cating motion is required.

With this description of my invention, what I claim, and desire to secure by Letters Patent, is—

The combination with the eccentric 1, having a slot 2, and the eccentric-shaft 7, of the detachable two-part strap 3 and 4, the part 4 having lugs 5 provided with threaded openings, and the connecting-rod 6, constructed substantially as, and for the purposes, speci-85 fied.

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

ERNEST VONDERHEYDEN.

Witnesses:

JOHN F. KERR, MINNIE L. DILL.