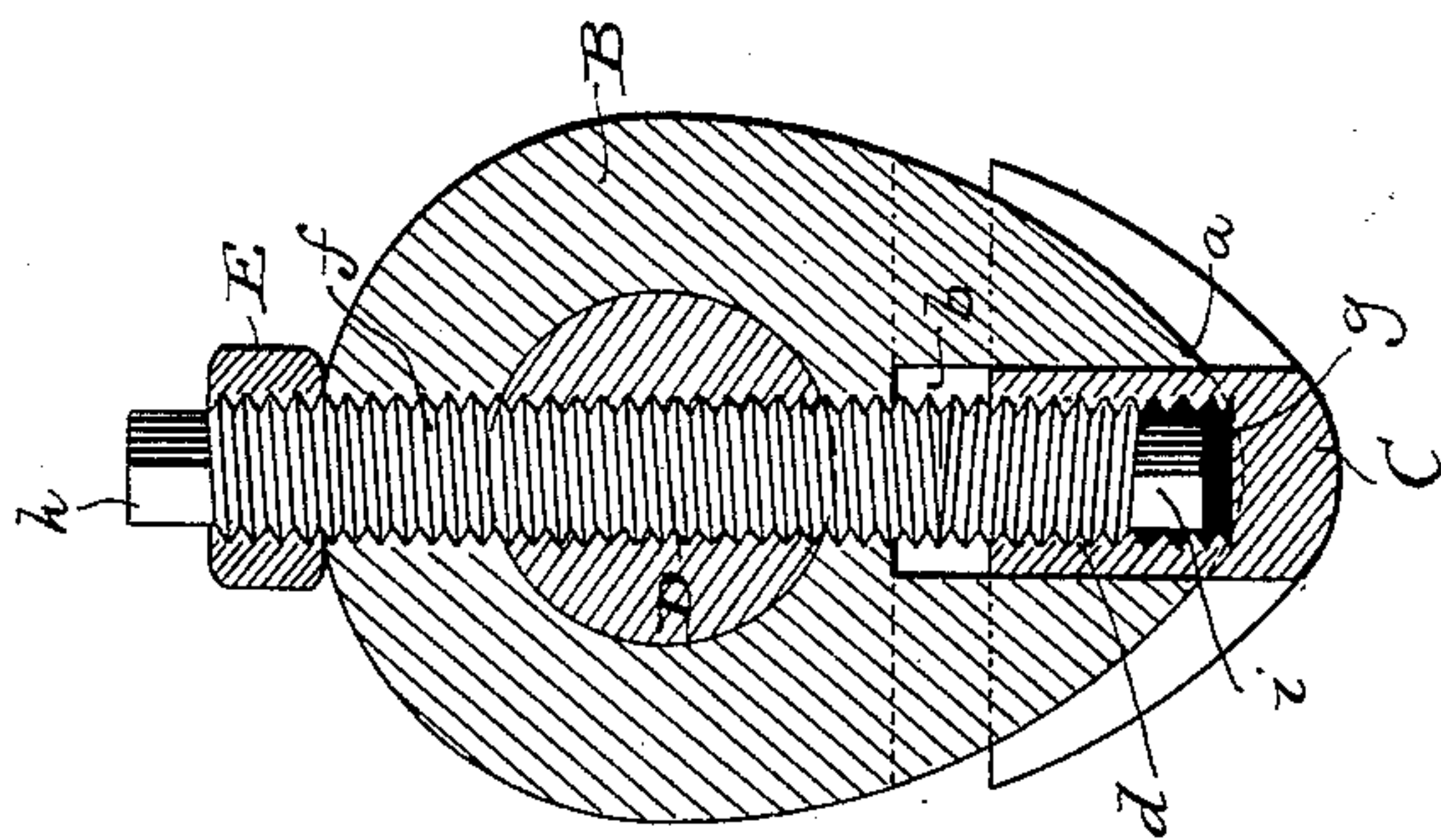
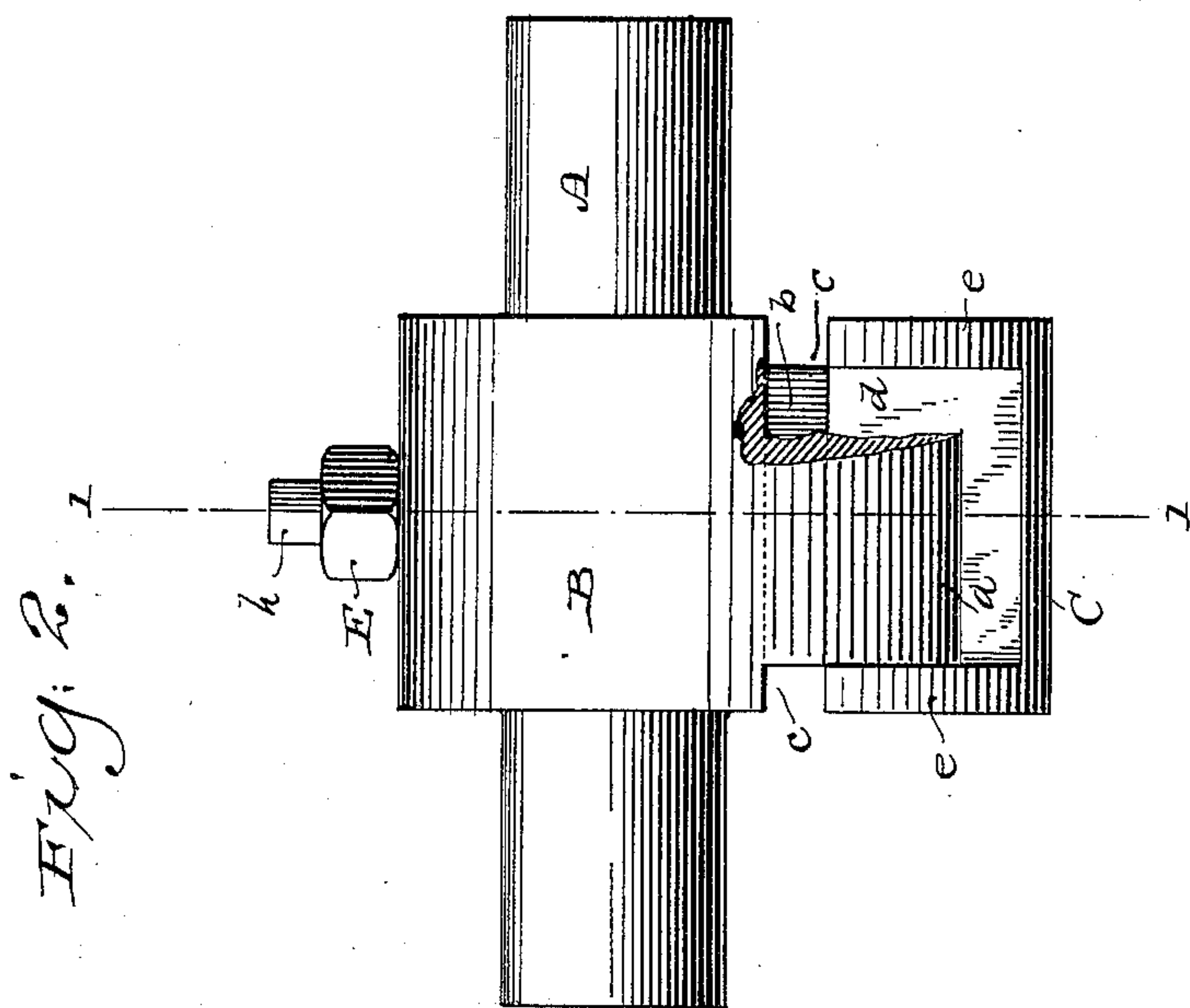


(No Model.)

J. CRYDERMAN.
CAM.

No. 432,301.

Patented July 15, 1890.



Witnesses
Wm. Young,
Wm. Kellogg

Inventor
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UNITED STATES PATENT OFFICE.

JACOB CRYDERMAN, OF MILWAUKEE, WISCONSIN.

CAM.

SPECIFICATION forming part of Letters Patent No. 432,301, dated July 15, 1890.

Application filed February 13, 1890. Serial No. 340,288. (No model.)

To all whom it may concern:

Be it known that I, JACOB CRYDERMAN, of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain new and useful Improvements in Cams; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to cams for use on shafting and other machinery; and it consists in certain peculiarities of construction, as will be fully set forth hereinafter, and subsequently claimed.

In the drawings, Figure 1 is a vertical section through a shaft provided with my device on the line 1 1 of Fig. 2; and Fig. 2 is a side elevation of the same, partly broken away at one point to better illustrate the construction.

A represents a section of a shaft, to which is rigidly attached the main body B of my cam, which is preferably of oval shape, as shown, in cross-section, and the point or longest portion *a* of said body is centrally grooved or cut out, as shown at *b*, and further transversely grooved or cut out at each edge, as shown at *c c*, for the reception of the extensible section C of said cam, the part C having a tongue *d* fitting in the groove *b*, and side edges or wings *e e* moving in the grooves *c c*, the exterior surfaces of said wings *e e* exactly conforming to the contour of the point *a* of the cam, and when fitted wholly within the described grooves presenting the appearance of a solid point. A hole *f* is bored through the cam-body B and shaft A and provided with female screw-threads, (say right-handed,) and a similar hole *g*, but with female screw-threads running in the opposite direction, (as left-handed,) is bored into the tongue of the extensible section C, and said bores are fitted with a screw-bolt D, which has corresponding right-handed and left-handed male screw-threads cut upon it, as shown, the said bolt having squared ends *h i* for convenience in adjusting it to place and subsequently operating it with a wrench.

E is a lock or jam nut for holding the parts in the desired relation after adjustment.

The operation of my device will be apparent from the foregoing description of its construction, taken in connection with the drawings, and by its use the necessity of changing the cams upon shafting or other machinery, or adding extraneous devices thereto, is entirely obviated, forming a ready, convenient, and highly-useful article, and one capable of use in a widely-varied number of machines.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. An extensible cam formed in sections provided with longitudinal screw-threaded bores, the thread in one bore being of opposite pitch from that in the other bore, in combination with an adjusting-screw working within said bores and having corresponding oppositely-pitched threads, substantially as described.

2. An extensible cam formed in sections, one of which slides within the other, and both of which are longitudinally perforated with a central screw-threaded bore, the threads of one section being right-handed and those of the other section left-handed, in combination with a correspondingly-threaded actuating-screw, substantially as set forth.

3. The combination, with a shaft, of a cam-body rigidly secured thereto and grooved or cut out at one end, an extensible section fitting in said groove, all of said parts being perforated with a screw-threaded bore, the threads of the bore through the cam-body and shaft being cut in one direction and those in the extensible section being cut in the opposite direction, a correspondingly-threaded actuating-screw fitting in said bore, and a lock-nut on the outer end of said screw, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

JACOB CRYDERMAN.

Witnesses:

H. G. UNDERWOOD,
WM. KLUG.