

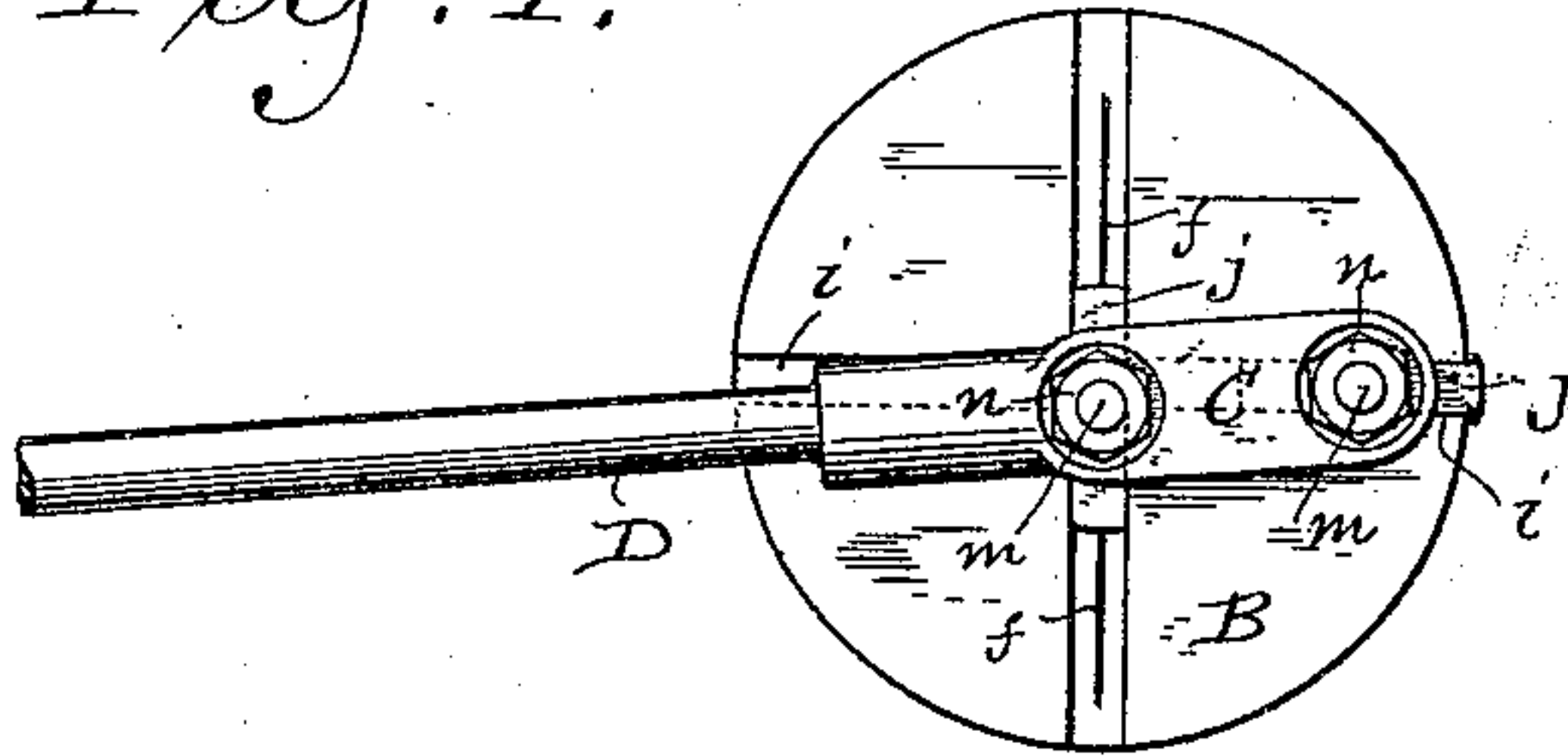
(No Model.)

L. S. EDLEBLUTE.  
MECHANICAL MOVEMENT.

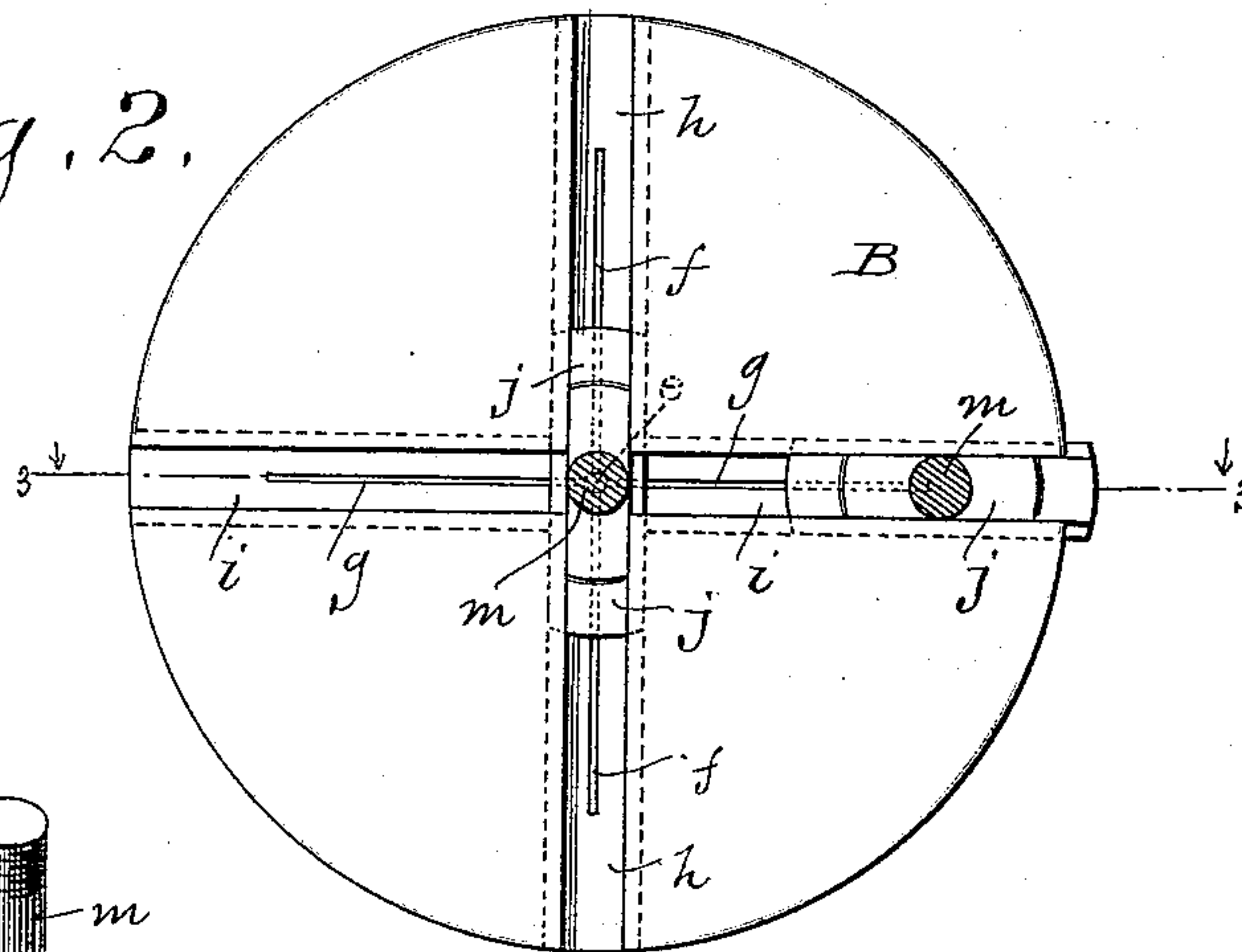
No. 451,114.

Patented Apr. 28, 1891.

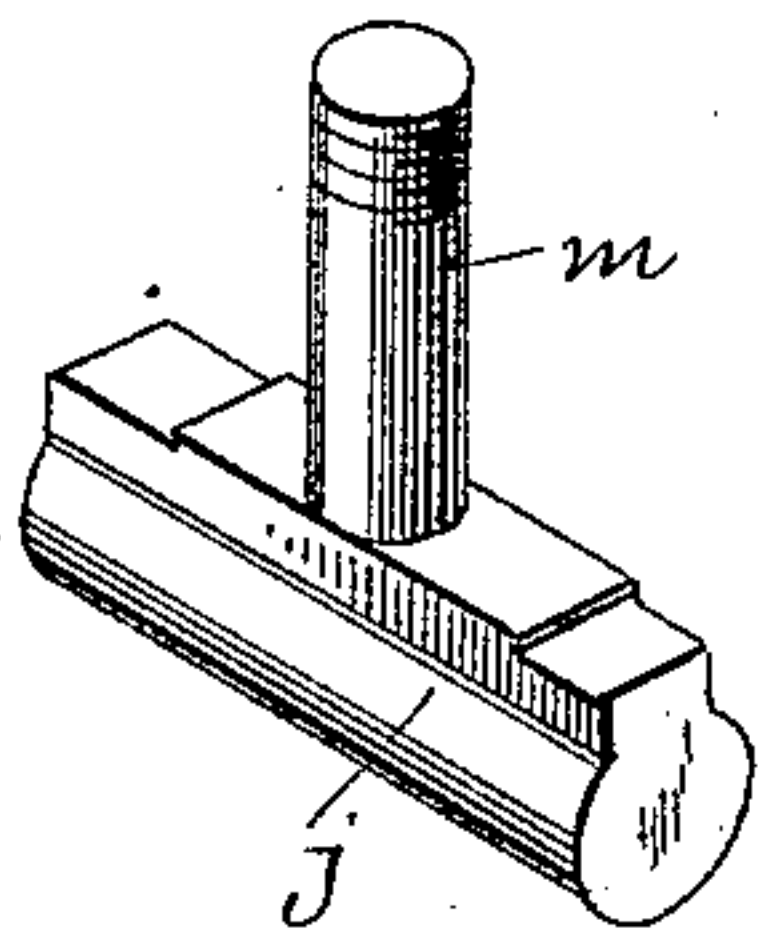
*Fig. 1.*



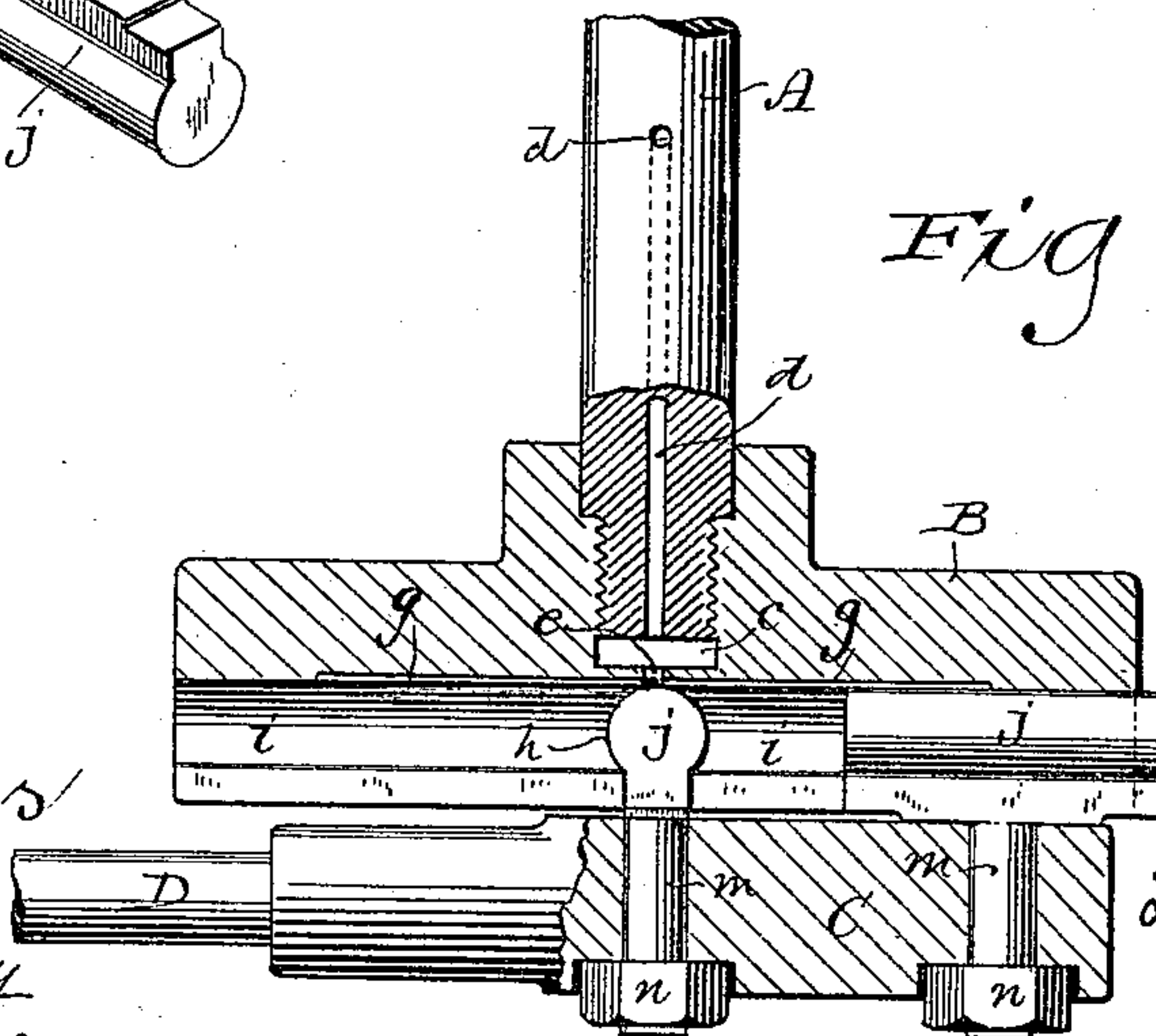
*Fig. 2.*



*Fig. 4.*



*Fig. 3.*



Witnesses  
Geo. W. Louny  
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# UNITED STATES PATENT OFFICE.

LUCIUS S. EDLEBLUTE, OF SHEBOYGAN, WISCONSIN, ASSIGNOR OF ONE-HALF  
TO FRED MUELLER, OF SAME PLACE.

## MECHANICAL MOVEMENT.

SPECIFICATION forming part of Letters Patent No. 451,114, dated April 28, 1891.

Application filed December 30, 1890. Serial No. 376,263. (No model.)

*To all whom it may concern:*

Be it known that I, LUCIUS S. EDLEBLUTE, a citizen of the United States, and a resident of Sheboygan, in the county of Sheboygan, and in the State of Wisconsin, have invented certain new and useful Improvements in Mechanical Movements; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention consists in certain peculiarities of construction and combination of parts to be hereinafter described with reference to the accompanying drawings and subsequently claimed.

In the drawings, Figure 1 represents an elevation of my device; Fig. 2, a like view of the same partly in section; Fig. 3, a vertical transverse section of said device, and Fig. 4 a detail perspective view of one of the pitman-blocks.

Referring by letter to the drawings, A represents a shaft designed for connection with a source of power, one end of this shaft being shown as screw-threaded to engage a corresponding recess in the hub side of a disk B, a space *c* being left between said end of the shaft and the opposing portion of the disk. The shaft A is provided with a channel *d*, that leads to the space *c*, and a port *e* connects this space with leads *f g* in dovetail central grooves *h i*, that are formed in the outer side of the disk B to intercept each other at right angles. Each of the grooves *h i* is preferably in the form of a circular opening intercepted by an angular slot, and arranged to slide in these grooves are correspondingly-shaped blocks *j*, each of the latter being provided with a screw-threaded stem *m*, that passes through the head C of a pitman D to engage a nut *n*, preferably countersunk in said pitman-head.

In practice lubricant is introduced through the shaft-channel *d* to fill the latter and the space *c* in the disk B and to also find its way through the port *e* into the leads *f g*, above described. The disk B in its rotation exerts leverage on the blocks *j*, and thus the latter are moved back and forth in the relative disk-grooves to impart reciprocative movement to the pitman, said blocks being lubricated in their travel by the material accumu-

lated in the leads *f g* in said grooves, friction being further reduced because of the peculiar corresponding shape of the aforesaid blocks and grooves.

The rectilinear movement of the blocks in the grooves while the disk is on its rotation causes each block to describe an imaginary ellipse, the minor axis of the ellipse farthest from the outer end of the pitman being equal to the major axis of the other ellipse and at right angles thereto. There being always a pushing force against at least one of the blocks, dead-centers are overcome and the pitman has a steady reciprocative movement, and while the disk is making one-half of a revolution said pitman will make two strokes, one back and the other forward. Attention is also called to the fact that each pitman-block revolves twice around its relative imaginary ellipse while the disk is making one revolution, and consequently the pitman has two full strokes alternately in each direction during this revolution of said disk.

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

1. A mechanical movement comprising a rotary device centrally provided with a lubricant-space and having intercepting-grooves in one of its sides, these grooves provided with leads that communicate with said lubricant-space, a sliding block arranged in each groove, and a pitman connected to the blocks, substantially as set forth.

2. A mechanical movement comprising a shaft provided with a lubricant-channel, a disk fast on the shaft and having a central lubricant-space and intercepting-grooves, the latter being provided with leads that communicate with said lubricant-space, a sliding block arranged in each groove, and a pitman connected to the blocks, substantially as set forth.

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

LUCIUS S. EDLEBLUTE.

Witnesses:

D. T. PHALEN,  
JAC. SCHLICHT.