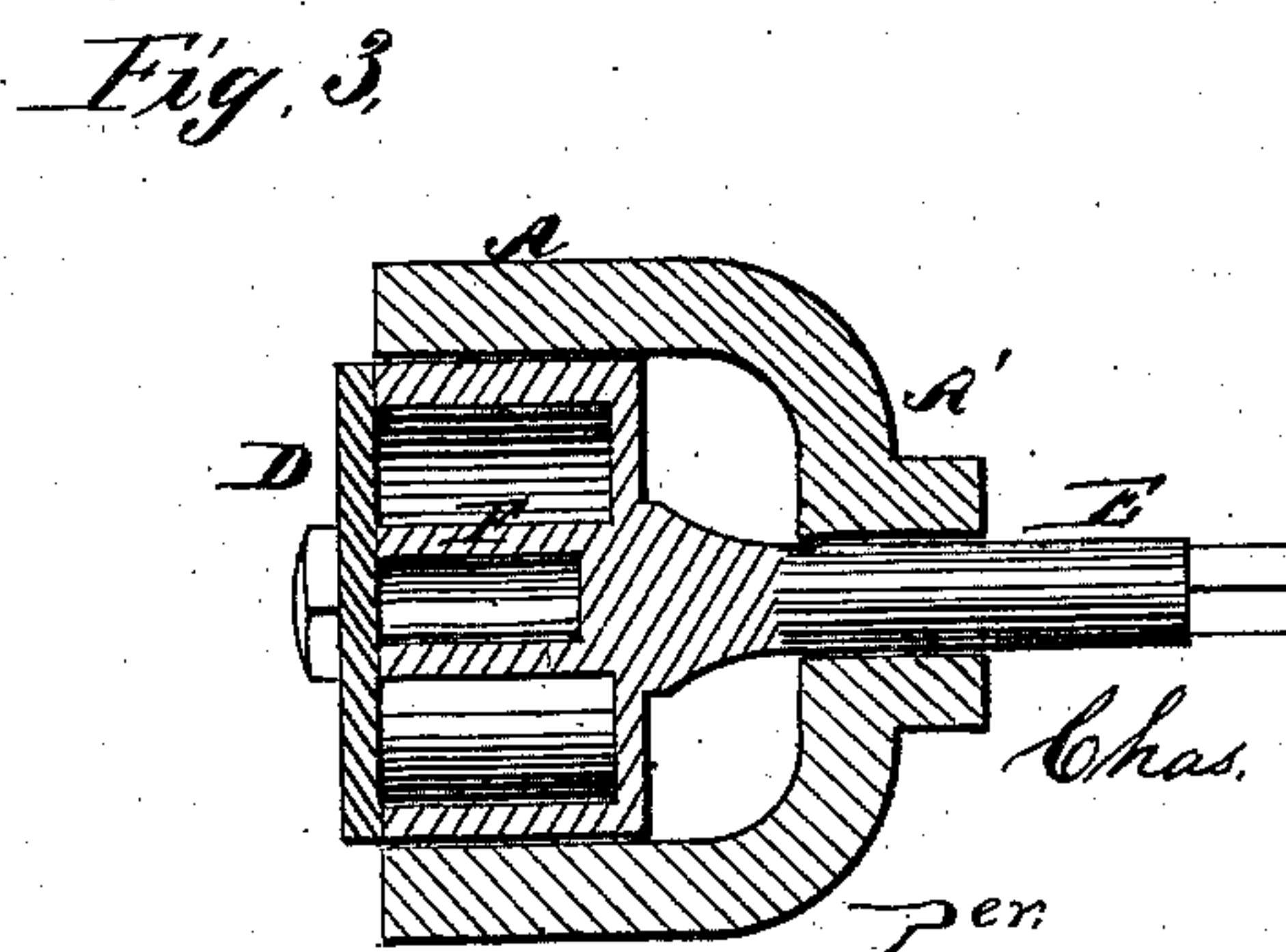
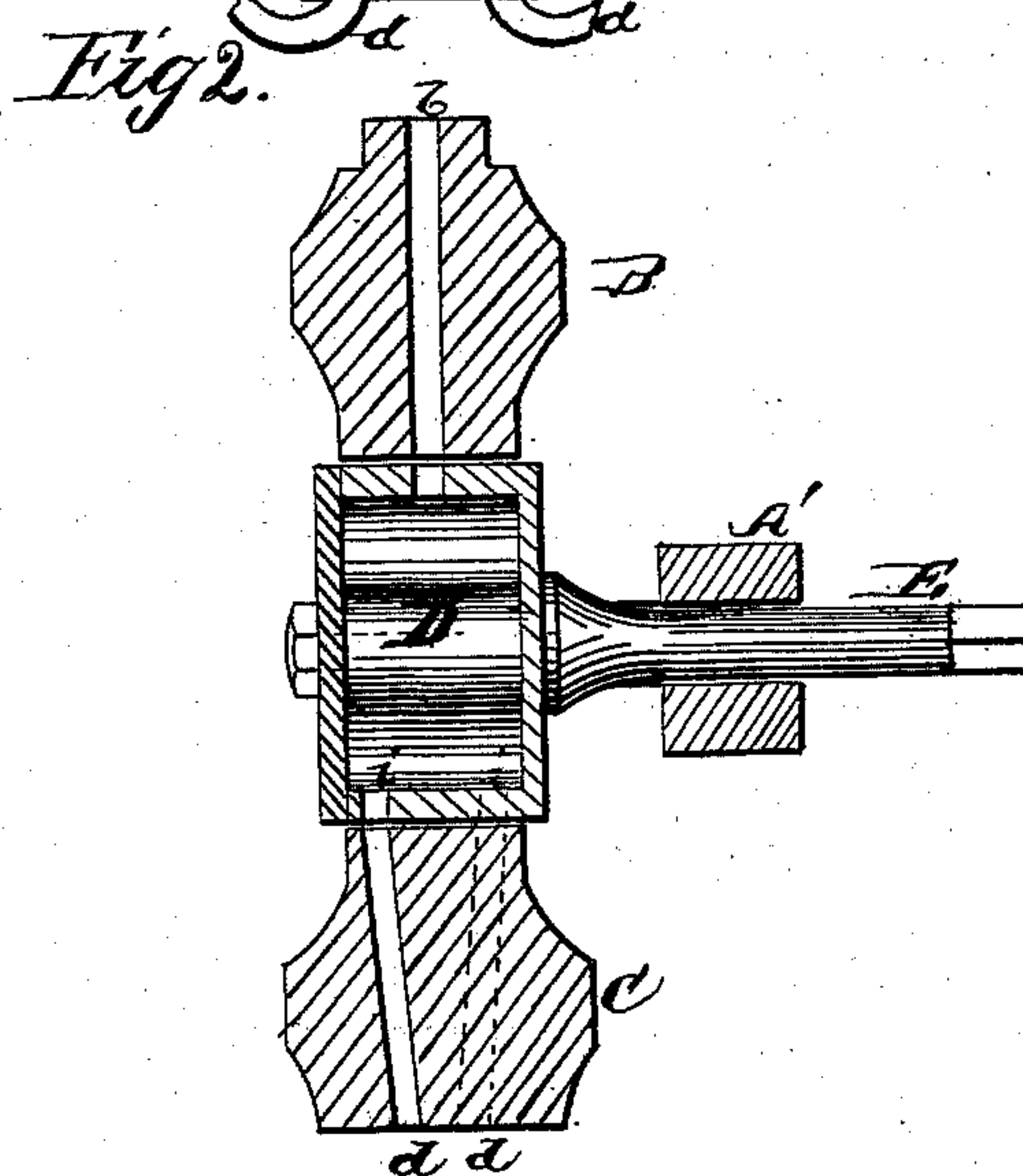
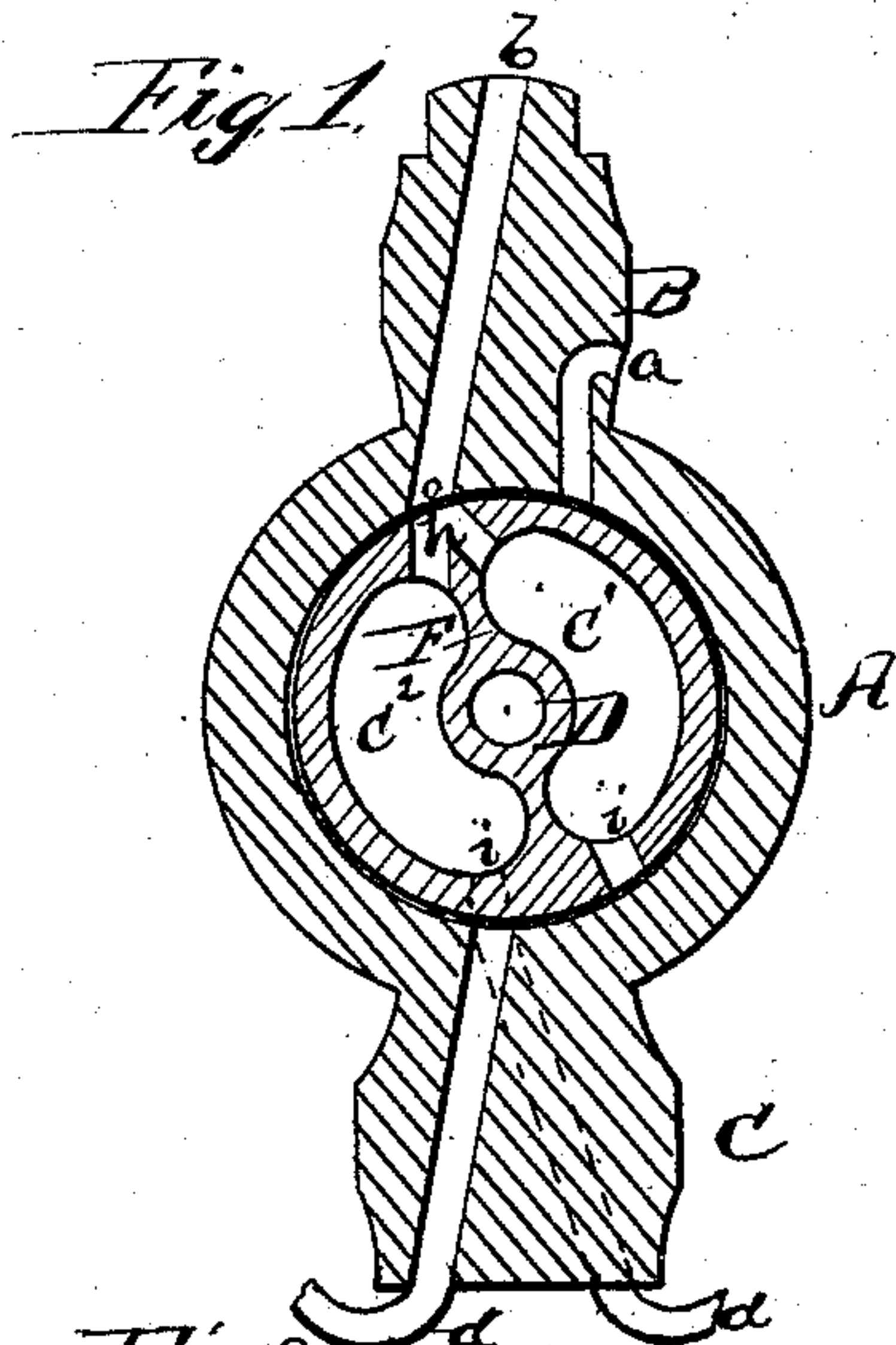


C. F. RAYMOND.
Lubricator.

No. 207,067.

Patented Aug. 13, 1878.



Witnesses:
W. C. McArthur
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Inventor:
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UNITED STATES PATENT OFFICE.

CHARLES F. RAYMOND, OF BIRMINGHAM, ALABAMA.

IMPROVEMENT IN LUBRICATORS.

Specification forming part of Letters Patent No. **207,067**, dated August 13, 1878; application filed June 7, 1878.

To all whom it may concern:

Be it known that I, CHARLES F. RAYMOND, of Birmingham, in the county of Jefferson and State of Alabama, have invented certain new and useful Improvements in Tallow-Cups; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

The nature of my invention consists in the construction and arrangement of an oil or tallow gage for lubricators for locomotive valves and cylinders, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a vertical longitudinal section, Fig. 2 a vertical cross-section, and Fig. 3 a horizontal cross-section, of my invention.

A represents a circular frame provided at the top with a neck or projection, B, to be screwed into the bottom of the tallow cup or reservoir, and at the bottom with a neck, C, to be connected by small pipes with the cylinders, the cup or reservoir itself being set on the smoke-arch behind the stack. Through the upper neck, B, is a passage, *b*, to conduct the oil from the cup to the plug or valve. There is also an air-vent, *a*, leading from the inside of the frame A through the side of said neck. Through the lower neck, C, are two passages, *d d*, leading from the inside of the frame, and the connecting-tubes mentioned above are attached in the lower ends of said passages.

In the frame A is a circular hollow plug or valve, D, with stem E passing through a bridge, A', attached to and forming part of the frame A. The plug or valve D is, by a central partition, F, divided into two chambers, which hold just enough oil to oil each cylinder or steam-chest at one time. Through the top of the valve is a passage, *h*, which branches or

divides and enters the interior of the valve on both sides of the partition F. In the bottom of the valve are two passages, *i i*, one from each chamber.

The plug or valve D should be turned so that its passage *h* will coincide with the passage *b*, and thus allow oil to pass down from the cup and fill both the chambers. Where it is desired to oil the valves the plug or valve will be turned—by a rod in the cab connected with the stem of the valve—so that the passages *i i* and *d d* will coincide and the top passage *h* of the valve will come opposite the air-vent *a*. The oil will then flow from the chambers of the valve into the cylinders or steam-chests. When all the oil has run out the valve is returned to its former position, and the chambers will be filled ready to oil again when necessary.

In a full-sized gage there will be a stop put on the plug, so as to allow it to turn only the required distance.

I am aware that the valve with a partition forming two chambers is not new; nor is it new to have inlet and exit passages. I therefore confine myself to my specific arrangement, as herein described.

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

The frame A, provided with the upper neck, B, having the passages *a b*, and lower neck, C, having the passages *d d*, in combination with the valve D, having the partition F and branch inlet-passages *h*, leading into both chambers, and outlets *i i*, whereby both chambers are simultaneously filled with oil, and both simultaneously discharged, to oil both cylinders at the same operation with one air-duct, substantially as described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

CHARLES F. RAYMOND.

Witnesses:

P. H. CARPENTER,
W. J. CAHALAN.