

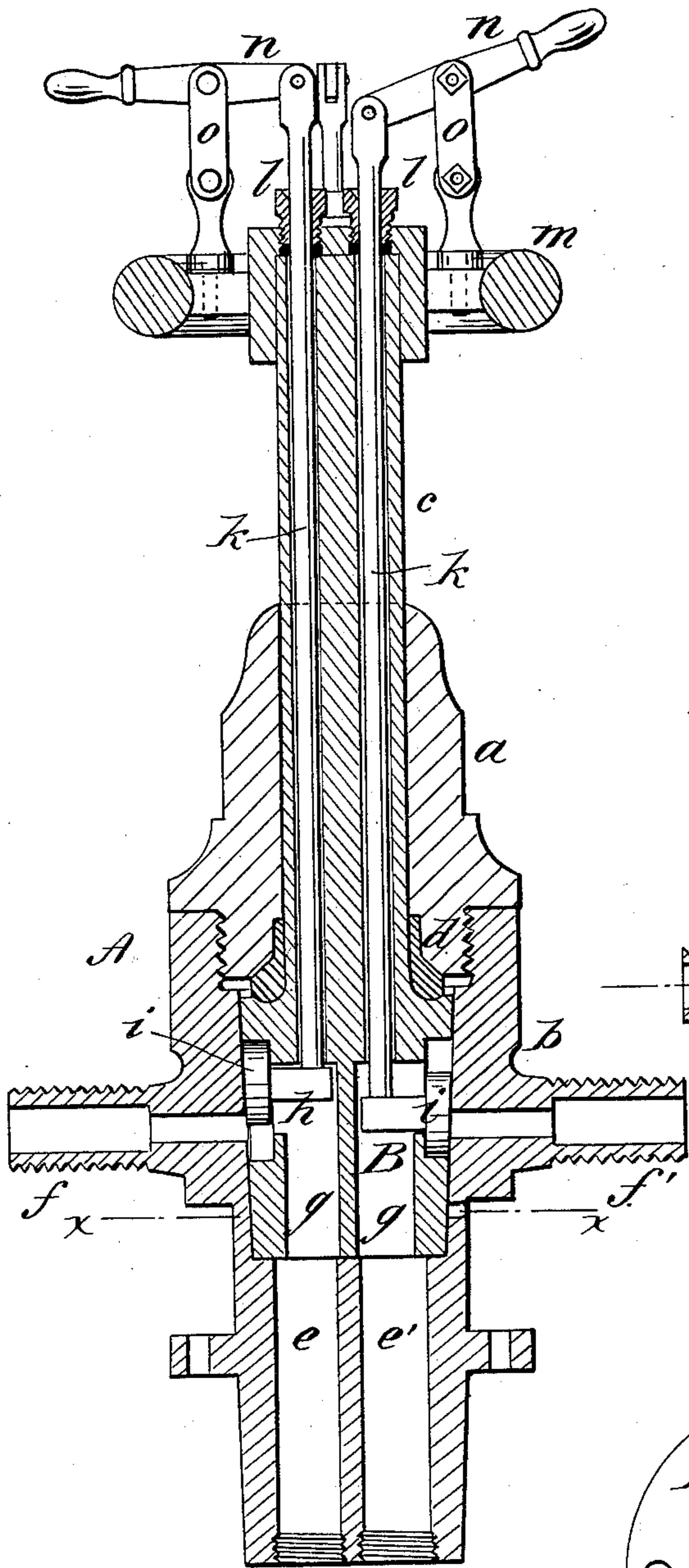
(No Model.)

G. W. APPLEBY.  
COMPOUND VALVE.

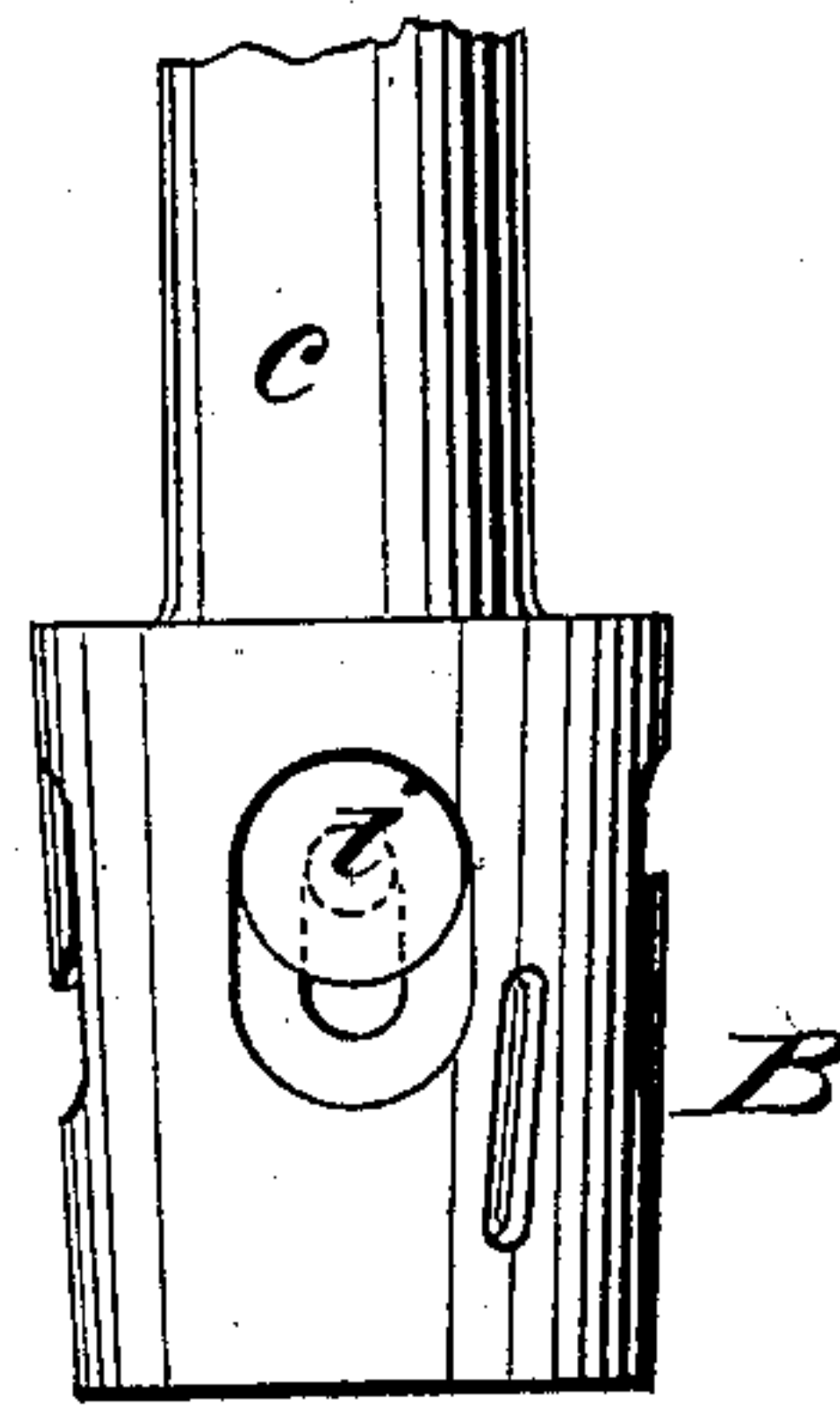
No. 318,159.

Patented May 19, 1885.

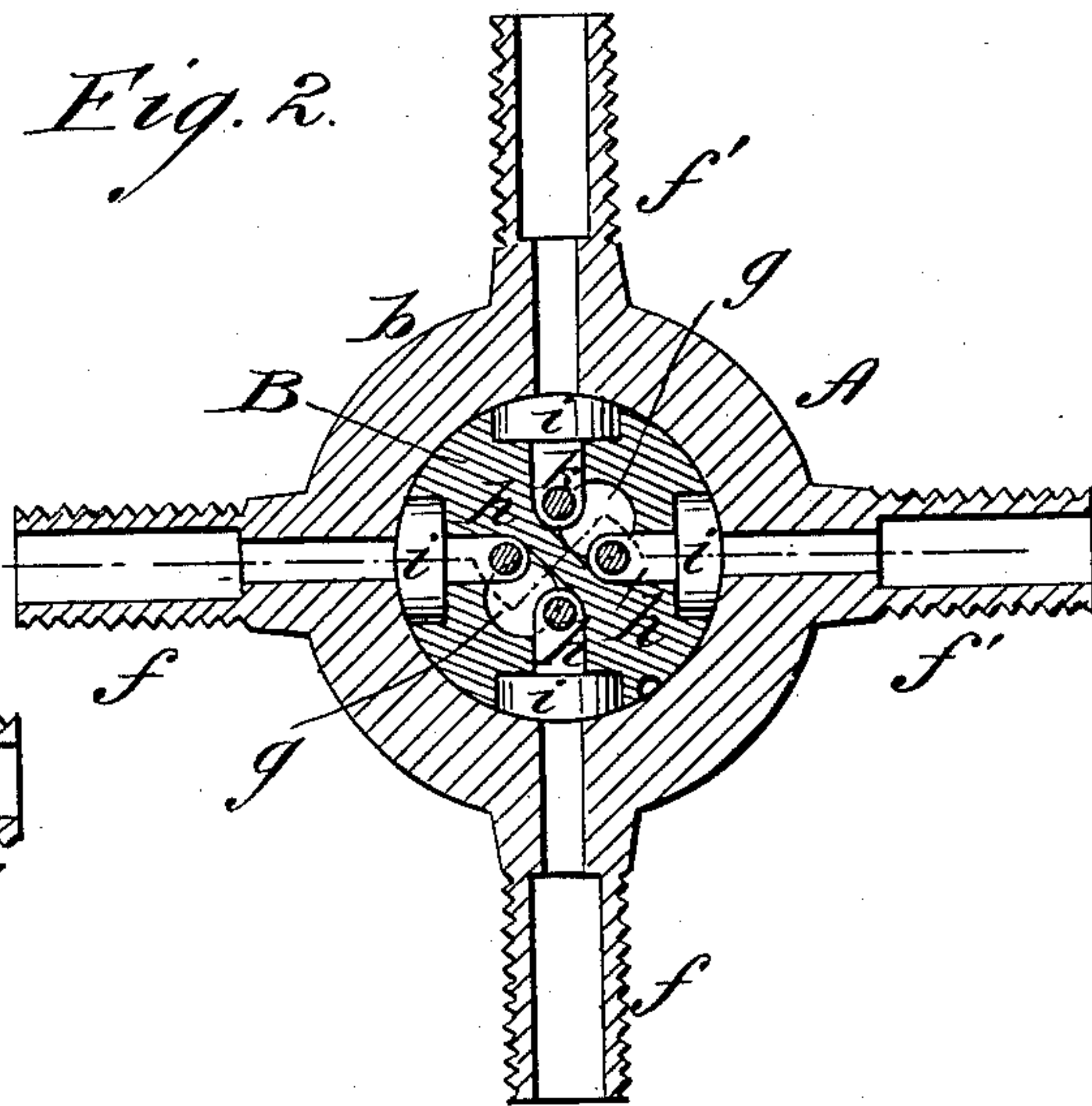
*Fig. 1.*



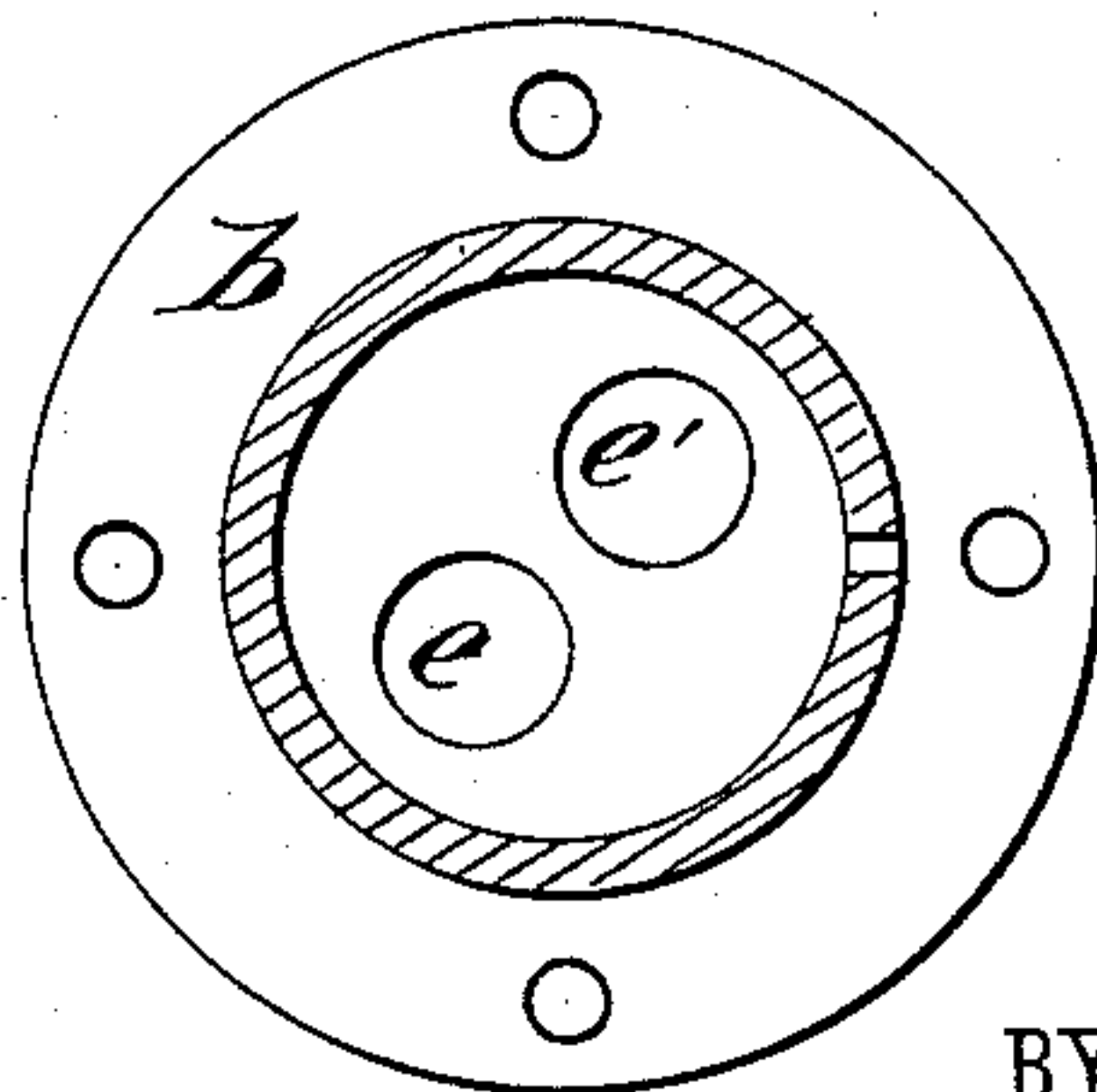
*Fig. 3.*



*Fig. 2.*



*Fig. 4.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

GEORGE WILLIAM APPLEBY, OF COHOES, NEW YORK.

## COMPOUND VALVE.

SPECIFICATION forming part of Letters Patent No. 318,159, dated May 19, 1885.

Application filed January 3, 1885. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE WILLIAM APPLEBY, of Cohoes, in the county of Albany and State of New York, have invented a new and useful Improvement in Compound Valves, of which the following is a full, clear, and exact description.

My invention consists in a compound valve combining two valves in one for delivery of two liquids at once, or either alone, without intermixture. The plug and body of the valve are each made with two passages, and the outlets—of which there may be two or four—are cut off by sliding valves fitted to the plug and operated by levers, as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal section of the compound valve. Fig. 2 is a transverse section of the same. Fig. 3 is a side view of the plug detached, and Fig. 4 is a cross-section on line *xx* of Fig. 1.

The body A is made in the two parts, as shown, for convenience of manufacture. The part *a* carries and serves as a guide for the stem *c* of plug B, and a packing-ring, *d*, inserted between the plug and the inner end of the part *a*, prevents escape of the liquid in that direction. The part *b* of the body A is slightly tapered internally to form a seat for the plug B. It is formed with the separate inlet-passages *e e'*, and with four outlet bibs, *f f' f' f'*. The plug B has two passages, *g*, which connect to branch passages *h*, opening out at the side of the plug, there being two branches to each passage *g*. The side of the

plug at the passages *h* is countersunk or recessed to form seats for slide-valves *i*, which are carried by stems *k*, that pass through the plug-stem *c* and out at the end, and these are packed by glands *l* in the end of stem *c*. On the hand-wheel *m* of stem *c* are posts, on which levers *n* are hung by links *o*, and the levers are severally connected to the valve-stems *k* for use in moving the valves *i* up and down. By opening either valve *i* the fluid is allowed to flow from one inlet, *e*, to one outlet, *f*, and out at two bibs, *f*, when the other valve *i* at that side is raised. The same result is attained for discharging the liquid from the second inlet, *e'*, to one or both outlets, *f'*, by opening the other valves *i*, and both deliveries can be used at once. Either two of the bibs, *f f'*, can be connected to either passage *e e'* by turning the plug B on its seat.

This compound valve is adapted for use on boilers for discharging either steam and water, or both, for heating apparatus, and for other purposes of a similar nature.

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

1. The compound valve consisting of body A, made with separate inlet and discharge passages, the plug B, having separate passages, and the slide-valves *i*, seated upon the plug, and having stems extending to the outside for their operation, substantially as described.

2. The combination, in a compound valve, of the valves *i*, stems *k*, and levers *n* with the plug B, substantially as shown and described.

GEORGE WILLIAM APPLEBY.

Witnesses:

JOHN BARKLAM,  
ARTHUR JONES.