

No. 771,777.

PATENTED OCT. 4, 1904.

E. H. GOLD.
CAR HEATING APPARATUS.
APPLICATION FILED SEPT. 12, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 1.

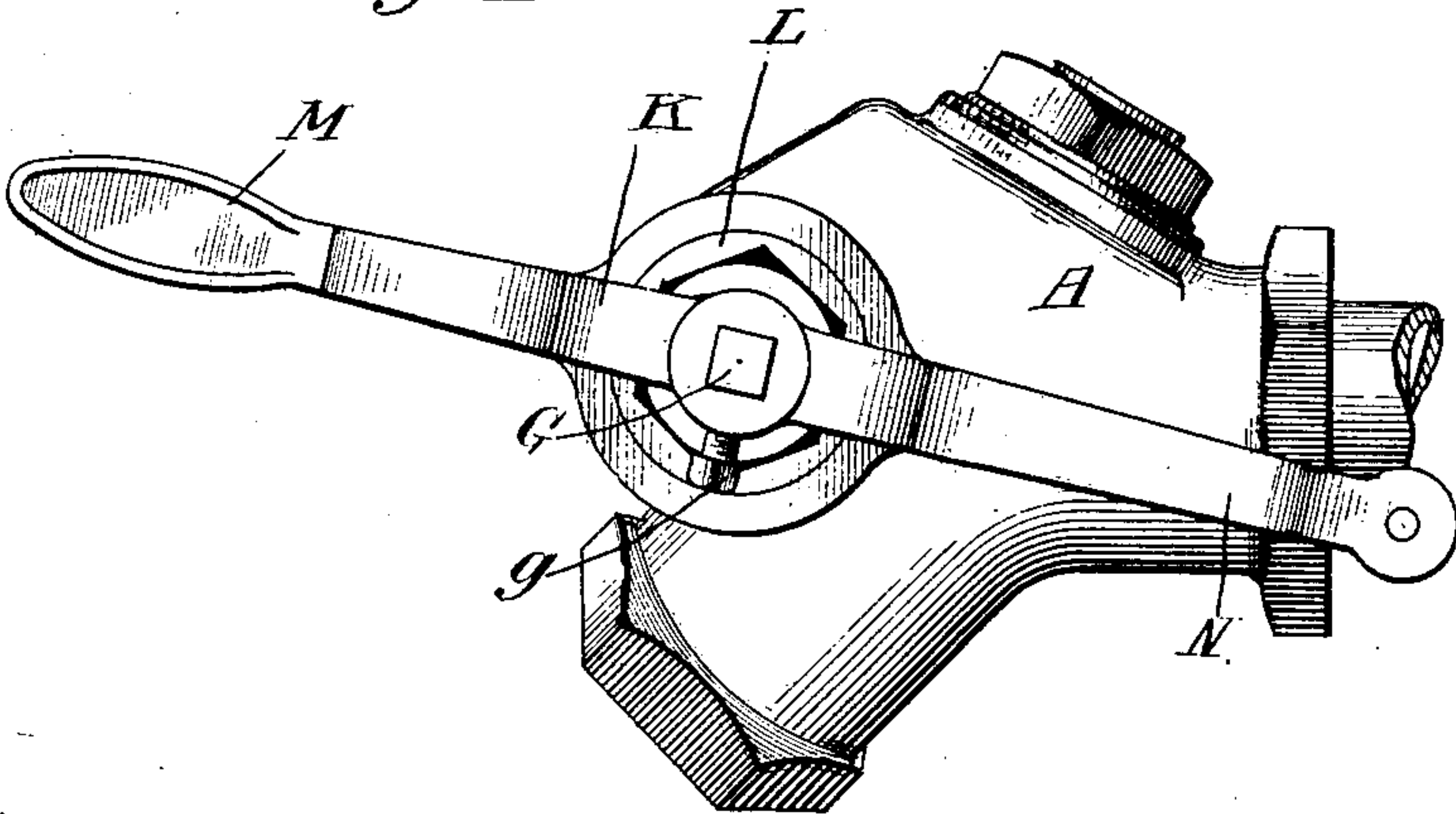


Fig. 2.

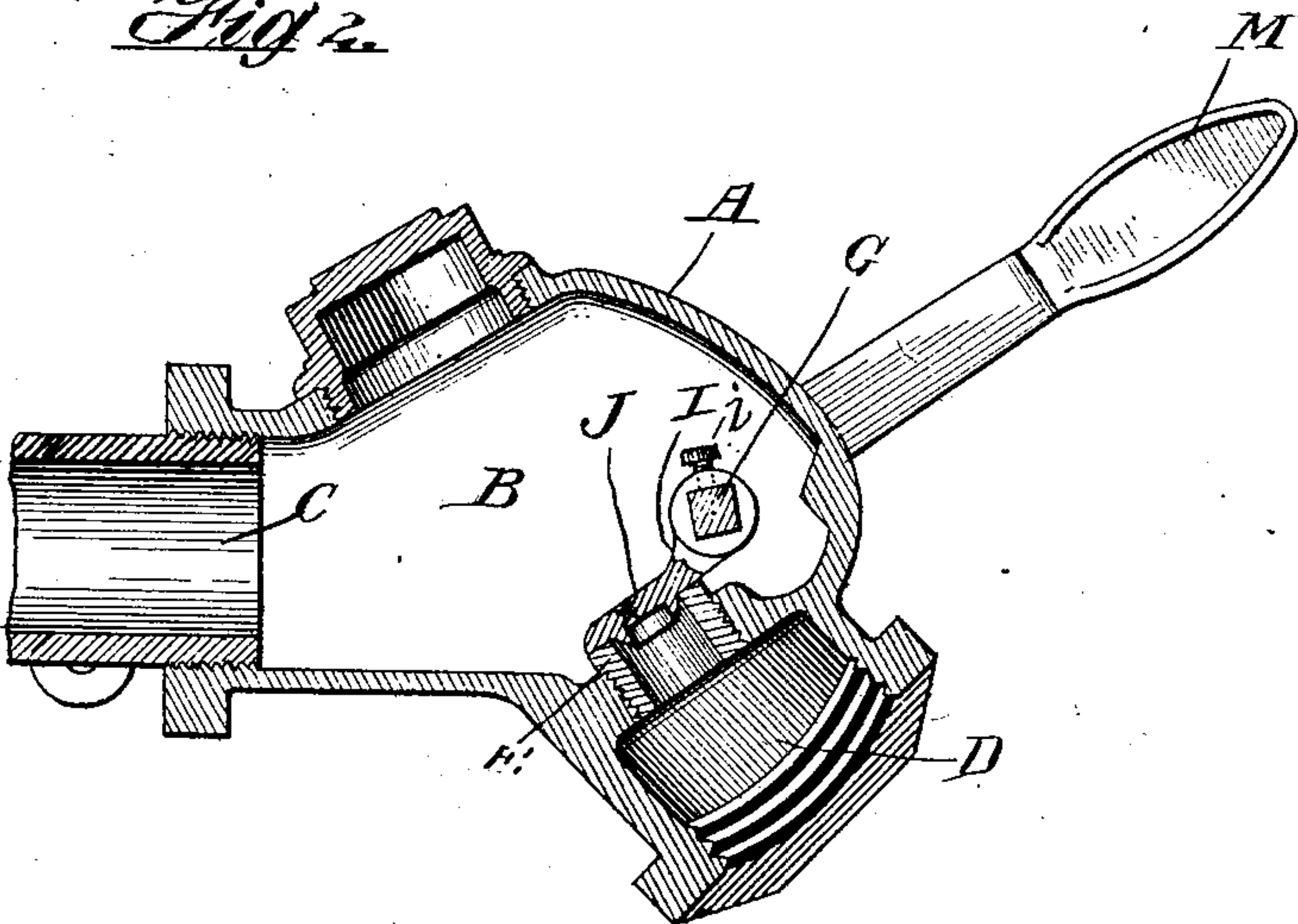
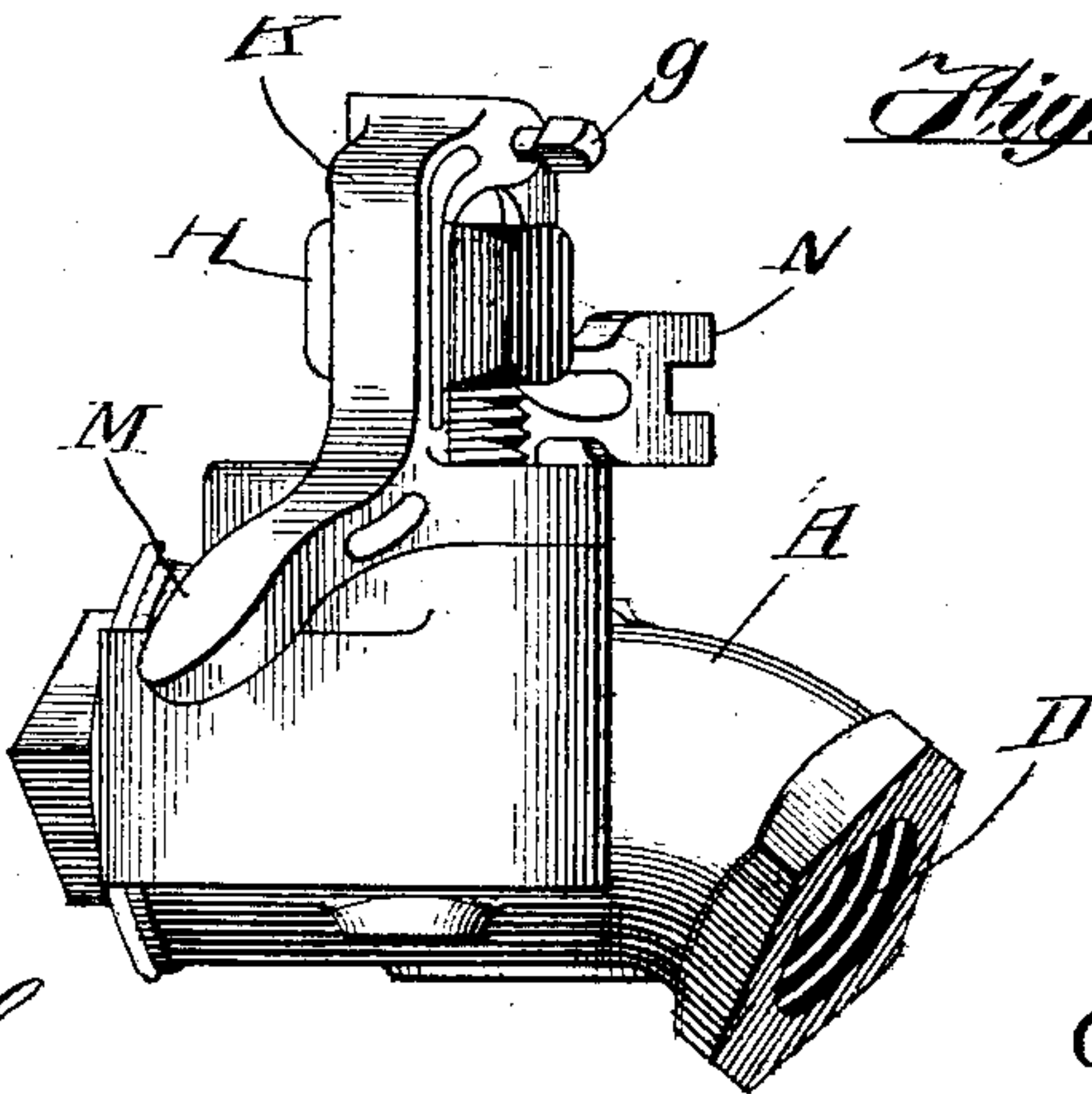


Fig. 3.



Witnesses:

Wernich
Wern

Inventor.

E. H. Gold.
By Raymond & Smith
Attorneys

No. 771,777.

PATENTED OCT. 4, 1904.

E. H. GOLD.
CAR HEATING APPARATUS.
APPLICATION FILED SEPT. 12, 1903.

NO MODEL.

2 SHEETS—SHEET 2.

Fig. 4.

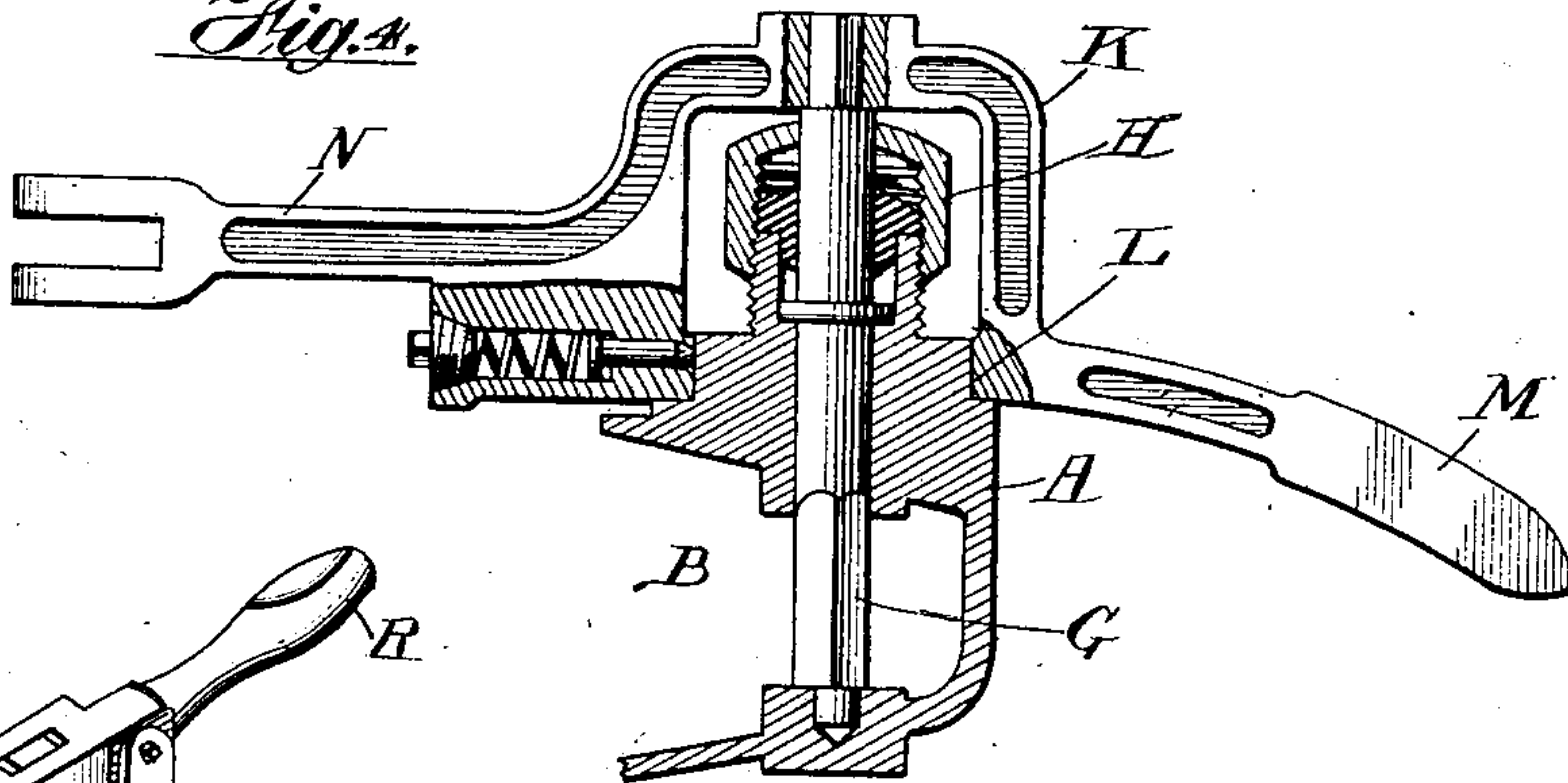


Fig. 5.

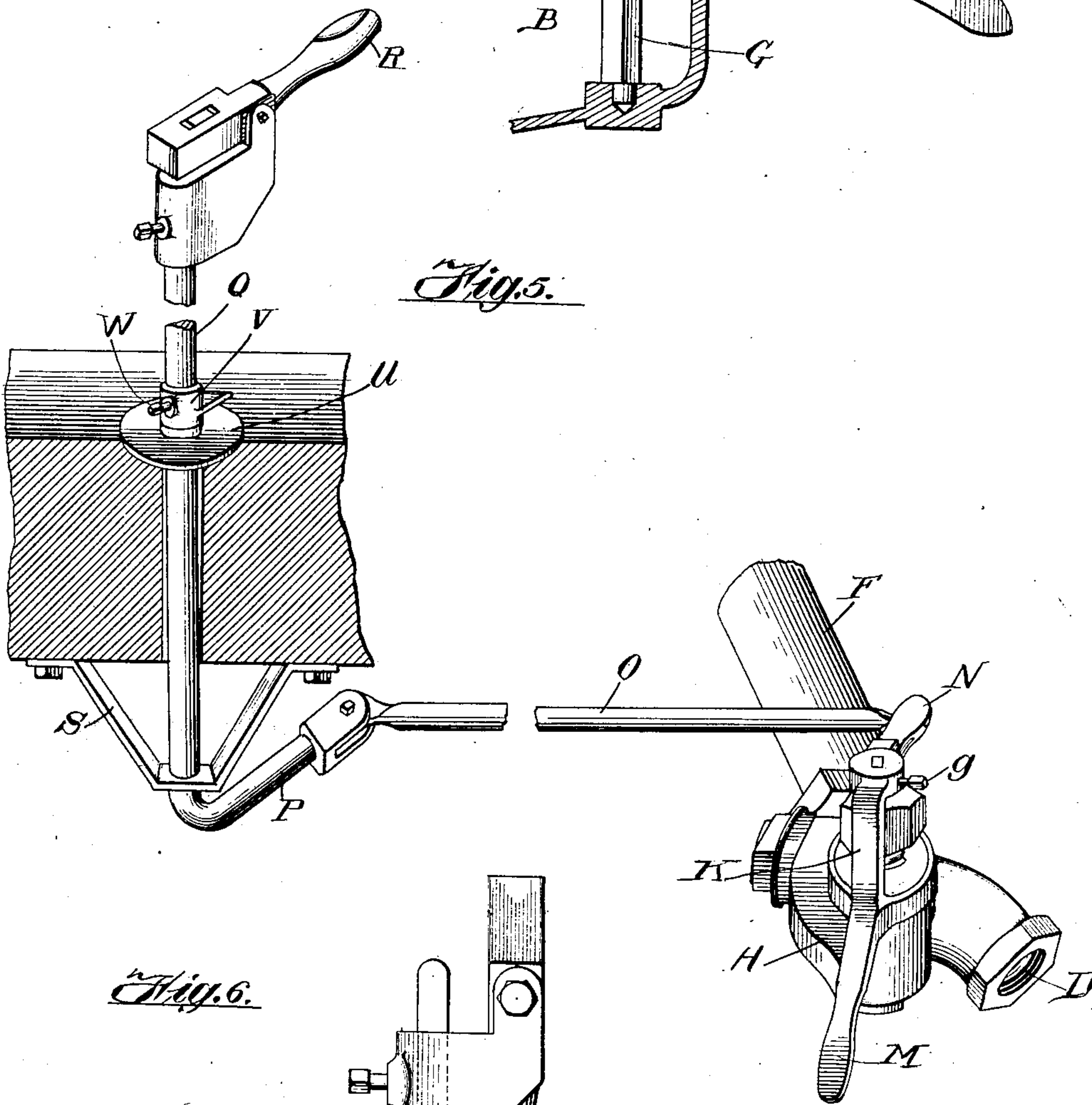
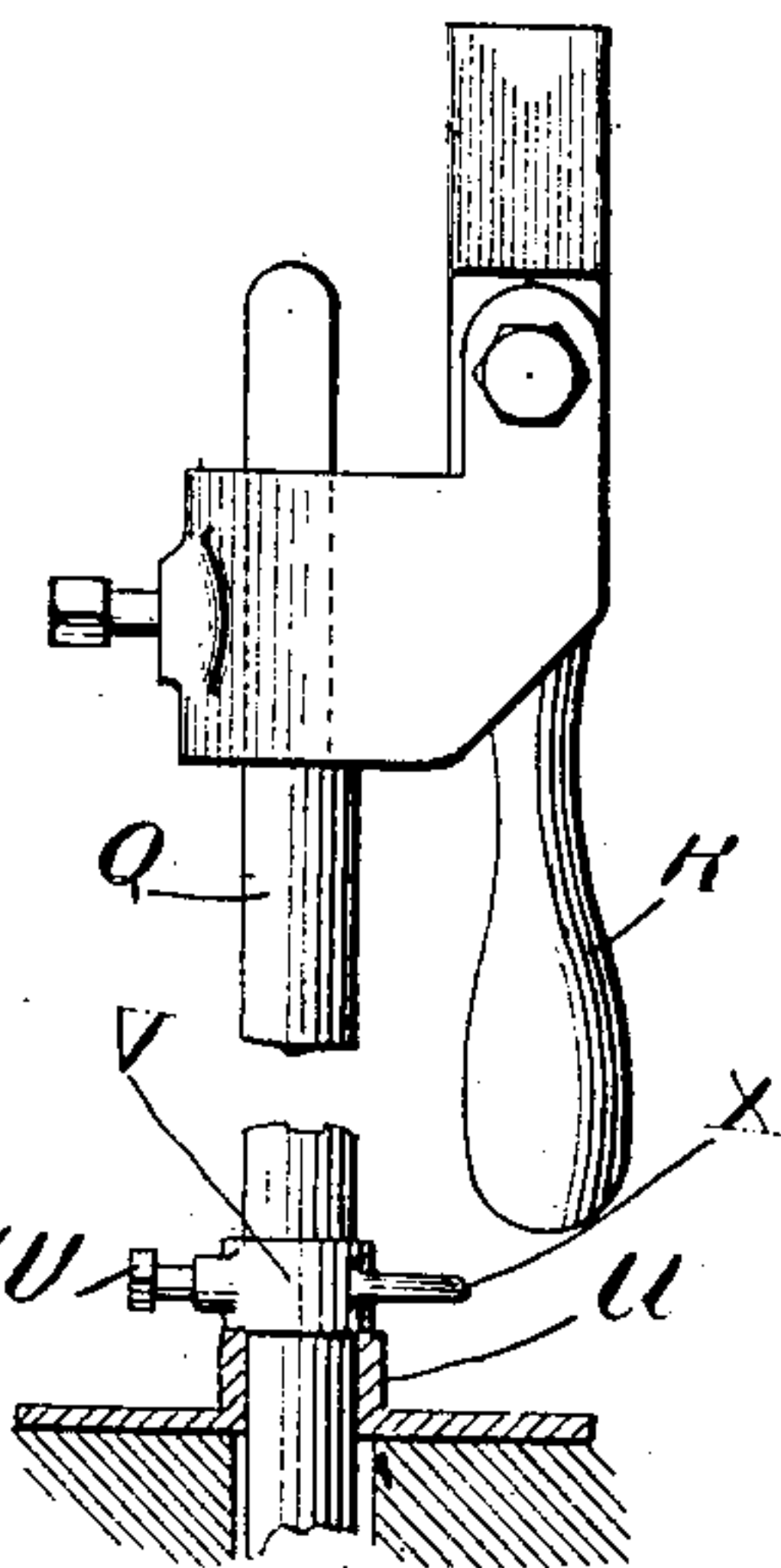


Fig. 6.



Witnesses:

O. M. Hemmich

Robert H. W. Eir

Inventor:

Egbert H. Gold

By Raymond H. Burnett

Attorneys:

UNITED STATES PATENT OFFICE.

EGBERT H. GOLD, OF SHELBY, INDIANA.

CAR-HEATING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 771,777, dated October 4, 1904.

Original application filed April 29, 1903, Serial No. 154,775. Divided and this application filed September 12, 1903. Serial No. 172,979. (No model.)

To all whom it may concern:

Be it known that I, EGBERT H. GOLD, a citizen of the United States, residing at Shelby, in the county of Lake and State of Indiana, have invented certain new and useful Improvements in Car-Heating Apparatus, of which the following is a specification.

This application is a division of application Serial No. 154,775, filed April 29, 1903.

My invention relates to improvements in means for operating train-pipe end valves, especially those used in connection with car-heating apparatus.

The object of my invention is to provide means for operating such a valve from the car-platform or from any similar situation, so that the valve may be manipulated as conditions may require while the train is in motion.

These and such other objects as may hereinafter appear are attained by the device shown in the accompanying drawings, in which—

Figure 1 is a plan view of one form of my improved valve. Fig. 2 is a sectional view thereof. Fig. 3 is a side elevation thereof. Fig. 4 is a vertical section thereof. Fig. 5 shows one form of my apparatus for operating the valve from the platform, and Fig. 6 is a detail showing the mounting of parts of the operating device upon the platform.

Like letters of reference indicate the same parts in the several figures of the drawings.

Referring by letter to the accompanying drawings, A is the valve-casing, provided with a valve-chamber B, having a recess therein at one side of the main travel of the steam carried from the inlet-port C to the outlet-port D and provided with a valve-seat E. The inlet-port C connects with the train-pipe F, and the outlet-port D connects with the flexible coupling between the cars. This is the preferred mounting of the valve.

Extending across one side of the valve-chamber B is a spindle G, which is rotatively mounted in the valve structure. One end of the spindle G projects through the casing A and the stuffing-box H. Non-rotatively mounted upon the spindle G is the valve-arm I, which is preferably secured to the spindle G by a

screw *i*, which thereby serves to hold the spindle G in its position within the valve-casing. This result is further attained by the engagement between the spindle G and the stuffing-box H. Mounted upon the arm I is the valve J.

The end of the spindle G which projects through the valve-casing engages a yoke or collar K. The collar portion of this device surrounds an annular shoulder L on the outside of the valve-casing A and affords strength and stability to the valve-operating mechanism. The yoke portion extends over the stuffing-box and engages the end of the spindle G, to which it is secured by a lock-bolt *g*. This combined yoke and collar is provided with a hand-lever M and with an operating-arm N for connection with a platform-operating attachment. This attachment comprises a link O, pivotally connected with the arm N at one end and at the other end with a lever-arm P, connected with a vertical shank or shaft Q, which is provided with a platform-lever R, located above the platform. I prefer to support this upright shank by means of a bracket S, secured to the under side of the platform T, and a flanged collar U, which rests upon the upper face of the platform and through which the upright shaft passes. Mounted upon the upright shaft immediately above the collar U is a collar V, which may be locked to the shaft by a lock-bolt W or which may be rigidly secured thereto in any satisfactory manner.

The flange upon the collar not only serves to give a broad bearing and support upon the upper face of the platform, but also furnishes a permanent device upon which by suitable marks the open and closed positions of the valve may be indicated, the collar W being provided with a pointer X, arranged to correspondingly indicate these open and closed position marks.

With an apparatus so constructed it is apparent that by the simple movement of the hand-lever upon the platform in one direction or the other the upright shaft will be rotated upon its axis, will correspondingly swing the arm at the lower end thereof, which

movement of the arm will in turn, through the medium of the link, operate the arm R and the spindle G of the valve.

While I have shown a preferred form of valve for use with this apparatus, it will be understood that this valve, which is not claimed herein, but which in some respects is the subject-matter of a separate application, Serial No. 154,775, filed April 29, 1904, is merely used for purposes of illustration, as many other forms of valve may be used with this apparatus without departing from the spirit of my invention. So, also, I do not limit myself to the yoke structure as a part of the device herein claimed, as obviously my apparatus is suitable for use with valve mechanism not involving such yoke structure, and the valve provided with the yoke, substantially as herein shown and described, is also a part of the subject-matter of my said co-pending application, which application is numbered 154,775, filed April 29, 1903.

I claim—

1. The combination in a car-heating system, of a train-pipe carried beneath the car, an end valve mounted upon said train-pipe and adjacent to one end of the car, a valve-operating arm mounted upon the valve, an upright rotatable shaft extending upwardly through the car-platform, a link connecting said valve-operating arm with said shaft and a hand-lever mounted upon said shaft, substantially as described.

2. In a means for operating an end train-pipe valve, the combination of a platform, an end train-pipe valve located below the said platform and provided with an upright op-

erating-spindle, a vertical shank extending above the platform and provided with operating means adapted to rotate the said spindle on its axis and an arm-and-link connection intervening between the shank and the valve-spindle.

3. In an apparatus for operating end train-pipe valves, the combination of a car-platform, an end train-pipe valve provided with a stem or spindle in an upright position, an arm or lever connected to the said spindle, a second arm or lever, a link pivotally connected at one end with the lever of the end train-pipe valve and at the other with said second lever, an upright shank extending above the car-platform and a platform-lever located above the platform and carried by the shank, the said shank also carrying the said second arm or lever.

4. In an apparatus for operating end train-pipe valves the combination with the car-platform of an end valve mounted below said platform, a valve-operating arm, an upright shaft extending through the platform and provided with operating means above the platform and with operative connections between said shaft and said valve-operating arm below the platform, a collar mounted upon the platform and surrounding said upright shaft, and a second collar engaging the upper face of said first collar and secured to said upright shaft.

EGBERT H. GOLD.

Witnesses:

M. E. SHIELDS,
G. Y. DANKWARD.