

No. 651,964.

Patented June 19, 1900.

T. J. CODD.
CHECK VALVE.

(Application filed Oct. 26, 1899.)

(No Model.)

Fig. 1.

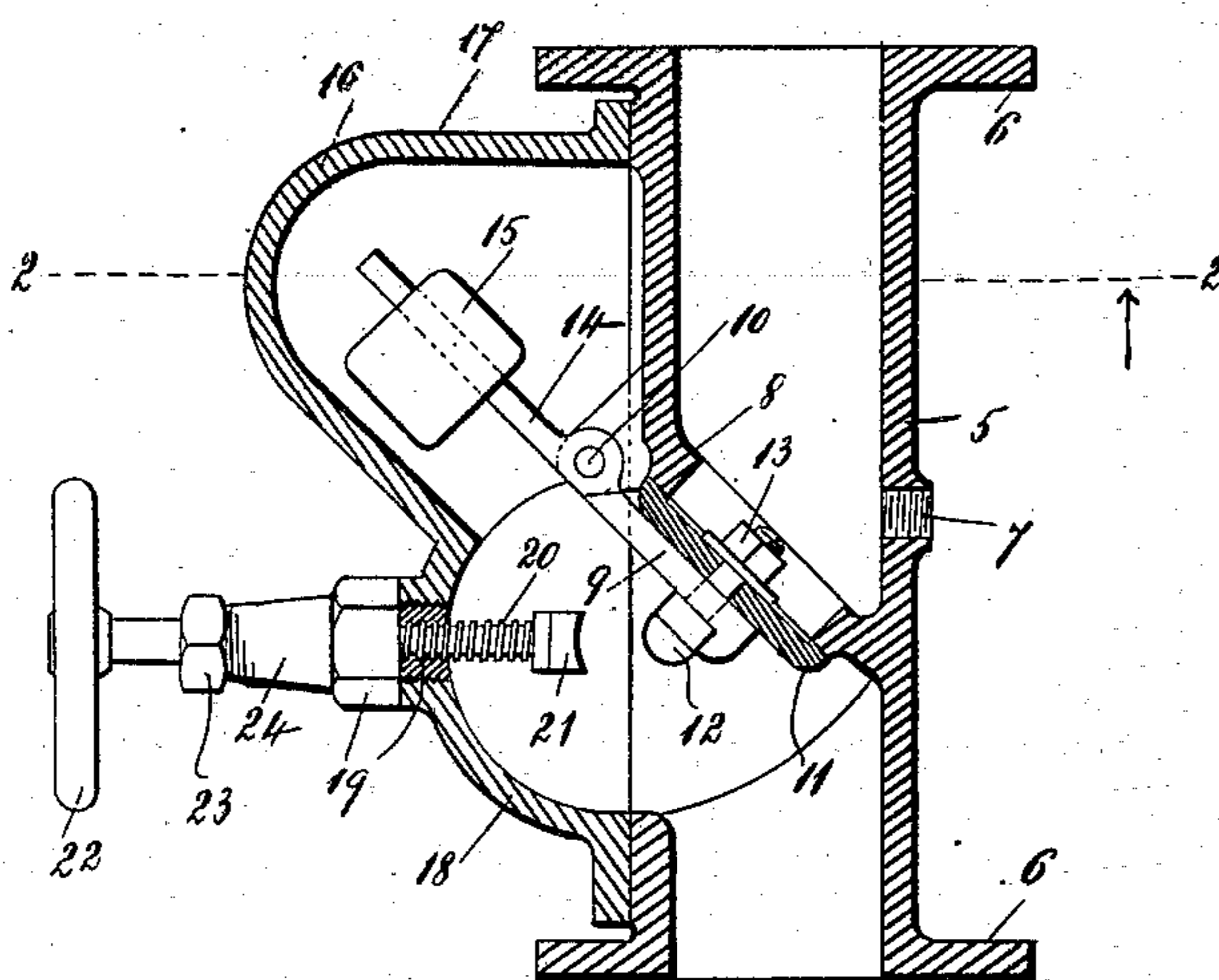
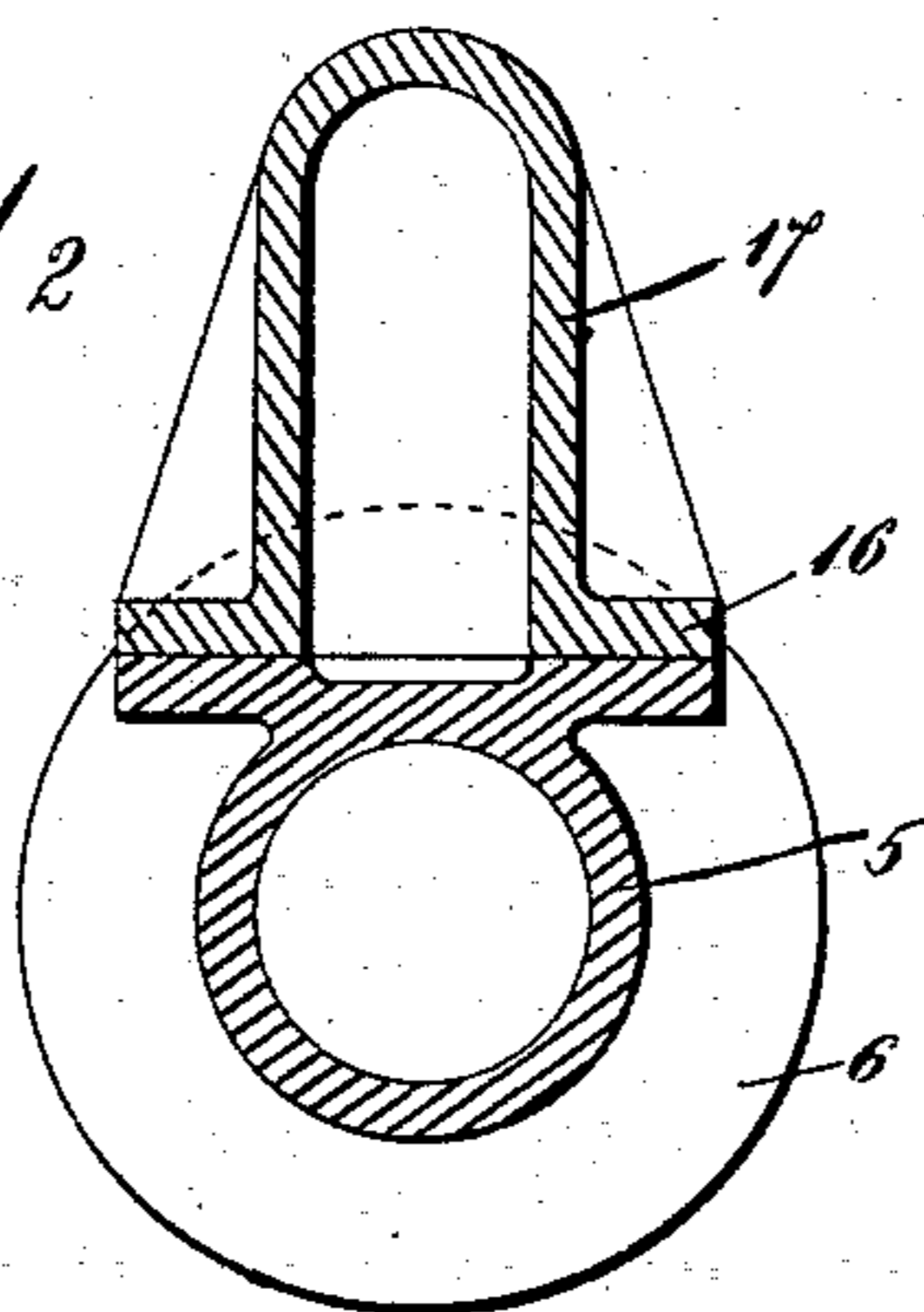


Fig. 2.



WITNESSES

John Richter,
J. A. Stewart

INVENTOR

Thomas J. Codd,

BY

Edgar Sale & Co.
ATTORNEYS

UNITED STATES PATENT OFFICE

THOMAS JAMES CODD, OF LONDON, ENGLAND.

CHECK-VALVE.

SPECIFICATION forming part of Letters Patent No. 651,964, dated June 19, 1900.

Application filed October 26, 1899. Serial No. 734,840. (No model.)

To all whom it may concern:

Be it known that I, THOMAS JAMES CODD, a subject of the Queen of Great Britain, residing at Woodside, Fillebrook road, Leytonstone, London, Essex county, England, have invented certain new and useful Improvements in Check-Valves, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to check-valves, being the same for which I applied in Great Britain on the 29th day of March, 1899, for provisional Letters Patent.

The object of this invention is to provide a valve of the class described which will effectually prevent return flow and by means of which the amount of flow may be readily regulated and which is particularly suited to regulation of the transmission of steam and hot water.

My invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which like reference characters denote like parts in the several views, and in which—

Figure 1 is a longitudinal section of a valve constructed according to my invention, several of the parts thereof being shown in full lines; and Fig. 2, a section on the line 2 2 thereof looking in the direction of the adjacent arrow.

Referring more particularly to the drawings, I have shown at 5 a valve-casing which is cylindrical in form and provided with end flanges 6, by means of which it may be connected and mounted as desired. The casing 5 is provided at one side with a threaded opening 7, by means of which any air or other pipe may be connected therewith.

A valve-seat consisting of an annular internally and obliquely arranged shoulder 8 is provided beneath the threaded opening 7, and a valve-supporting plate 9 is pivoted, as at 10, adjacent the uppermost portion of the valve-seat 8 and provided at its outer end with a circular valve 11, which operates in connection with said valve-seat and is connected with the valve-supporting plate 9 by means of a bolt 12 passed through both and secured thereto by means of a nut 13. The

valve-supporting plate 9 is provided with a rigid projecting balance-rod 14, upon which is mounted a weight 15, and it will be seen that the weight 15 will normally retain the valve 11 upon its seat 8, as shown in Fig. 1. It is evident that any device for the same purpose may be substituted for the weight 15 and that any suitable means for swinging the valve 11 into its normal seated position may be employed.

The balance-rod 14 operates within a chamber formed by a supplemental casing 16, which is connected at top and bottom with the valve-casing 5. The supplemental casing 16 consists of two lobes, an upper lobe 17 and a lower lobe 18, of which the lobe 17 is the more bulbous and within which the balance-rod 14 operates, and the valve-casing 5 is cut away at one side to form a communication with the supplemental casing 16, and said cut-away portion registers with the lower lobe 18 of the supplemental casing 16. Passed through a gland or packing 19, set into the casing-lobe 18, is an adjusting-screw 20, provided at its inner end with a segmentally-recessed head 21, which operates in connection with the curved head of the bolt 12, and it is evident that the degree of advancement of the screw 20 into the casing 18 and main casing 5 will determine the pivotal play of the valve 11. The adjusting-screw 20 is provided at its outer end with an operating-wheel 22, and lock-nuts 23 are passed upon the screw 20, as is a collar 24, by means of which the said adjusting-screw may be locked in adjusted position. It is evident that the screw 20 may be advanced inwardly so far as to finally seat the valve upon its seat and may likewise be adjusted to regulate the play of said valve.

It is apparent that the means employed for regulating the play of the valve 11 may be considerably varied and that the various other parts of the improved valve shown may also be variously constructed and arranged, all within the scope of my invention.

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

1. An apparatus of the class described comprising a casing provided with a valve-seat, a valve pivotally mounted therein provided

with a balance device and means for regulating the pivotal play of said valve, substantially as shown and described.

2. An apparatus of the class described comprising a casing provided with a valve-seat, a valve pivotally mounted in said casing an adjusting-screw passed through said casing and operating in connection with said valve to limit the pivotal movement thereof, the relative arrangement and construction of parts being such that said adjusting-screw may be operated to absolutely prevent the pivotal movement of said valve, said valve being provided with a balance device, substantially as shown and described.

3. An apparatus of the class described comprising a cylindrical casing provided with a valve-seat, a valve pivotally mounted within said casing and adjacent said valve-seat and arranged to operate in connection therewith, said valve being provided with a projecting balance-rod and a weight mounted upon said balance-rod, a supplemental casing connected with said cylindrical casing and communicating therewith and within which said balance-rod operates, and an adjusting device

mounted in said supplemental casing and operating in connection with said valve to limit the play thereof, substantially as shown and described.

4. An apparatus of the class described comprising a cylindrical casing provided with an interiorly and obliquely arranged valve-seat, a valve pivoted adjacent said valve-seat, a supplemental casing connected with said cylindrical casing and communicating therewith and provided with two lobes or members, a balance-rod connected with said valve and operating within the larger of said lobes, and an adjusting-screw operatively mounted in the smaller of said lobes and operating in connection with said valve to limit and regulate the play thereof, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 13th day of October, 1899.

THOMAS JAMES CODD.

Witnesses:

WALTER ERNEST ROCHE,
GEORGE WILLIAM SMITH.