G. J. O. D. DIKKERS.

STOP OR LIKE VALVE. APPLICATION FILED JUNE 21, 1907.

940,239.

Patented Nov. 16, 1909.

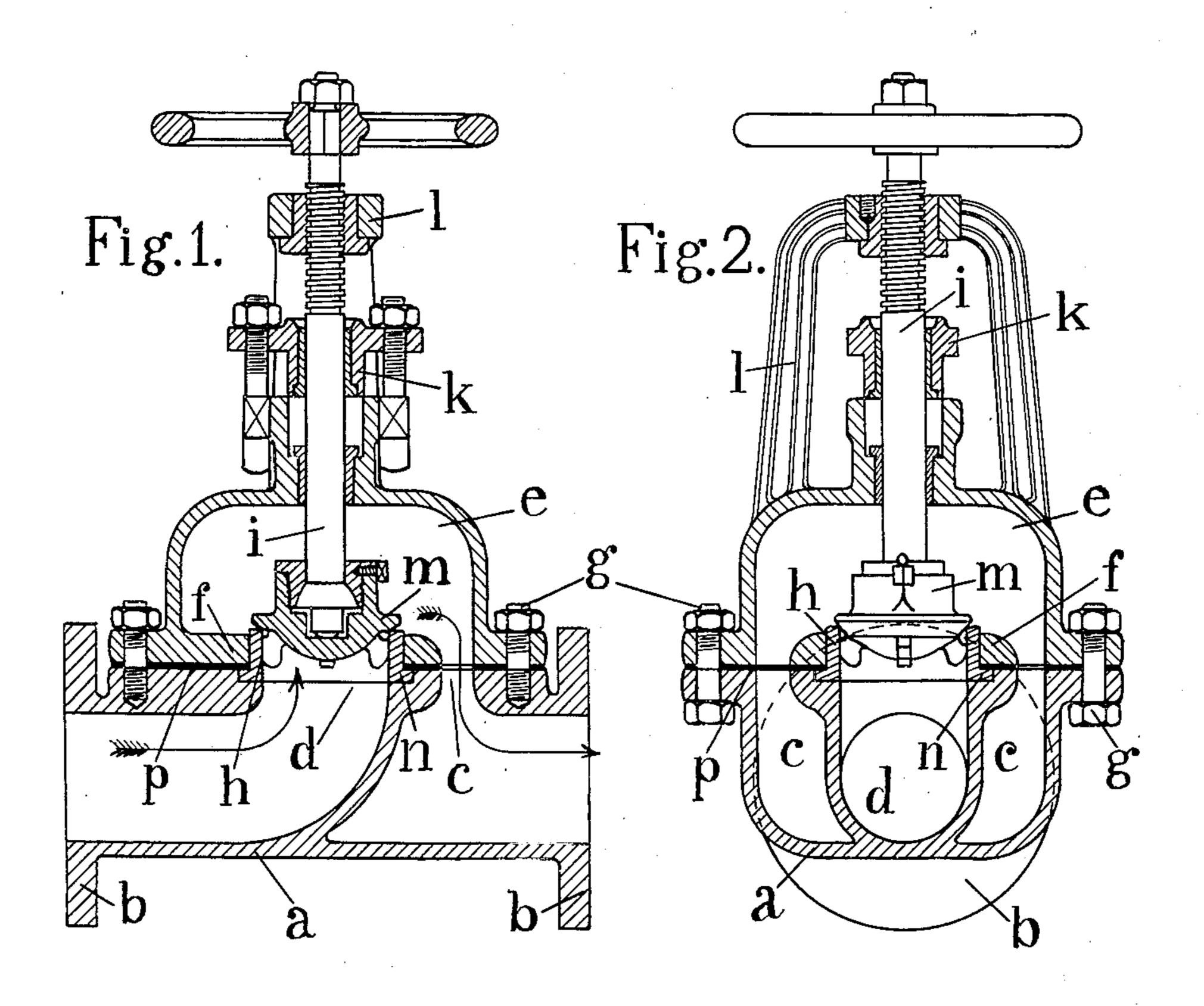
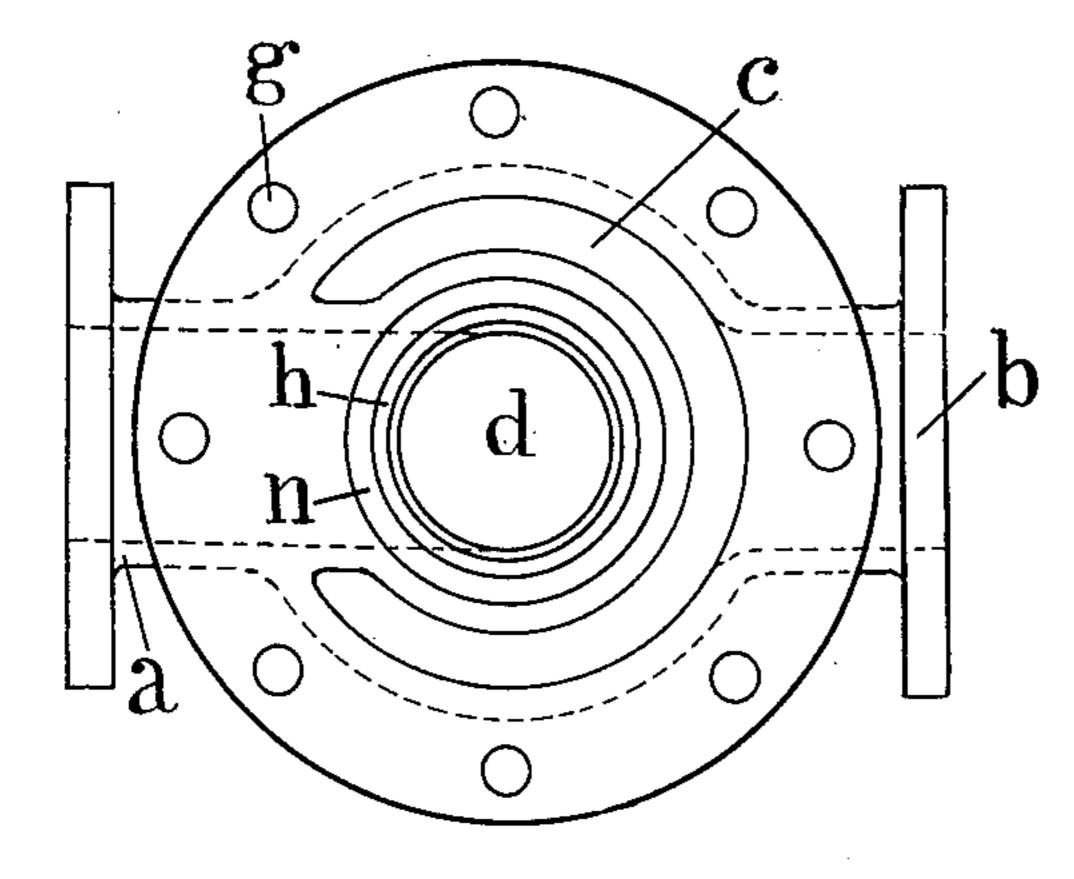


Fig.3.



Nitnesses

GERHARDJOAN OTTO DORIS DIKKERS. Van Oldenneelt, Schoenlank Attornens.

UNITED STATES PATENT OFFICE.

GERHARD JOAN OTTO DORIS DIKKERS, OF LONNEKER, NEAR HENGELO, NETHERLANDS.

STOP OR LIKE VALVE:

940,239.

Specification of Letters Patent. Patented Nov. 16, 1909.

Application filed June 21, 1907. Serial No. 380,157.

To all whom it may concern:

Be it known that I, Gerhard Joan Otto Doris Dikkers, a subject of the Queen of the Netherlands, residing at Lonneker, near Hengelo, Overijssel, in the Kingdom of the Netherlands, have invented certain new and useful Improvements in Stop or Like Valves, of which the following is a specification.

Be it known that I, Gerhard Joan Otto Doris Dikkers, a subject of the Queen of the flange of the casing. The height of this said edge, n, is such that its face, effecting a tight packing with the base plate of the casing. In this manner the seat, h, resting loosely in between the cap and the casing may be easily lifted off after removing may be easily lifted off after removing the casing may be easily lifted off after removing the casing may be easily lifted off after removing the casing may be easily lifted off after removing may be

The present invention relates to stop valves for steam and the like pipes, the object being to allow the various parts of the valve to be removed or substituted without having to take the valve chest or casing proper out of the pipe, that is to say, without being compelled each time to disconnect

the casing from the pipe.

The invention consists in arranging the nut for the valve spindle, the stuffing box and the other usual parts of the stop valve on a removable cap, so that the interior of the valve, the valve seat and the passage where the steam inlet passes over into the steam outlet are exposed by removing the 25 cap. The valve seat is therefore arranged in such a manner that its tubular part is inclosed by the cap and its surface for effecting a tight packing between the same and the casing, lies in one plane with the pack-30 ing surface of the flange of the cap. For this purpose the cap is secured upon the valve casing by the usual screwed bolts and nuts or other suitable and convenient fastenings.

The invention will now be described with reference to the accompanying drawings which show one form of valve constructed in accordance with the invention, wherein—

Figure 1 is a vertical longitudinal section.

Fig. 2 a cross section, and Fig. 3 a plan of

the valve with the cap removed.

The valve casing, a, is provided with flanges, b, b, which are connected in the usual manner to the pipe. Passages c and d, for the steam outlet and supply respectively, and a flange are provided on the valve chest or casing, the latter being adapted to receive a cap, e, the base plate, f, of which, provided with openings corresponding to those of the flange, is screwed on steam tight by means of bolts, g. The valve seat, h, is fitted loosely in the base plate, f, of the cap in such manner that its tubular part is inclosed by the base plate, f, of the tap. The valve seat rests with a broadened

edge, n, on an annular surface turned in the flange of the casing. The height of this tight packing with the base plate of the cap or the casing, lies in the plane of the flange 60 of the casing. In this manner the seat, h, resting loosely in between the cap and the casing may be easily lifted off after removing the cap, e, while the steam tight packing between cap and the casing and of the 65 valve seat and the base plate of the cap or casing, can be effected by means of single packing ring or plate, p. This arrangement has the advantage that the packing plate p, can never be displaced by the action 70 of the steam. The upper part of the cap is suitably arched and contains the known parts, namely, the valve spindle, i, the stuffing box k, and the spindle nut l. The diameter of the bore provided in the base plate, 75 f, of the cap for the seat is made so large that the valve, m, suspended on the spindle or stem, i, may be brought into the interior of the cap through this bore and be connected with the spindle. This arrangement 80 enables the exchange of worn out parts, the mechanical correction or fitting in of the seat or the like to be effected without it being necessary to remove the valve casing from the pipe line, namely, by simply re- 85 moving the cap 1.

Having now described my invention, what I claim as new and desire to secure by Let-

ters Patent is:—

1. In a valve, a valve-casing having a flat 90 top-surface extended to form a flanged edge and having an inlet passage, an outlet passage and a recess around the inlet passage, a valve seat removably fitted within the recess and having an opening therethrough, in 95 combination with a detachable cap formed to clamp the valve seat in the recess aforesaid, said cap carrying a valve stem and a valve for opening and closing the inlet passage through the valve seat.

2. In a valve, a valve casing having a top surface extended to provide a flange, said casing having an inlet passage and an outlet passage and formed for connection with inlet and outlet pipes, a detachable cap having 105 a bottom surface extended to form a flange and having inlet and outlet passages in register with those of the casing, a removable valve seat for the inlet passage of the casing and clamped in position between the two 110

flanges aforesaid, said cap carrying a valve stem and a valve for opening and closing the inlet passage through the valve seat.

3. In a valve, the combination with a cas-5 ing, a cap having a flat bottom surface provided with passages, a valve-seat and a sheet of packing-material, with openings cut in it in correspondence with passages in the bottom-surface of the cap.

10 4. In a valve, the combination with a cap, a casing, a flanged valve-seat in a recess in the flat top-surface of the casing and a sheet of packing-material, fitting the flange and

collar of the valve-seat and placed on the flat top-surface of the casing and the collar 15 of the valve-seat on one side, so that when the cap is bolted on said casing, a tight joint is secured and all joints lie in one plane and are covered by the sheet of packing-material.

In testimony whereof I have hereunto set 20 my hand in presence of two subscribing wit-

nesses.

GERHARD JOAN OTTO DORIS DIKKERS.

Witnesses:

ANTOINE ELBETH ORGER, AUGUST SIEGFRIED DOCEN.