

No. 699,532.

Patented May 6, 1902.

W. E. JERAULD.

SAFETY VALVE.

(Application filed Sept. 28, 1899.)

(No Model.)

FIG. 1.

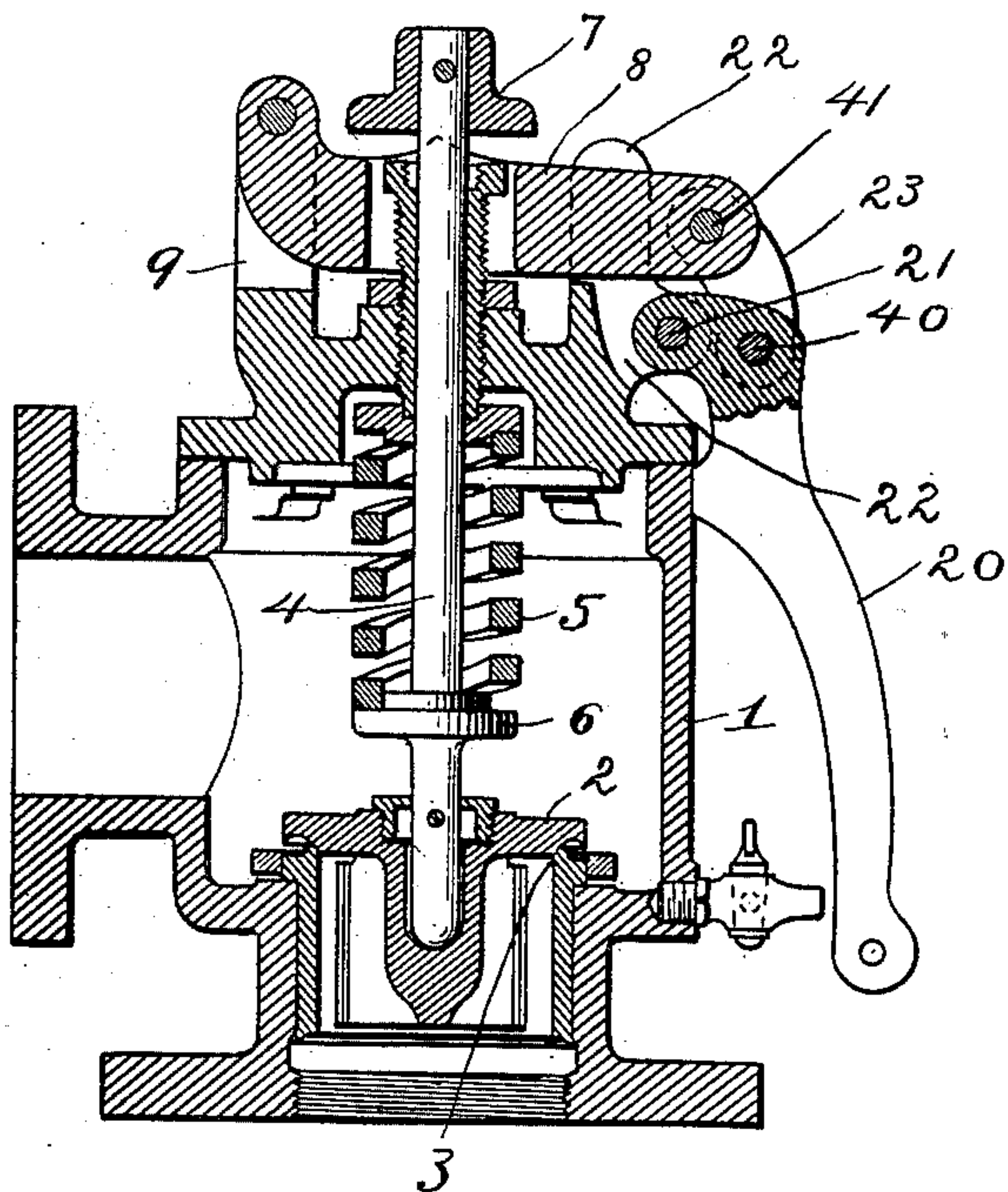


FIG. 2.

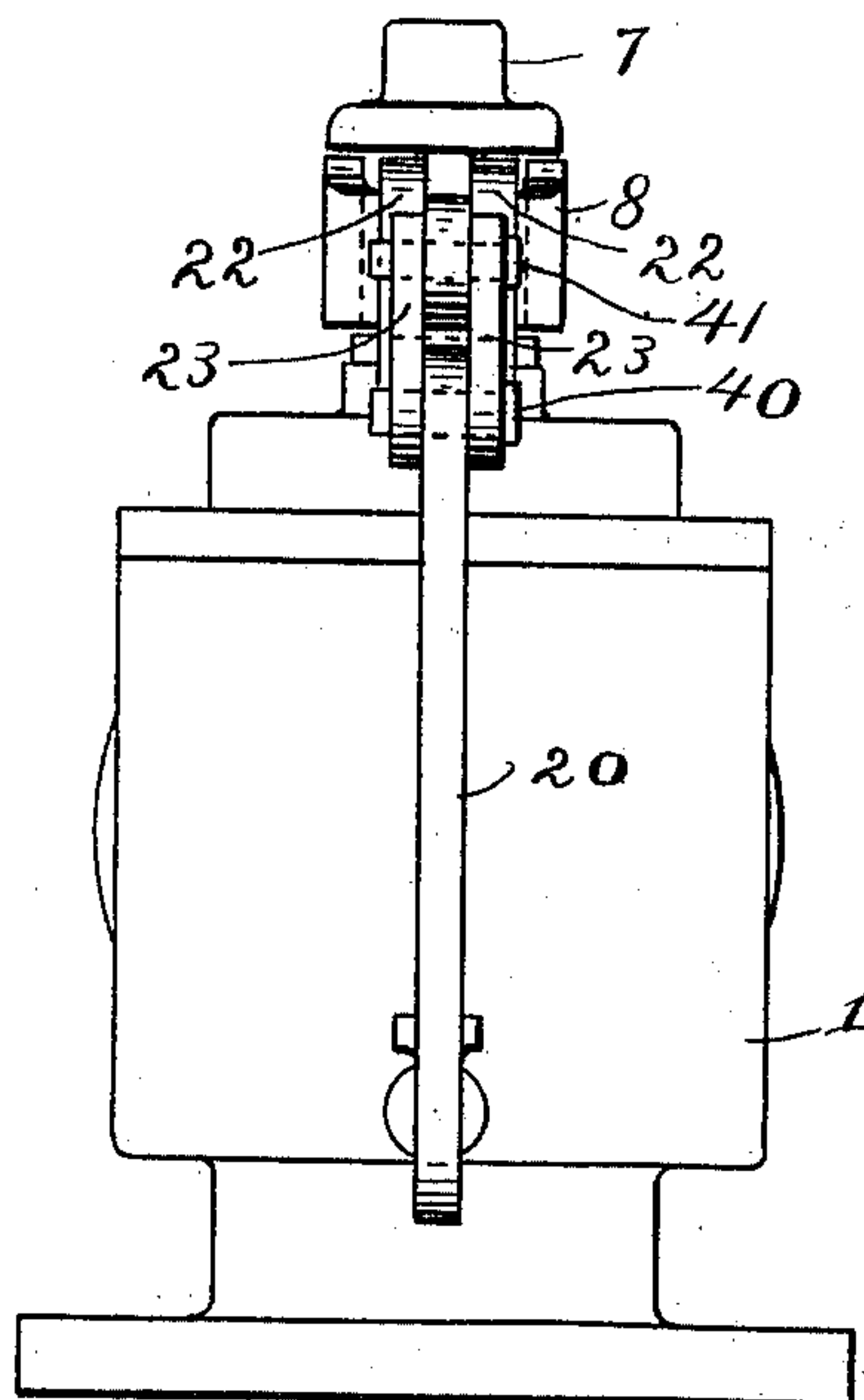
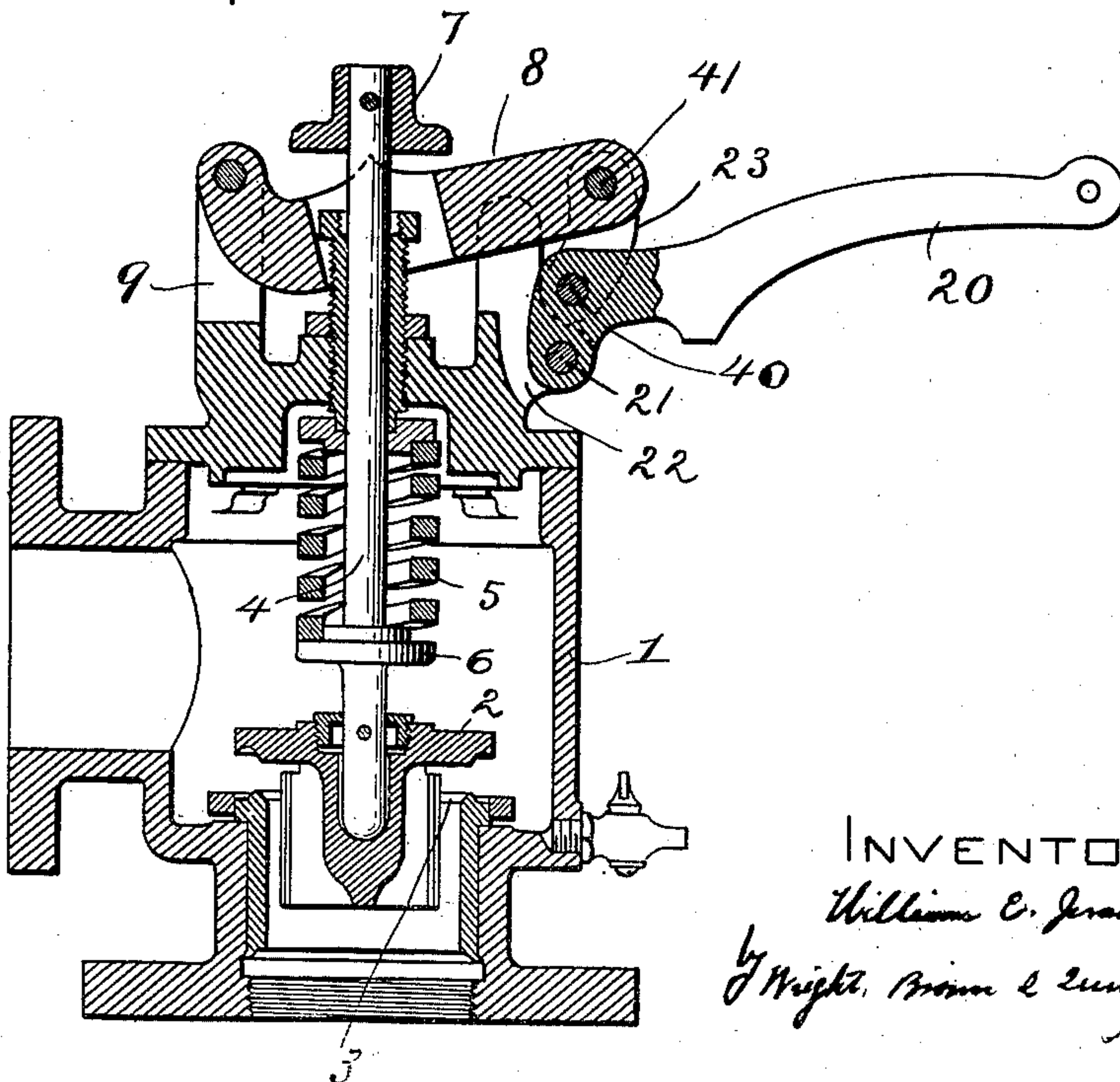


FIG. 3.



WITNESSES:
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UNITED STATES PATENT OFFICE.

WILLIAM E. JERAULD, OF WALTHAM, MASSACHUSETTS, ASSIGNOR TO THE
AMERICAN STEAM GAGE COMPANY, OF BOSTON, MASSACHUSETTS, A COR-
PORATION.

SAFETY-VALVE.

SPECIFICATION forming part of Letters Patent No. 699,532, dated May 6, 1902.

Application filed September 28, 1899. Serial No. 731,962. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. JERAULD, of Waltham, in the county of Middlesex and State of Massachusetts, have invented cer-
5 tain new and useful Improvements in Safety-Valves, of which the following is a specifica-
tion.

This invention relates to an improvement in safety-valves; and it consists in the novel
10 features of construction and relative arrange-
ment of parts hereinafter fully described in the specification, clearly illustrated in the drawings, and particularly pointed out in the claim.

15 Reference is to be had to the accompanying one sheet of drawings, forming a part of this application, in which like characters indicate like parts wherever they occur.

Figure 1 represents a vertical sectional view
20 of a safety-valve constructed in accordance with my invention, showing the parts in their normal position. Fig. 2 represents a side ele-
vation. Fig. 3 represents a view similar to Fig. 1, showing the lever elevated, the spring
25 compressed, and the valve relieved from the pressure of the spring.

The casing 1 and its parts, the valve 2, the valve-seat 3, the spindle 4, the spring 5, the internal collar 6, the external collar 7, the le-
30 ver 8, arranged to engage the collar 7 when the lever 8 is elevated, the lugs 9, between which the lever 8 is pivoted, are or may be of any well-known or preferred construction, the same forming no part of my present in-
35 vention.

20 represents a lever arranged upon the exterior of the casing and pivoted by a pintle 21 between lugs 22 on the opposite side of the casing from the lugs 9.

40 23 represents a link pivoted at one end to the end of the lever 8 and at its other end to the lever 20 near the pintle 21 in such manner that when the lever 20 is elevated, as in

Fig. 3, the lever 8 is also elevated to relieve the valve from the pressure of the spring 5, 45 the link 23 not only serving to communicate motion from the lever 20 to the lever 8, but also by reason of the position of its pintle 40 in relation to the pintle 21 to act as a lock and hold the lever 8 elevated until the le- 50 ver 20 is again depressed by the operator. When the lever 20 is moved from the position shown in Fig. 1 to the position shown in Fig. 2, the pintle 40 is carried by the plane occu-
55 pied by a line passing through the pintles 21 and 41, so that the tendency of the spring 5 to depress or pull down the lever 8 is to force the end of the link 23 toward and against the abutment afforded by the lugs 22, in which position the parts will remain, as stated, until 60 the lever 20 is positively depressed in order to break the toggle action of the link and bring the pintle 40 from the position shown in Fig. 3 to the position shown in Fig. 1.

Having thus explained the nature of my in- 65 vention and described a way of constructing and using the same, though without attempting to set forth all of the forms in which it is used or all of the modes in which it may be made, what I claim, and desire to secure by 70 Letters Patent, is—

In a safety-valve, the combination with a valve-spindle lever, of a hand-lever pivotally secured to the casing, a link connecting the valve-lever and the hand-lever, and an abut- 75 ment to act as a stop to limit the movement of the link, the parts being so arranged that when the hand-lever is moved to operate the valve-lever the link will automatically maintain the valve-lever in its changed position. 80

In testimony whereof I have affixed my signature in presence of two witnesses.

WILLIAM E. JERAULD.

Witnesses:

E. BATCHELDER,
H. L. ROBBINS.