

(No Model.)

J. H. LAUMANN.

AUXILIARY BOILER ATTACHMENT.

No. 377,313.

Patented Jan. 31, 1888.

FIG. 2.

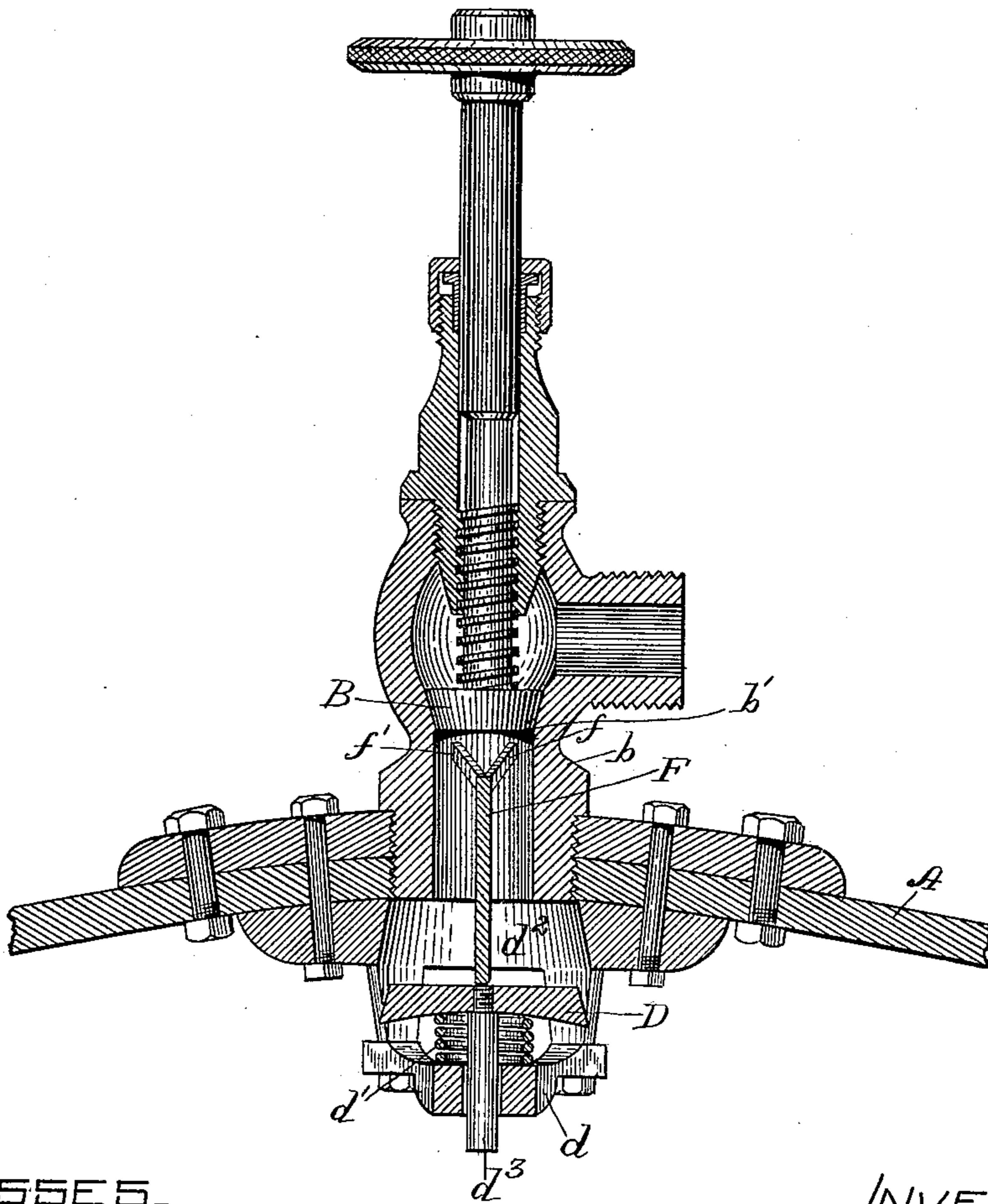
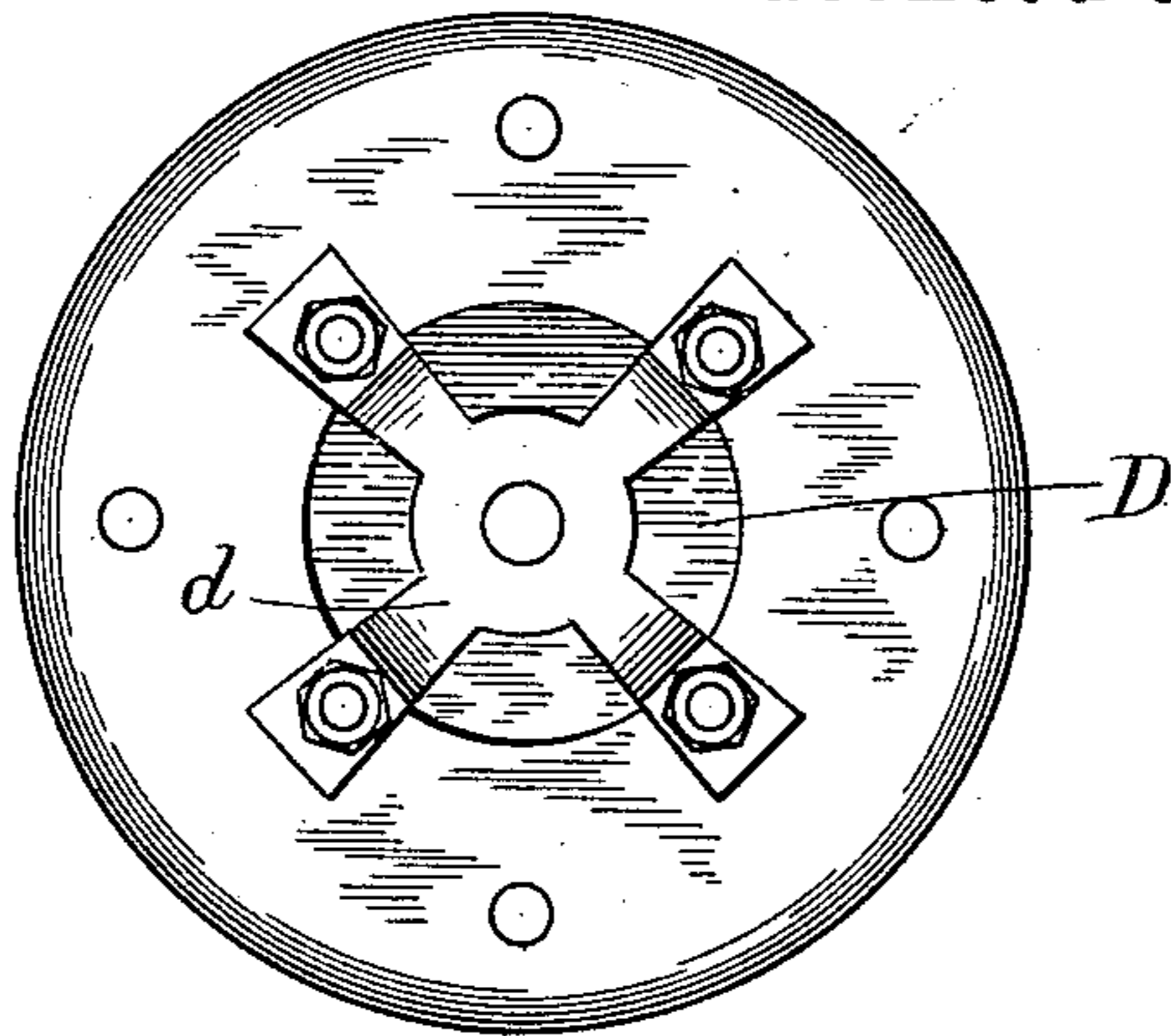


FIG. 1.

WITNESSES.

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UNITED STATES PATENT OFFICE.

JOHN HENRY LAUMANN, OF NEWBURYPORT, MASSACHUSETTS.

AUXILIARY BOILER ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 377,313, dated January 31, 1888.

Application filed April 11, 1887. Serial No. 234,342. (No model.)

To all whom it may concern:

Be it known that I, JOHN HENRY LAUMANN, of Newburyport, in the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Auxiliary Boiler Attachments, of which the following is a specification, reference being had to the accompanying drawings, in which my invention is illustrated.

10 The special object of my invention is to prevent the escape of steam and water from boilers when devices controlling their outlets are removed or broken off; and my invention is the combination of an outlet-controlling device
15 of a boiler or other vessel with an auxiliary outlet-controlling device which is operative only when the body or frame of the outlet-controlling device is removed or broken off.

It sometimes happens that devices controlling the outlets of the boilers of both stationary and locomotive engines are blown or broken off, and that persons are seriously scalded by escaping steam and water. This is frequently the case when the outlet-controlling devices of
20 the boilers of locomotive-engines are broken off in railroad accidents; and my attachment is especially intended for use in connection with each outlet of the boiler of a locomotive-engine, although it is equally well adapted for
25 use in connection with the outlets of boilers of all other engines, and, in fact, with the outlets of all kinds of vessels whose outlets are controlled by a valve or the like.

35 In the drawings, which show one form of my attachment, Figure 1 is a sectional detail, and Fig. 2 a plan view.

A is a portion of the wall of a boiler, and B is a valve controlling an outlet.

40 D is an auxiliary valve mounted in a frame, d , and provided with a spring, d' , which forces valve D against its seat d^2 when the spindle F, fast at one end to the cylinder b , is out of

engagement with it, the spindle d^3 steadying the movement of valve D in its ways in frame d , as will be plain to all skilled in the art. The spindle F is preferably made with arms f , cast on the inner wall of cylinder b at some distance beyond the outer surface of the boiler at the weakest point of the cylinder b , between the valve B and the boiler-outlet, as shown, in order that the spindle F may be the more certain of being broken off when the cylinder b is broken off, as it frequently is, and projects far enough beyond the inner end of cylinder b to hold valve D off its seat when cylinder b is in place.

It is obvious that when cylinder b is broken off or removed valve D is forced to its seat, and the outlet of the vessel is thereby stopped. While my auxiliary valve, being on the interior of the boiler or vessel, would be forced to its seat in most cases by the pressure of the contents of the receptacle to whose outlet it is applied, so that the spring d' is not really essential, I nevertheless back up the auxiliary valve D by a spring, in order to insure the seating of valve D whenever spindle F ceases to keep it off its seat.

I am aware of Brouk's patent, No. 239,645, dated April 5, 1881, and of Granger's patent, No. 307,294, dated October 28, 1884, and disclaim all that is shown in them.

What I claim is—

The combination, with receptacle A, having an outlet, exterior outlet-controlling device, B, and interior outlet-controlling device, D, of a spindle, F, fast to cylinder b , arranged and operating substantially as and for the purpose set forth.

JOHN HENRY LAUMANN.

Witnesses:

JAMES F. MUNROE,
EDWARD S. BEACH.