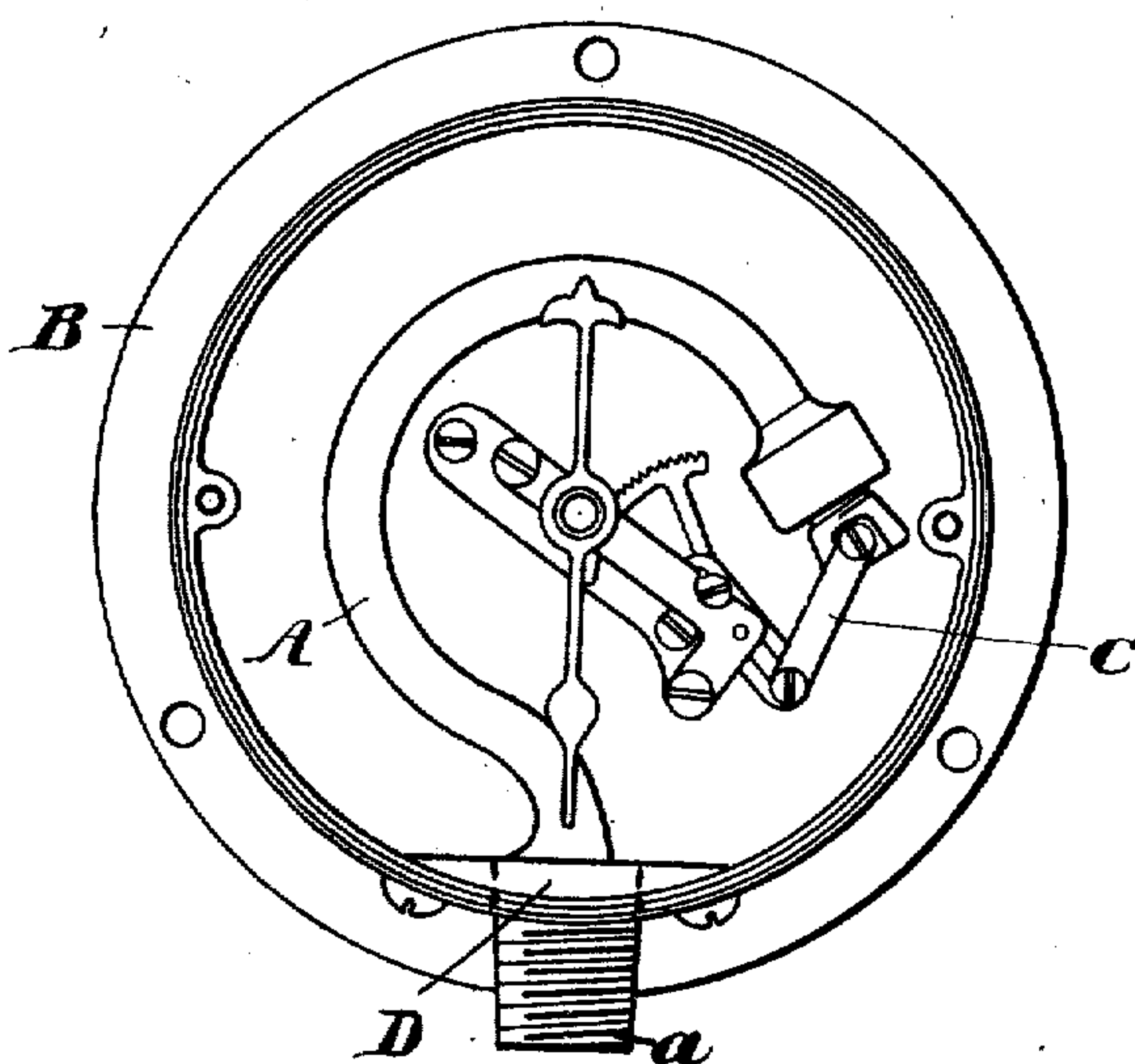


No. 829,551.

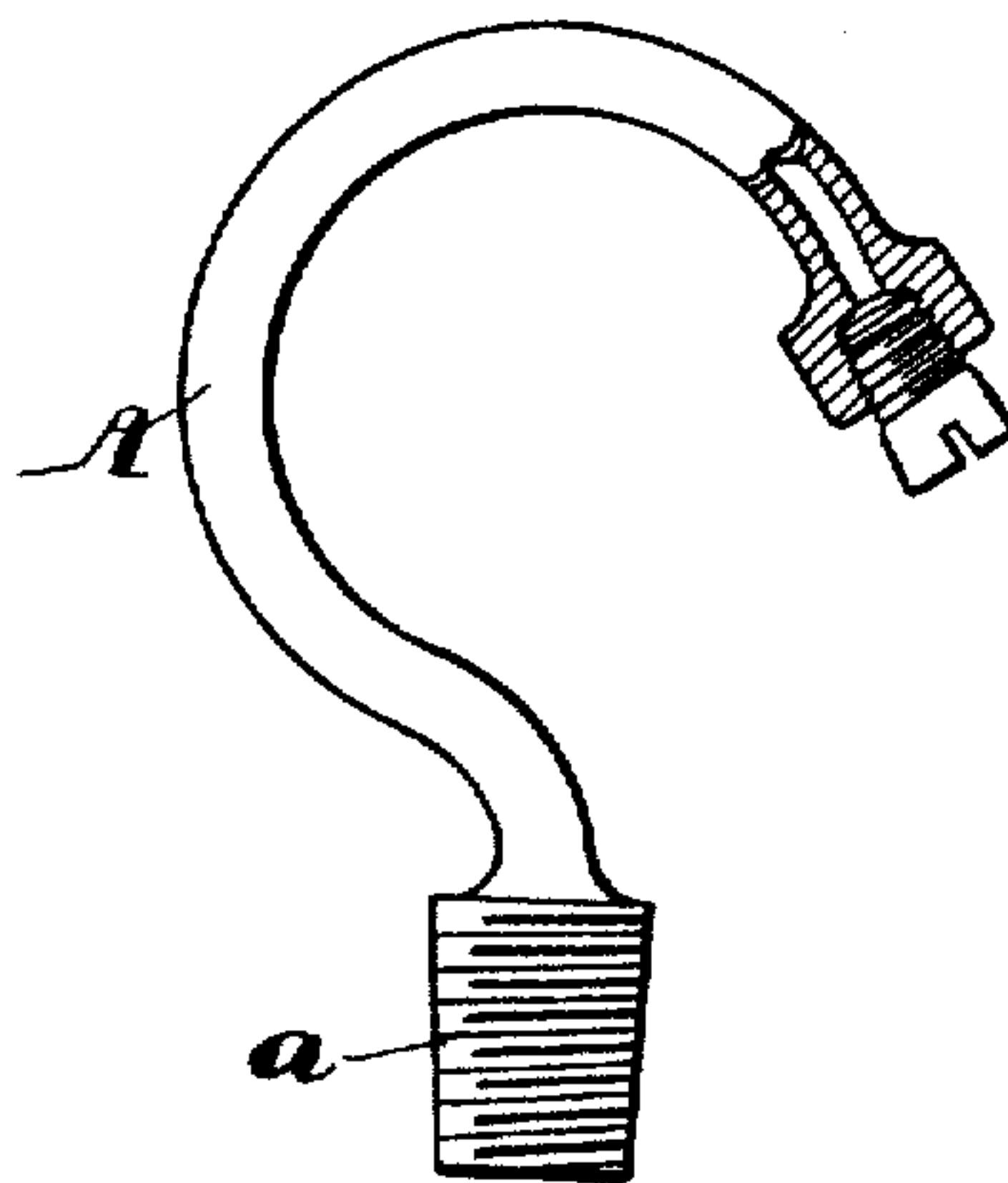
PATENTED AUG. 28, 1906.

G. SPENCER.  
PRESSURE GAGE.  
APPLICATION FILED FEB. 6, 1906.

*Fig. 1.*



*Fig. 2.*



**Witnesses:**

Nathan C. Lombard and  
Edward C. Bates.

**Inventor:**

George Spencer  
by his attorney  
Ralph W. Brown

# UNITED STATES PATENT OFFICE.

GEORGE SPENCER, OF MEDFORD, MASSACHUSETTS, ASSIGNOR TO CROSBY STEAM GAGE AND VALVE COMPANY, OF BOSTON, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

## PRESSURE-GAGE.

No. 829,551.

Specification of Letters Patent.

Patented Aug. 28, 1906.

Application filed February 6, 1905. Serial No. 244,489.

*To all whom it may concern:*

Be it known that I, GEORGE SPENCER, of Medford, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Pressure-Gages, of which the following is a specification.

My invention relates to pressure - gages employing Bourdon-tube springs; and its object is to provide for securing such springs directly to the boiler or other receptacle or its connections without employing a "gage-socket," so called, which heretofore has always been employed in such gages, such former construction comprising a tube-spring gage-socket, to which the tube-spring is secured, and the boiler or other receptacle or its connections, to which the socket in turn is secured.

My invention does away with the gage-socket as an independent element, thus dispensing with one of the joints of the usual construction, and in this way considerably lessening the expense of the instrument, strengthening it, and avoiding the liability to leakage and to injury arising therefrom.

The invention is illustrated by the accompanying drawings, in which—

Figure 1 shows the tube-spring arranged in a gage-case. Fig. 2 shows the tube-spring alone.

Similar letters refer to similar parts in the two drawings.

A is a Bourdon-tube spring arranged in the gage-case B, with the registering mechanism C attached to the upper end of said tube-spring and fixed to said case in the usual way. Through the plate D, affixed to the side of said gage-case, is a threaded hole through

which plate and case extends the lower end *a* of the Bourdon tube in threaded engagement with said plate. This threaded lower end *a* may be secured directly to a boiler or to its connections. The spring-tube described may be connected with the boiler or its connections in any other way, as by a union-joint, and may have its lower end properly made for such connection.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a pressure - gage the combination, with the gage-case and registering mechanism arranged therein, of a Bourdon - tube spring mounted in said case and made of one piece and integral with its socket, having one end fixed to said registering mechanism and having its socket end extended through said case to the outside thereof and adapted for engagement with a steam-boiler or other receptacle; substantially as described.

2. In a pressure - gage the combination, with the gage-case and registering mechanism arranged therein, of a Bourdon - tube spring mounted in said case and made of one piece and integral with its socket, having one end fixed to said registering mechanism and having its socket end extended through said case to the outside thereof and threaded for engagement with a steam-boiler or other receptacle; substantially as described.

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

GEORGE SPENCER.

Witnesses:

RALPH W. FOSTER,  
EDWARD C. BATES.