(No Model.)

F. A. JONES.

RECORDING PRESSURE GAGE.

No. 343,177. Patented June 8, 1886.

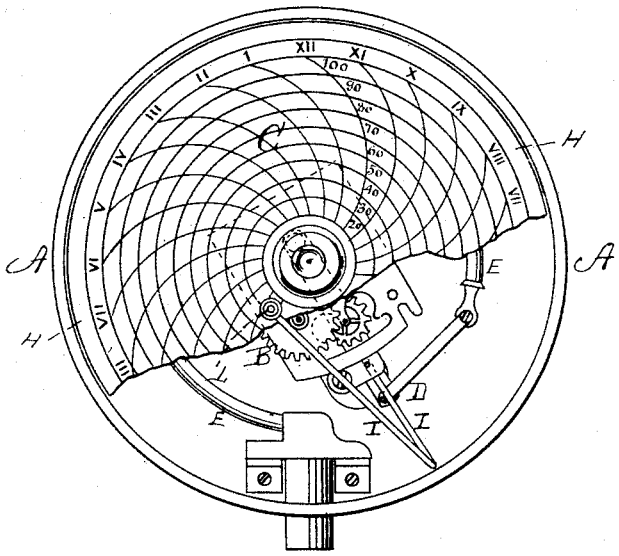

Fig. 1.

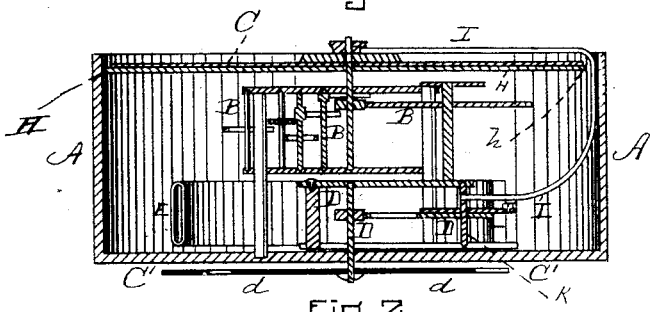

Fig. 2.

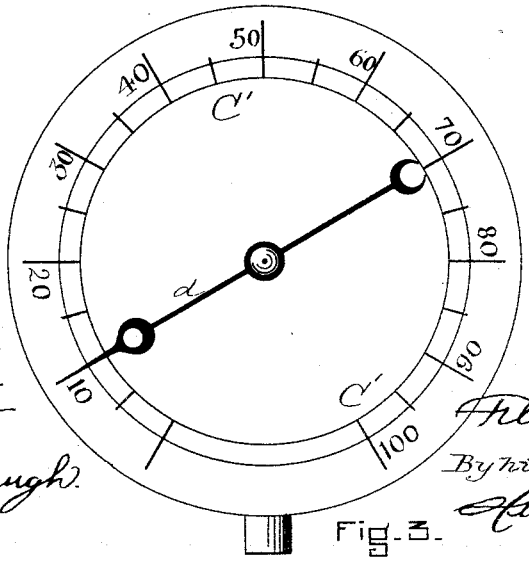

Fig. 3.

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UNITED STATES PATENT OFFICE.

FLORENTINE A. JONES, OF MALDEN, MASSACHUSETTS.

RECORDING PRESSURE-GAGE.

SPECIFICATION forming part of Letters Patent No. 343,177, dated June 8, 1886.

Application filed February 29, 1884. Serial No. 122,479. (No model.)

To all whom it may concern:

Be it known that I, FLORENTINE A. JONES, of Malden, in the county of Middlesex and State of Massachusetts, have invented new and useful Improvements in Recording Pressure-Gages, of which the following is a specification.

This invention relates to gages for recording the extent and variations of pressure in steam-boilers, cylinders, or other vessels containing air, gas, liquid, or other fluids, the object being to produce a recording pressure-gage operated by a Bourdon spring or springs, which shall, within the compass of an ordinary pressure-gage, both indicate and record the pressure, this being desirable on account of space and cost of manufacture; also, if the pressure is indicated on one side and the record made upon the other, it may in certain situations serve in place of two indicating-gages, by reason of being enabled to read the pressure from the recording side as well as on the indicating side. This is an improvement on the invention for which Letters Patent were issued to myself and one Sylvester Glines, bearing date October 30, 1883, and numbered 287,684, and to myself of the same date, numbered 287,686.

In the accompanying drawings, in which similar letters of reference indicate like parts, Figure 1 is a plan view showing one side or face of a recording pressure-gage embodying my invention, a portion of the recording-dial being represented as broken out. Fig. 2 is a central transverse section. Fig. 3 is a plan view showing the opposite side or face from that shown in Fig. 1.

A represents a single box containing, one above the other, the clock-work mechanism B, for operating the recording pressure-dial C, situated on one side of face of the box, and the steam-pressure mechanism D, for operating the pointer *d* on the steam-pressure dial C′, situated on the opposite side or face of the box.

The recording-dial C is operated in the usual manner by the clock-work mechanism B, constructed as common in steam-pressure gages, and the pointer *d* is operated in the usual manner by the steam-pressure mechanism D, constructed in steam-pressure gages, a single or double Bourdon spring being employed. Thus it will be seen that by utilizing the opposite faces or sides of a single small box, A, both the recording-dial and the steam-pressure dial and their mechanisms are accommodated in an economical but convenient manner.

Underneath the recording-dial C is a stationary sheet-metal disk or plate, H, of somewhat larger diameter than said dial, through an opening, *h*, in which extends a rod or lever, I. This rod I has its rear end secured to any convenient portion of the steam-pressure mechanism D or to the Bourdon spring E, (in the drawings it is rigidly secured to the rack-post K) and passing through the opening *h* it is bent back upon itself, as shown in Figs. 1 and 2, over the recording-dial C, and operates a suitable delineating device, L, upon said dial, which may consist of paper, or any suitable surface proper to receive impressions from the delineating device.

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

1. An article of manufacture comprising a pressure-indicating mechanism, a pressure-recording mechanism, a Bourdon spring or springs, a recording-surface, and a clock-work mechanism for rotating the same, the said indicating mechanism and dial and recording-surface, with the clock-work, being arranged, substantially as described, so as to indicate the pressure upon one side of the box and record the pressure upon the other side, substantially as and for the purpose set forth.

2. In a recording pressure-gage in which the pressure actuates a Bourdon spring or springs, the combination, with the steam-pressure mechanism and the recording-dial, of an arm or lever extending from said mechanism to said dial, said arm or lever being bent back upon itself and operating a device whereby the extent and variations of pressure are recorded on said dial, substantially as for the purpose described.

FLORENTINE A. JONES.

Witnesses:

HENRY W. WILLIAMS,

JOSEPH ISHBAUGH.