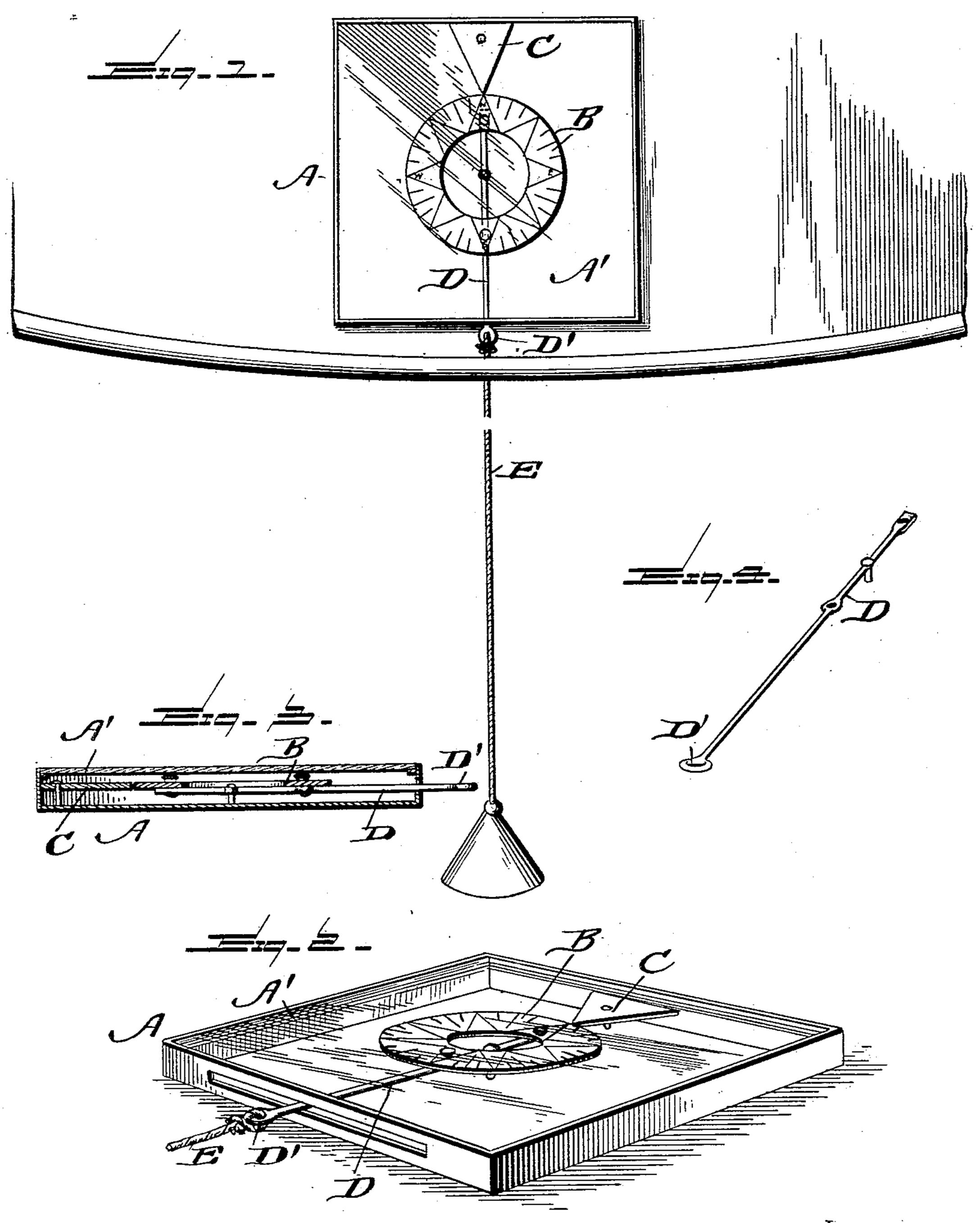
Patented Nov. 18, 1902.

W. J. CONDLON.

COURSE INDICATOR FOR SHIPS.

(Application filed July 6, 1901.)

(No Model.)



WITNESSES: MSROloudel William J. Condlon.

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INITED STATES PATENT OFFICE.

WILLIAM J. CONDLON, OF BUFFALO, NEW YORK.

COURSE-INDICATOR FOR SHIPS.

SPECIFICATION forming part of Letters Patent No. 713,608, dated November 18, 1902.

Application filed July 6, 1901. Serial No. 67,325. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. CONDLON, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New 5 York, have invented a new and useful Course-Indicator for Ships, of which the following is a specification.

This invention is an apparatus to be used on board ship for the purpose of calculating to the amount of leeway a vessel is making, and is therefore in the nature of a compass.

The invention consists in the peculiar construction of the various parts and in their novel combination and arrangement, all of 15 which will be fully described hereinafter and pointed out in the claim.

In the drawings forming part of this specification, Figure 1 is a diagrammatic view showing the practical application of the invention. 20 Fig. 2 is a perspective view of the device. Fig. 3 is a longitudinal section, and Fig. 4 is a perspective view, of the rod to which the

log-line is attached. In carrying out my invention I employ a 25 box or case A, having a glass top A'. Pivoted centrally within the casing is a rod D, upon which is fixedly secured a circular disk B, having its upper surface subdivided similar to the divisions of a compass, and in practice 30 I may arrange the usual compass-marks thereof if found desirable. The disk is fastened to the rod in any suitable manner, but preferably by set-screws, as shown, and one end of the rod protrudes through a slot formed in 35 the side of the case and has its end terminating in an eye D', to which the log-line E is fastened. At a point within the case and preferably upon the opposite side to the slot I securely fasten an indicator-point C, which 40 is made V-shaped in construction, with the extreme point approaching and nearly touch-

ing the periphery of the disk, as shown. It will be observed from Fig. 4 that the rod D is made with eyes, through which the pivot 45 and set-screws pass; but in practice I may

construct this bar in any suitable way, and therefore do not limit myself to the construc-

tion shown in said figure.

In practice my invention is preferably used in connection with a taffrail-log, the latter 50 being arranged between the propeller-wheel and my improvement, although this arrangement is not essential, as my improvement may be used separately, as shown in the drawings, and in order to find out how much leeway the 55 vessel is making the dial or disk B is set at the same point with the vessel's compass. The log-line is then attached to the arm D and cast over the stern of the vessel and the time taken. If the vessel makes leeway, the 60 log-line will move to that quarter and the exact amount will be shown upon the dial or disk B. After running a certain time or distance the dial or disk is compared with the ship's compass and the leeway made can be 65 accurately figured. It will be understood that the stationary point C is always in direct line with the head of the vessel.

It will thus be seen that I provide an exceedingly simple and efficient device for cal- 70 culating the amount of leeway made by a vessel in a given length of time.

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

In a device of the kind described, the combination with a box or case having a stationary point at its forward end and a horizontal slot at its rear end, a dial or disk arranged centrally of the case, and an arm pivoted 80 within the casing and attached to the said disk or dial and projecting through the slotted end of the box or case, the end of said arm having an eye to which the log-line is attached, substantially as set forth.

WILLIAM J. CONDLON.

Witnesses:

W. R. FISH, CHAS. AMSTRONG.