

C. S. BURGON.
SHIP'S COURSE INDICATOR.
APPLICATION FILED SEPT. 30, 1908.

954,777.

Patented Apr. 12, 1910.

FIG. 1.

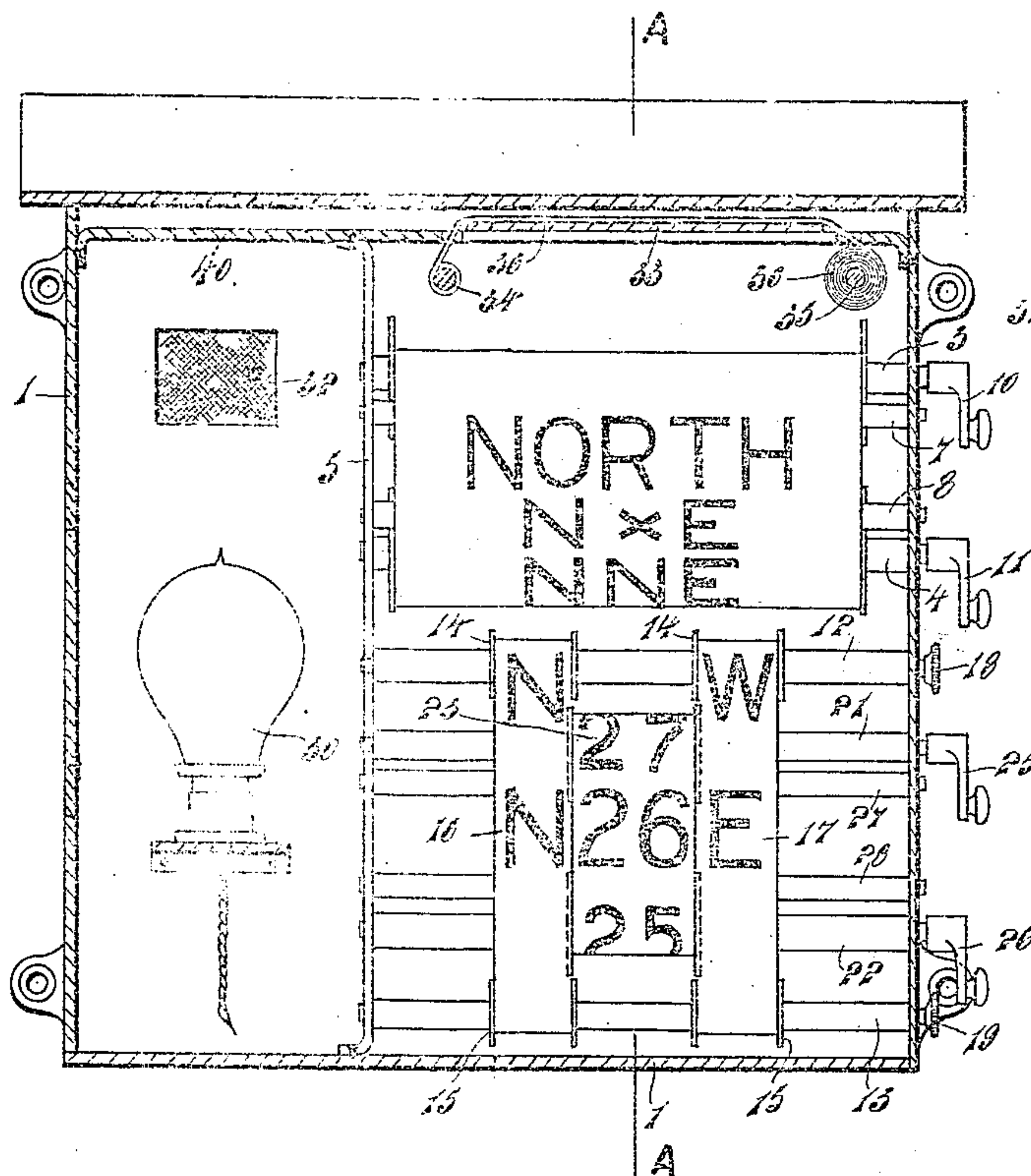
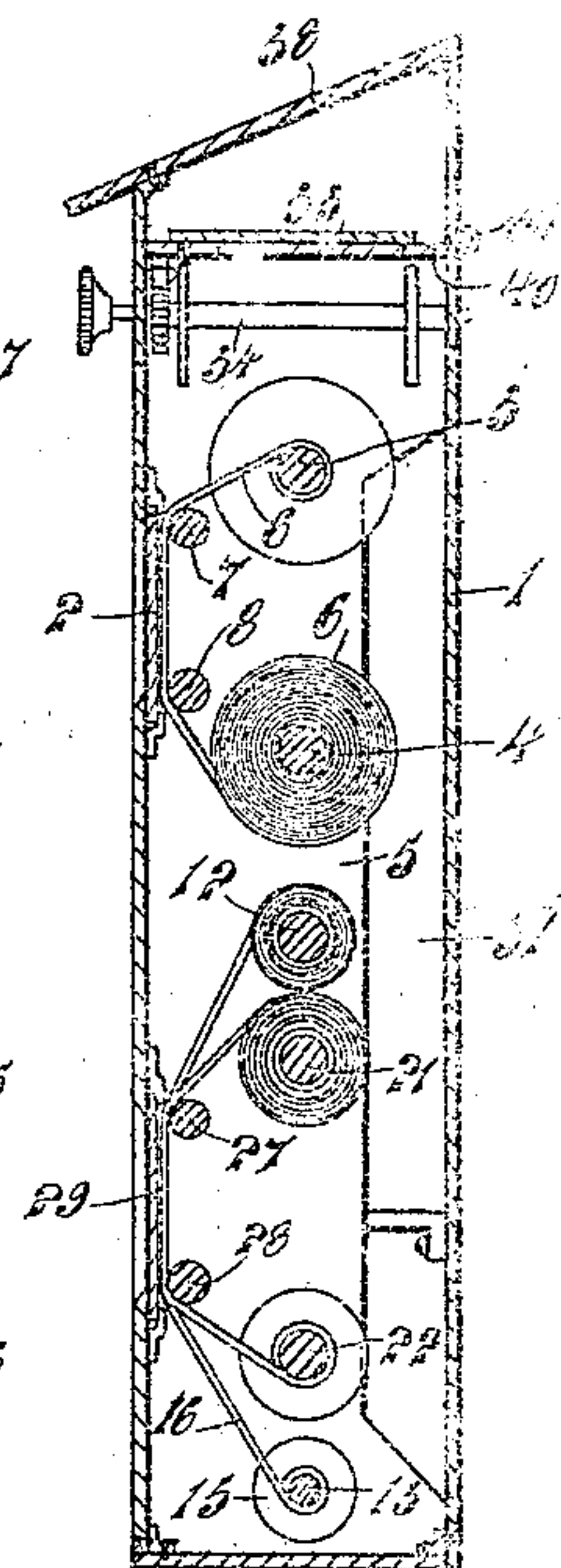


FIG. 2.



Witnesses.
Sydney H. Higgs.
Elsie Higgs.

Inventor
Charles Stuart Burgon.
By *Baldwin & Raymond.*
Attorneys.

UNITED STATES PATENT OFFICE.

CHARLES STUART BURGON, OF WELLINGTON, NEW ZEALAND.

SHIP'S COURSE-INDICATOR.

954,777.

Specification of Letters Patent.

Patented Apr. 12, 1910.

Application filed September 30, 1908. Serial No. 455,424.

To all whom it may concern:

Be it known that I, CHARLES STUART BURGON, a subject of His Majesty the King of Great Britain and Ireland, residing at 256 Lambton Quay, Wellington, in the Provincial District of Wellington, in the Dominion of New Zealand, have invented new and useful Improvements in Ships' Course-Indicators, of which the following is a specification.

This invention provides a device for use in substitution of the blackboard at present used on board ship whereon the course to be steered is written, and consists of new and useful improvements of which the following is a full, clear and exact description.

The drawings illustrate the invention.

Figure 1, is a sectional elevation of the apparatus, and Fig. 2, a cross sectional elevation on line A—A Fig. 1.

At the present time it is customary for an officer on watch, from time to time, to mark the course with chalk upon a blackboard kept for that purpose upon the bridge of a ship. This blackboard is clearly in view of the man at the wheel, but this method is unsatisfactory owing to the chalk writing becoming effaced in wet weather, and at night it frequently happens that the writing cannot clearly be seen.

In the present invention a casing (1) having a glass panel (2) is provided preferably in its upper part with rollers (3) and (4) journaled in the end of the casing (1) and in a vertical partition (5). A band (6) of linen or the like is attached at one end to the roller (3) and at its other end to the roller (4). Guide rollers (7) and (8) journaled in the end of the casing (1) and in the partition (5) lead the band (6) to a position near the glass panel (2). The distance of the band from the glass is thus constant independently of the amount wound upon either of the rollers (3) or (4). Upon this band the points of the compass are indicated, and on the drawings "North", "N×E" indicating "north by east", and "N N E" indicating "north north east". The remaining points of the compass being continued upon the band and rolled upon the roller (4). The band is preferably black with the points of the compass indicated in white letters in order to be clearly visible through the sheet of glass to the man at the wheel. The roller (3) extends beyond the casing and is provided with an operating handle (10) and roller (4) has a similar handle (11). By

turning a handle the rollers are rotated so that the band rolls upon one roller and unrolls from the other roller. This band (6) is employed when it is desired to steer the vessel by points of the compass. When it is desired to steer by degrees of the compass the mechanism in the lower part of the device is used and consists of rollers (12) and (13) journaled in the end of the casing (1) and the partition (5) and provided with flanges (14) and (15) between which linen bands (16) and (17) are rolled around the said rollers. These bands are spaced apart as shown in Fig. 1 and are marked to read "N-E", "N-W", "S-W", "S-E". These rollers are operable by milled buttons (18) and (19) secured upon the rollers (12) and (13) outside the casing. Other rollers (21) and (22) are journaled in the end of the casing (1) and the partition (5) and are introduced between the rollers (12) and (13) and have a band (23) inscribed with degrees "1°" to "90°" inclusive. Thus if it is desired to steer north twenty-six degrees east, the rollers are set to read "N 26 E", as shown in Fig. 1. The rollers (21) and (22) are operable by handles (25) and (26). Guide rollers (27) and (28) journaled in the end of the casing (1) and the partition (5) guide the bands (16) (17) and (23) past a sheet of glass (29) and near thereto.

In a compartment formed by the partition (5) and the end of the casing (1) a lamp (30) is introduced and preferably an electric lamp as shown in the drawings. The light from the lamp shines through a gap (31) formed at the back of the partition and illuminates the backs of the bands (16) (17) and (23) so that the lines and degrees thereon are visible at night time. An opening (32) covered by gauze wire or the like provides ventilation to the casing.

In the top (40) of the casing is inserted a sheet of glass (33) and rollers (34) and (35) journaled in the front and back of the casing are provided with a paper band (36). This band passes over the top of the glass (33). Alterations in the course steered and the time of such alterations may be recorded upon the paper band, the light from the lamp (30) making the writing visible at night. The rollers (34) and (35) are operable by a milled button (37).

A lid (38) upon the top of the casing is hinged at (39) to give access to the paper band (36) and is sloped to allow rain water

or spray to run readily off the top of the apparatus the overhanging part of the lid preventing water running down in front of the sheets of glass (2) and (29). The said
5 lid also prevents glare of light from shining through the glass (33) and the band (36).

What I do claim and desire to secure by Letters Patent of the United States is:—

13 A course indicator of the class described, comprising in combination a casing, a partition across the casing and having a gap, a sheet of glass in front of the casing, rollers journaled in the end of the casing and in the partition, a band fastened at its end to

the rollers and marked with points of the 15 compass, rollers guiding the band past the sheet of glass, a lamp in the compartment formed by the end of the casing and the partition and adapted to shine through the gap and illuminate the back of the band, as set 20 forth.

In testimony whereof I have signed my name to this specification in the presence of two witnesses.

CHARLES STUART BURGON.

Witnesses:

PERCY BARNETT WRIGHT,
JOHN JOSEPH WATSON.