

**SUPPLEMENT TO BERGEN'S EPITOME
OF NAVIGATION, CONTAINING THE
NEW QUESTIONS REQUIRED BY THE
BOARD OF TRADE, ON AND AFTER
THE 1ST OF AUGUST, 1881**

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Supplement to Bergen's Epitome of Navigation, Containing the New Questions Required by the Board of Trade, on and After the 1st of August, 1881 by William Cuulley Bergen

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WILLIAM CUULLEY BERGEN

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THE BOARD OF TRADE,

ON AND AFTER THE 1st OF AUGUST, 1881.

BY

WILLIAM CULLEY BERGEN,

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"SEAMANSHIP," Etc.

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PREFACE.

The following work is adapted to the requirements of the Board of Trade after the 1st of August, 1881; a few Tables required for the solution of the questions are given, so that those persons who have the former editions of Bergen's Navigation will not need any other work

It is intended to enlarge this supplement as soon as convenient.

The author is indebted to Capt. Wm. B. Duncan, Teacher of Navigation, South Shields, for his valuable help and useful suggestions, while the work was passing through the press.

WM. C. BERGEN.

INDEX.

NOTICES BY THE BOARD OF TRADE.

	PAGE.
Examination Papers	10
Answers to Examination Papers	46
Examples in Napier's Diagram	58
Exercises in Napier's Diagram	67
Answers to Exercises on the Curves	72
Sumner's Method	76
Projection of the Chart	78
Answers to Sumner's Method	85
Table of the Angles	86
Examinations in Chart	87
Exercises in the Examination in Chart	104
Examination Papers	109
On Soundings	119
On Interpolation	119
Additional Alterations in "Seamanship"	129
Adjustment of the Sextant	185
Elements from the Tide Tables	186
Tide Tables and Constants	187
Tables from "Nautical Almanack"	188
Declination of the Fixed Stars	144

1

2

3

4

5

6

7

8

9

10

HINTS TO CANDIDATES.

1. Before presenting themselves at the Examination Rooms, candidates should see that their applications are properly filled up, and that their papers and testimonials are in regular order ; any mistake or omission in regard to these will cause delay and disappointment.

(a) *Second Mates* should show on their applications the whole of their service since they first went to sea.

(b) *Only Mates, First Mates and Masters* should show on their applications the whole of their service since the date of their last certificate.

(c) *All Grades* must show 12 months service in a square rigged vessel, as seaman, mate, or master ; otherwise they can only obtain certificates for steamers.

(d) *All Grades* must produce good testimonials for their last 12 months service, from the date of the examination.

(e) The time upon the application must be in *consecutive order*. All service, whether as Apprentice, Boy, O.S., A.B., Cook, Steward or Carpenter, must be shewn ; and if a candidate has been on shore for more than two months at a time, he must state on his application what he has been doing during the interval.

2. *Second Mates' service in the coasting trade does not count* to entitle them to pass as First Mate or Master ; but such service must appear upon the applications.

3. Pens and ink are provided in the Board Room, and Candidates must not on any account take books or papers of any kind into the Board Room, except their applications, testimonials, and discharges. This rule does not apply to penholders or pens.

VIII.

No communication between Candidates is allowed, and a Candidate infringing this rule, or assisting any other will be instantly dismissed, and will lose the fee he has paid.

4. Candidates are recommended to be calm and steady, and not to begin to work until they have attended to the following rules.

(a) As soon as you receive your examination paper from the examiner copy your rotation number into the examination paper, and write the name of the port, day of the month, and the year, in their appropriate places; also write your name close to the foot of the page on both sides of every sheet you receive; be specially careful to do this.

5. Keep your work well up towards the top of the page, close and compact, and do not spread it all over the sheet; otherwise if you make any errors you will not have room to commence the work afresh; write the names of the latitude in, longitude in, declination, &c., and the answers to the questions clearly and neatly.

If your paper is returned to you for correction, do not leave any of the incorrect work standing on the paper, but draw your pen across it and cancel it.

Keep the minor corrections abreast of the work they belong to.

6. You are not allowed to leave the premises during the examination, but you may go to the retiring room if you give up the paper on which you are engaged, and ask leave to do so.

WM. C. BERGEN.

Consecutive Office No. 178.
Departmental 895.
Examinations 11.

BOARD OF TRADE,
Marine Department,
January, 1881.

EXAMINATION
FOR
CERTIFICATES OF COMPETENCY
OF
MASTERS AND MATES OF FOREIGN-GOING STEAMSHIPS.

Preliminary.

On and after the 1st day of March, 1881, certificates of competency will be issued subject to the examinations herein-after described, for officers who have served in steamships, and who, owing to absence of service in square rigged sailing ships, cannot under the existing regulations obtain certificates of competency to act in the capacity of masters or mates of square rigged steamships.

These certificates will entitle the holders to go to sea as masters and mates of foreign-going steamships, but will not entitle the holders to go to sea as masters or mates of foreign-going sailing ships.

The forms of certificates will differ from those at present in use.

There will be no distinction in respect of "fore and aft," and "square-rigged" steamships.

Regulations as to Examinations.

**QUALIFICATIONS FOR CERTIFICATES OF COMPETENCY FOR FOREIGN-GOING
STEAMSHIPS ONLY.**

Examination in Colours.—All candidates for certificates of competency must pass the Examination in colours.

A Second Mate.—Must be 17 years of age, and must have been four years at sea.

In Navigation.—He must write a legible hand, and will be required to give in writing definitions of various astronomical and other terms used in navigation. He must have a competent knowledge of the first five rules of arithmetic and the use of logarithms. He must be able to work a day's work complete, correcting the