Laying out mines. Raising mines. Work at junction box. Hydraulic testing. Making up the following batteries :--a. Daniells. b. Groves. c. Leclanché, No. 3. d. Signalling, special. e. Test, special. f. Firing. **†**Testing detonators. **†Adjusting relays.** Testing priming apparatus. Connecting up circuit-closer with relay. Making up primers fora. Ground and buoyant mines. b. Electro-contact mines. **†**Fitting up test table. Daily testing. Adjusting shutter apparatus. Testing firing battery and earths. Firing charges. Use of position finders. Calibrating 3-coil galvanometer. Finding liquid resistance of batteries. Use of dynamo-electric exploder. Use of reflecting galvanometer. **†**Testing cables. Use of condenser. Knowledge of principles of electricity and magnetism. Working out electric examples. Working electric light. Mechanical mines. Passive obstructions. Improvised apparatus. †Engine driving. †Diving (both for submarine mining and general service). It is not desirable to attempt to teach all of the foregoing subjects to each individual; a thorough knowledge of a portion will be more valuable in the operations of defence than a superficial acquaintance with the whole. Subjects marked thus † are taught 'only to special classes. Signature of Officer of) the Coast Corps R. E. of the Port... ... Counter - signature of) the Officer Commanding the Volunteer Battalion the I append the recommendation of the Commandant of the School of Instruction, dated for the name of to be included in the efficiency return of his Company. Signature of the Officer Commanding the Battalion ... ...: I recommend that the name of shall be included in the annual submarine mining efficiency returns of his Company. Signature of the Officer deputed by the Inspector General of Fortifications for inspection of the Company in submarine mining duties ... ...

An officer of a Company of Volunteer Engineer Submarine Miners shall be returned as efficient as follows, viz. :--He shall have attended a two

A 2

months' course at the School of Military Engneering, Chatham, and have received a recommendation from the Commandant that his name shall be included in the efficiency return of his Company. He shall further attend the annual exercise of his company for the full period authorised, and shall attend annually 20 submarine mining drills of the sappers or non-commissioned officers of his company who may be under instruction in those drills.

\* In the case of members who have obtained the recommendation of the Commandant of the School of Instruction it will not be necessary to fill in this portion of the Certificate in the return made for the twelve months embracing the period of his attendance at the School of Instruction.

The amount of proficiency acquired in previous returns will also be shown hereon, previous qualifications being shown in red.

Subjects marked thus † are taught only to special classes.

## FORMS OF CERTIFICATES OF EFFICIENCY.

Army Form E. 617.

FOR ENGINEER VOLUNTEER CORPS (SUBMARINE MINERS).

Certificate of Efficiency for Serjeants.

Infantry Drill.

We hereby certify that of the has been this day examined by us;

a. That he is able to drill a Company in close order

b. That he is acquainted with the duties of commander of a guard, and with the proper mode of marching reliefs and posting sentries ;

c. That he is practically acquainted with the exercises for the short rifle (manual and firing);

Also that in his written answers to questions he has expressed himself with \*

Signature of Adjutant, countersigned by the Officer Commanding Volunteer Corps	·
Station	

Date

\* Here insert "clearness" or "tolerable clearness" as the case may be.

## Engineering Duties.

1. We certify that has attended the Annual Camping Practice of his Company, and that he has attended, during the 12 months

ending 31st October, 18 Submarine mining drills of this Corps ordered by the Commanding Officer, each of such drills

being of not less than one hour's duration. 2. \* That he has during the above period acquired a fair, practical, or very good knowledge of the subjects on the following list to the extent stated against each :---

Rowing.

Sculling

General handiness in boats.

Taking soundings.

**†**Use of sextant.

Knotting and splicing.

Making grummets. Making fenders, pointing, &c.

Bending thimbles to wire rope.

Signalling-

a. With flags and lamps.

b. With lime light.