

temperature observations, &c., all, of course, directly in the line of their future vocation.

The other four accompanied one or the other of Professor Powell's parties into the far West, and have had every opportunity for field work.

The results of this experiment have been so satisfactory that it is proposed to detail six more midshipmen during the present month, the first six to continue another year, making the entire course one of two years.

The selections for this detail are made by the Navy Department, after conference with the Superintendent of the Naval Academy, from among those who, while pursuing their educational course, have shown most interest in scientific matters.

The measure is extremely popular among the younger officers, although of course it is derided by others, who consider it an innovation in the established routine.

One special object of the experiment is to have as a part of the regular force of the Navy, officers competent to do the scientific work for which it has generally been necessary to employ civilians, as also on any cruise to be able to utilize to some extent at least the opportunities of research which constantly present themselves to the inquirer.

WASHINGTON, D. C., *October 7, 1882.*

31.—EXPORT OF FISH OIL FROM NORWAY, 1878-'82.

By **FREDRIK M. WÄLLEM.**

[Extract from letter to Prof. S. F. Baird.]

Official returns regarding the export from Norway of fish oil are just issued. They show the export for December, 1882, to have been 4,400 hectoliters fish oil, and for the past five years as follows:

Years.	Hectoliters.	Gallons.
1882.....	100,600	2,657,550
1881.....	128,000	3,381,376
1880.....	169,000	4,464,473
1879.....	143,000	3,777,631
1878.....	137,000	3,610,129
Average.....	135,520	3,580,032

The Lofoten cod fishing has commenced, but the fish are not fat, and the liver will not give so much oil as an average year, still it is too early to tell how much the oil product shall be.

BERGEN, NORWAY, *February 16, 1883.*