

Another important advance is that the course in day schools has been considerably extended beyond the stereotyped three R's, and that teachers and managers are to a limited extent allowed to use their judgment. Some attention is at length paid to

the special tastes and aptitudes of the scholars. In technical education, too, the last twelve months have witnessed immense progress, though it is clear this department is but beginning to attract public attention.—*The Publishers' Circular*.

## GEOGRAPHY.

DR. W. B. CARPENTER. — The death of Dr. William B. Carpenter in England has removed one of the pioneers in the study of the natural history of the ocean depths. His work in connection with the young science of oceanography will never be forgotten. He was one of the founders of the science. It is a curious fact that it was not naturalists nor mariners who began this study. Engineers took the first steps in this direction. It was not until the first submarine cable between Europe and America was laid, that the need for a careful study of the physical conditions of ocean depths became apparent. The first studies were made and the results were so novel and encouraging that a few years later there was a movement among some maritime powers for the organization of scientific expeditions to explore the ocean depths.

The first work of great importance was done in 1869 and 1870 by the English vessel, *Porcupine*, which made many soundings and other researches under the direction of Prof. Wyville Thompson and Dr. Carpenter in the North and Mediterranean Seas. Then came the great expedition of the *Challenger*, which, leaving England in 1872, made a cruise around the world occupying over three years and accomplishing scientific results which were of enormous value. France has also taken a considerable part in these

explorations, and our own deep-sea researches, under the direction of Mr. Alexander Agassiz and others, have been of the greatest importance.—*Goldthwaite's Geographical Magazine* (N.Y.).

NOTES FROM THE REPORT ISSUED BY THE TORONTO OBSERVATORY FOR THE YEAR 1891.—The mean temperature of 1891 was 45.87, being 1.74 warmer than the average of the past half century, and 0.67 warmer than 1890. The warmest day was the 16th of June, mean temperature 77.62, and the coldest day the 16th of January, with a mean temperature of 5.13. The highest temperature of the year, 91.9, occurred on the 16th of June. The lowest, 2.0 below zero, on the 16th January. The mean height of the barometer was 29.6385 inches, being 0.0198 in. in excess of the average. The mean humidity of the year was 75, being 2 per cent. less than the average. The extent of sky clouded was on the average of the year six-tenths of the whole. September was the clearest month, and November the most cloudy. During the year there were 60 days completely clouded, being 12 less than the average (1890 79), the greatest number (18) occurring in January, none being registered in July. The resultant direction of the wind was N. 57° W. The mean velocity of the wind, without reference to direction,