

# SCIENCE

FRIDAY, DECEMBER 2, 1887.

A VERY SIGNIFICANT DISCUSSION on the subject of manual training took place at the late annual meeting of the school superintendents of New York State, held at Rochester. A year or two ago such a discussion would not have been possible. In the first place, the superintendents themselves would not have been able to discuss the subject intelligently at that time, nor would it have been regarded as at all a pressing matter. The events of the last twelve months have, however, conspired to bring about the result which made possible the discussion to which we refer. The continued agitation of the subject by those best qualified to discuss it, the increase of the intelligent literature on manual training, and the magnificent display of the results of this training which was made at the meeting of the National Educational Association at Chicago last July, have all had their effect. They have brought light to many minds where darkness was before, and produced a conviction even among the most determined scoffers at the movement. The discussion at Rochester was introduced by Superintendent Cole of Albany, in which city a very gratifying progress has been made toward the introduction of manual training, and whose school board has a most intelligent idea of the whole subject. The superintendents of Newburg, Dunkirk, Ogdensburg, Binghamton, Owego, and Elmira seem to have been to a greater or less extent in favor of manual training. The event of the discussion, however, must have been the remarks of State Superintendent Draper, for it was reserved for him to advocate manual training in the public schools, not because it is disciplinary, but because of its eventual utility. The attitude of the State superintendent only shows to what remarkable extremes the complete misunderstanding of this subject may be carried. We have frequently heard manual training opposed because of its utility, and because it was claimed that it has no disciplinary value; but Mr. Draper is the first person who has discussed the subject in public who has sufficiently misunderstood the whole subject to advocate it on that ground. He is reported as saying that he had no sympathy with the argument advanced, that industrial training should be carried on for its intellectual force. He claimed that the present school system of the State contained all the intellectual force that was needed. We fancy that the mere statement of these two propositions is sufficient comment upon them. It is hardly necessary to undertake to controvert them seriously. It would be interesting to know, however, whether Mr. Draper proposes to carry his theory into practice, and to eliminate from the school course all subjects which have a disciplinary value, and to replace them with those which have a practical utility. If so, the coming generation in New York may not know how to read, write, cipher, draw, and parse, but it certainly will be able to manage a steam-engine, lay transatlantic cables, and drive horse-cars.

THE DANGER TO COMMERCE from derelict vessels on the high seas cannot be too often pointed out, as it is not generally realized how long they are liable to keep afloat and pursue their aimless course, — a constant menace to navigation, and the cause, no doubt, of the loss of many a fine vessel by collision. This is well illustrated by the following instances, taken from the records of the Hydrographic Office, and it should be remembered that no such record can be complete. Long intervals often elapse without any report being made, and the track during this time, assumed as a straight line on the chart, must generally fall short of the actual

distance travelled. The ship 'Ada Iredale' (voyage from Androsan, Scotland, to San Francisco) was burned in the South Pacific through the spontaneous combustion of the coal with which she was laden. She was abandoned Oct. 15, 1876, latitude  $13^{\circ} 30'$  south, longitude  $107^{\circ} 45'$  west, about 1,900 miles east from the Marquesas Islands. The crew of twenty-three men reached the Marquesas group in twenty-five days, with the loss of one man and one of their three boats. The still burning wreck of the vessel drifted slowly to the westward in the south equatorial current, to Tahiti, Society Islands, 2,423 miles distant, and was towed into port by the French cruiser 'Seignelay,' June 9, 1877. She continued to burn till May, 1878, when she was repaired, and as a handsome iron bark, named 'Annie Johnston,' has done good service in the trade with China. The drift was 2,423 miles, and the time nearly eight months. The ship 'Oriflamme' was abandoned, on fire, in June, 1881, latitude  $18^{\circ} 12'$  south, longitude  $92^{\circ} 42'$  west. On Oct. 24 the steamship 'Iron Gate' (voyage from Adelaide, Australia, to Portland, Ore.) passed in latitude  $13^{\circ} 27'$  south, longitude  $125^{\circ} 19'$  west, an iron ship, apparently burned, with no masts standing, and sent a lifeboat alongside, but could see no signs of life. On Feb. 12, 1882, the hull of an iron ship laden with coal and iron drifted ashore on the island of Raroia, one of the Paumotu or Low Archipelago (latitude  $15^{\circ} 55'$  south, longitude  $142^{\circ} 12'$  west). She was visited by some natives, who brought away a small bell upon which was engraved "'Oriflamme,' 1865." She was completely burned out, and in a short time sank in deep water. The drift was 2,840 miles, and the time about eight months. The abandoned schooner 'Twenty-one Friends' was first reported March 24, 1885, about 160 miles off the capes of Chesapeake Bay, latitude  $36^{\circ} 45'$  north, longitude  $72^{\circ} 40'$  west. The Gulf Stream carried her in a direction about east-north-east, to latitude  $51^{\circ} 30'$  north, longitude  $27^{\circ} 40'$  west (2,130 miles in four months and a half). Thence she drifted in an easterly and south-easterly direction towards the northern coast of Spain, and was last reported Dec. 4 of the same year in latitude  $45^{\circ}$  north, longitude  $8^{\circ}$  west (about 130 miles north-north-east from Cape Finisterre). She was reported, in all, twenty-two times, which in itself shows how especially dangerous such a derelict is on the North Atlantic. The drift was 3,525 miles, and the time eight months and ten days.

## A CONSPIRACY OF SILENCE.

THERE is an interesting discussion going on in England at present between Professor Huxley, Professor Bonney, and the Duke of Argyll. The question at issue is whether the influence of a great name has become so great in science as to interfere with free discussion in questions of a purely scientific nature. It seems that some seven or eight years ago Mr. Murray offered an explanation of the origin and structure of coral reefs which controverted some of the opinions expressed by Darwin. It is maintained by one side that this theory of Murray's has not been given free publication and discussion, and that, while it is intrinsically more probable than the older theory of Darwin, it is still held in obscurity by a conspiracy of silence on the part of the leading men of Great Britain. To make clear the present state of the controversy, we publish below the articles published in *Nature* by Professor Bonney and the Duke of Argyll.

[COMMUNICATION FROM PROFESSOR BONNEY.]

THE Duke of Argyll is eminent as a statesman, and has won distinction as a man of science. The mental qualities, however, which lead to success in these capacities are widely different; nay, in the opinion of some, are almost oppugnant. To the man of