such as they called superstitions and the like. It appeared to him that it was eminently desirable, as far as might be, that the speculative notions and inquiries of children should be satisfied, and that their speculative notions should be sound. Suppose that, in walking along the beautiful sands at Portobello, one of the children they were instructing picked up a shell and asked what that was. He supposed no one would have any doubt or difficulty in replying that the shell belonged to a sea animal, that the creature which had made it was dead, and that the shell had been thrown up on the beach. That was what the most unscientific mind could not be ignorant of. So far the child's curiosity was satisfied in a proper manner. But if the child further asked—How did all the sand come there? He was not sure that it might always get so satisfactory an answer to that question; but let them suppose that the person possessed some common sense, and replied that the sand had come by the washing and wearing of the coast, and had been thrown up by the tide. In this way the child got a remote notion of natural operations. But suppose from this object they turned round and looked at that beautiful view, which he was never tired of gazing at—Arthur Seat, Salisbury Crags, Calton Hill, and so forth, and the child being inquisitive asked how this came to be. The question might be answered in three ways—first, Don't ask foolish questions—second, I don't know—and third, God made it. Each of these answers, in the sense in which the child understood the thing, was a distinct harm to that child. The first answer was a mortal harm, because it tended to repress the spirit of inquiry and desire for instruction. The second answer was harmful, because it might give the child to suppose that this was so difficult a question that a person of the intelligence and authority of its teacher might not be expected to be able to answer it; and the third answer was harmful, because it led the child to suppose that Arthur Seat and Salisbury Crags and all the rest of it came into existence by some agency different from that by which the beach was produced and by which the shell was cast upon the beach. A teacher should have such instruction in elementary geology as to be able to say with perfect confidence—he did not mean to explain to the child in technical geological language the exact relation these masses of rock had to the different periods of the world's history—but that he might say that these rocks were records of very singular operations and agencies which once took place there. By active volcanoes, and flows of lava, and action of water, and various natural agencies, these had been sculptured and shaped into their present order. There could be no difficulty in getting ideas of that kind into a child's head, and in that way its knowledge was increased, its justifiable curiosity was satisfied, and, more important than that, the idea of the unity of the operations of nature, and the uniformity as a whole of all such operations, had struck yet another root into the child's mind. He ventured to take it as desirable that science should be taught in schools; and now came the question whether it was possible. What they called possibilities and impossibilities had frequently a relation to the condition of things that existed, ignoring the question whether these conditions could be altered or not. He knew it to be lamentably true that at present the school time of young people was very full—in fact, he thought it was very considerably overburdened. The world at present was going examination mad. He was glad to get that response from practical teachers. They were gradually ceasing to care for learning, the one thing they did care for was to pass examinations. But there was no reason why that should not be altered. There was no divine law which had settled that subjects of education should be what they were at present. If he were to discuss the value of these subjects as compared with science he would enter a very large field—one he had touched already elsewhere, and on which his notions were entirely unchanged. He did not care to discuss it at present, because, having occasion to watch the course of events very carefully during the last thirty years, he had begun to see in what direction the great tidal currents, if he might so say, of modern civilisation were setting. There was a time when he was very anxious about the introduction of scientific training into the schools, but he had ceased to be so. The tide had set thay way, it was flowing as fast as it could flow, and if those who opposed themselves to it did not get out of the way they would be swept out. Granting the advisableness and possibility of getting scientific instruction, they might proceed to consider what, out of the enormous diversity of things that would be included under that head, would do better to be selected, and what method of teaching, or rather what course of teaching, would do better to be adopted. Here he thought they were quite safe in following the guidance of nature and the guidance of history. If they paid any attention to the history of science, they would see that its progress had been perfectly well marked. People had begun by acquiring an exact knowledge of the common phenomena of things which did not require much previous knowledge, and they had gone on making that knowledge more accurate, and gradually building up science out of common observation. They could not draw the boundary, and say where common observation ended and where science began. The one was simply a perfection of the other. He took it that they must follow the course of history in attempting to teach science to the young. They must begin with the common and familiar properties of things, by degrees enlarge upon these as the faculties of the children became more comprehensible, and build upon that foundation the system of knowledge they called science. He did not know that any foundation of science could be laid better than that which might be based upon a glass of water. If it were his business to teach a class of young people, he would be disposed to begin with such a common thing as that, and exemplify by the help of it the nature of water and the contrast of the properties of the fluid with the solid. He thought he would be disposed to give a rough explanation why some things floated in it, and other things sank in it. He would be inclined to show the different states of that water, and compare it with other bodies in their different states. Then he would go on to water in nature, and there would be no difficulty whatever in explaining in an elementary way and sufficient for the purpose the nature of rivers, rain, snow, hail, the difference of ocean as compared with fresh water, and the great mechanical operations of water. He would speak of the power of water as a transferring agent, and the manner in which it carried away material and laid the foundation for new land—in fact, from that foundation, without having recourse to a single technical term or abstract idea, they might build up not only elementary conceptions of physics and chemistry, such as child's mind was prepared to accept, but build up very competent notions of elementary physical geography. As a child advanced in knowledge of arithmetic and powers of reasoning, then they might make the knowledge a little more exact, and extend it to a wider area, but he would accompany that with demonstrations of the facts so far as practicable, making the student observe the phenomena of nature for himself. In that way not only would he gain a large amount of instruction, but there would be cultivated the power of observation and reasoning, and, what was more impor-