

those hidden powers of nature which it has pleased our Maker to subject to the control of man's intelligence and will—the winds of heaven, the water of our rivers, the forces stored in our coal-fields—multiplying a thousandfold the power of human muscles, and giving leisure therefore for human thought.

IMPROVEMENTS IN MACHINERY BENEFICIAL TO MASTER AND WORKMAN.

I know it is sometimes said that improvements in machinery have benefited the capitalist, and not the operative. Is that true? Do you think it true? I wish I could appeal to those who are personally concerned. There cannot be a more unfavourable moment for comparison than the present; but even now, is there an operative in Lancashire who would wish to go back fifty years, when there was far less machinery than now, or a hundred years, when there was no machinery at all? Such a question answers itself. There may be temporary loss and suffering in every change, for our society is old, and its arrangements are necessarily complicated; but the history of science is the history of improvement—of conquests of man over nature won and never lost again; of victories which benefit all and injure none—of the produce of all the earth applied to the use of all, intelligence substituted for brute force, skill of toil, of life lengthened, disease rendered less severe, leisure more abundant, knowledge more ample, and man better fitted for the higher destinies which I believe it is the purpose of Providence that he should fulfil. Gentlemen, if in any, even in the humblest degree, our school assists in the accomplishment of this great purpose, it will have fully answered the ends of its promoters.—*English Journal of Education.*

III.—THE RIGHT HON. LORD BROUGHAM.

REVIEW OF BRITISH EDUCATIONAL PROGRESS DURING 1863.

The venerable Lord Brougham in his inaugural address as President of the Association for the Promotion of Social Science, thus reviews the British educational topics and progress of 1863:

The progress made in the department of education during the last year has been very solid, though less showy, than that recorded at our former meetings. The half-school system of training, physical and mental, has been adopted in the army by the Education Council. The Commission of Inquiry into the employment of children in various manufactories have reported in favour of the half-school plan. The attention of all engaged in the management of schools to the physical as well as mental training of children has lately been recommended with great power in a most able, though unpretending, tract by a well-tryed teacher, Mr. Wilmot, of Cheltenham—a tract full of important matter upon education, the result of the reverend author's experience, and judiciously expounded. Mr. Chadwick has fully examined the plans of instruction pursued in various seminaries, and the result of his inquiries has been in many important particulars favourable to the schools and teaching in Scotland. The Educational Institute of Scotland, at its last yearly meeting, received an address of its president, Mr. M'Master, containing important suggestions on the training of candidates for examination. But the objection to all superintendence of Boards or other bodies authorized by Government on the ground of expense that might be saved is more than doubtful, and deserves full inquiry in our Educational Department, as does the great controversy between the Privy Council and our worthy colleagues the Lord Advocate and Mr. Black upon some points, especially the support refused to Ragged Schools. It would be wrong to pass over the fact of the Scotch system having for more than a century anticipated the important step of late taken in England, of granting substantial advantages to competitive examination. Reference is here made to the general course of advancement by bursaries in the schools, and by exhibitions in the Universities, of which there are only a very few instances out of Scotland. These benefits extend to all ranks. A distinguished professor in one University had in early years worked at his father's loom. A learned friend of mine, who became judge in the Supreme Court, owed his education at Oxford to an exhibition from Glasgow College. He was a baronet's son; but the son of a peasant on his estate might have gained the same place at Oxford, and then, instead of being called to the Bar, would probably have gone into the Church. The mixture of ranks in schools, male and female, has important advantages, both social and political. It is impossible to avoid remarking the wholly erroneous influence against education drawn by many who have observed with horror the dreadful excesses of the multitude in what is believed to be the country in the world best educated, the American States. It must, however, be remarked, that the Americans themselves complain of the defective kind of education afforded to the people. The report of the City Superintendent of Schools at New York, made only three years ago, dwells upon the "large masses of ignorance" (these are his words) "combined with destitution and vagabondism which are to be found in all our cities and towns," and he calls for a compulsory education of the multitude.

The effects of education in this island have appeared most strikingly of late years in many respects; but perhaps sufficient atten-

tion has not been given to the extraordinary diffusion of useful knowledge, as well as harmless amusement, in cheap publications. The subject was dwelt upon at our former meetings, particularly at Liverpool, and the progress has since been very great. In the retrospect of former years it would not be easy to enumerate all the benefits bestowed on our countrymen, wherever the language is spoken, by the admirable publications of Messrs. Chambers. They have been followed by others in the preparation of works inculcating the purest moral, political, and religious principles, and explaining the truths of all sciences. The circulation of cheap works is now enormous, and the low price marvellous. It may suffice to mention such as the half-crown volumes of Messrs. Houlston and Wright, sold to the extent of three-quarters of a million; the *British Workman*, by Mr. Smithies, at the penny, containing admirable prints. So do the various publications of our worthy colleague Mr. Cassell. Mr. Cassell and his partners may well say that they have converted every poor man's house into a school of moral and religious instruction. These are great things, on which the friends of social science may rejoice as having been done of late years for the advantage, moral as well as material, of the people, and especially of the middle and working classes. Above 60 years ago Robert Owen and his partners in the great spinning mills of New Lanark made the workpeople partakers of their profits by educating their children and giving them such instruction as not only fitted them for the work at the mills, but for any other employment. Indeed, he was the founder of infant schools as far as this island is concerned, the only question being whether Oberlin, in Alsace, had not founded them a few years before. The manufacturers of Lowell, in America, adopted the New Lanark plan in the whole extent of their great concerns, and the good feelings which prevailed between employers and workpeople distinguished the inhabitants of Lowell almost as completely as those of New Lanark, while the education of all classes was as entirely successful.

IV.—THE LATE MOST REV. DR. WHATELY.

DUTY OF COOPERATION FOR THE PROMOTION OF EDUCATION.

At the last annual visitation of his United Dioceses, the late Archbishop of Dublin made the following remarks respecting the National System of Education, of which his Grace has been a consistent advocate for twenty years:—"It is not, however, too late, even now, to effect something in the cause of popular education, though far less than was apparently within our reach several years ago. We may yet be able, as it were, to obtain one Sibylline book at the price which three would have cost some time back, and when we cannot do all that we could wish, we should yet strive to do all that is possible. The system, accordingly, pursued at Trinity College, Dublin, is, as is well known, to impart secular instruction to its members, of whatever persuasion; and religious instruction to all who will accept it, but to force it on none; and it seems but fair to proceed on the same principle in our dealings with our poorer countrymen. To force people to receive true religious instruction is what we have no power to accomplish, and no right to attempt; but it is something gained if the mass of the people are enabled to read a copy of the Bible when put into their hands; and where but very few have this power, the circulation of useful books is, of course, of small avail. Something again is gained, if the children are taught to read from books at least not positively pernicious, and something more is also gained by the diffusion of useful secular instruction. It is, indeed, a truth often elaborately proved, and ostentatiously proclaimed, though it has never been disputed, that mere secular knowledge and mere intellectual culture do not constitute a complete and sufficient education, any more than the ploughing and manuring of a field are sufficient culture without sowing it with good seed, but these prepare the land for the reception of the seed. And even so it is with education; gross ignorance and want of exercise of the rational powers leave the mind as it were untilld, unfitted for the reception of truth, and prepared to adopt the most absurd superstitions."

V.—THE EDUCATIONAL SECTION OF THE SOCIAL SCIENCE ASSOCIATION AT EDINBURGH.

Numerous topics of direct or indirect interests to the Scholastic Profession were discussed at the Meeting of this Association, which took place during the past month at Edinburgh. Had our space permitted, we should gladly have given our readers a fuller report of the proceedings of the Educational Section, but we are compelled to content ourselves with briefly noticing the subjects and bearing of some of the more important papers and discussions:—

The business of the Department was opened by the reading of papers on University Education. The Rev. C. R. Badenoch proposed the opening of classes in Arts in the morning and evening, at such hours as would enable young men in business to attend as at the University of London; and thus in due time to qualify themselves for the degree of Master of Arts. In a paper by Dr. George