

at this time in the earnestness with which he applied himself to arithmetic. Dissatisfied with the book of arithmetic which was used in the school, he set about composing one for his own improvement, taking, it is said, Mair's for the foundation. Not only his leisure hours were devoted to this object, but much nightly labour also—so early did he acquire that uncomfortable and injurious habit; and, young as he then was, he completed the task so much to his own satisfaction, that when, about ten years afterwards, most of his papers were lost in a shipwreck, he particularly regretted the loss of this.

So early as 1769, Andrew Bell matriculated at the United College. He was the youngest pupil in the mathematical class, and obtained the prize in that class when still young enough to be called Little Andrew; and, subsequently, "several public and honourable marks of distinguished merit and proficiency." During these years, he held the Glendie bursary as next-of-kin; his mother, (Margaret Robertson,) being descended from the Dean of Cashel of that name, who founded, by his will, a bursary at St. Salvator's, for the benefit of his descendants. The resources derived from this privilege were, however, scanty, and young Bell was compelled to eke them out by teaching. He diligently applied himself to mathematics and natural philosophy,—having for his instructor in the latter, Dr. Wilkie, the author of the "Epigoniad."

On obtaining twenty-one, Andrew Bell resolved on seeking his fortune in the colonies, and having received some offers from Virginia, embarked for America, first providing himself with honourable testimonials. It was in the year 1774 that he sailed from Glasgow. For the next five years nothing is known. In 1779 he was engaged as private tutor at an annual salary of £200, in the family of Mr. Carter Braxton, a wealthy merchant of West Point, on the Hudson River. Two years later he accompanied the sons of this gentleman to Europe, and devoted himself to their education; and so prudent had he been, that he was now in possession of, or held securities worth not less than 8 or £900, though, unfortunately, few of these securities were realized. He had much trouble with the young men, but fought through all difficulties, until, compelled by a combination of circumstances, he, in 1784, consented to their return. Meantime, he had himself succeeded in getting ordination in the Church of England; and soon after obtained an appointment as preacher to the Episcopal chapel at Leith, with a salary of £70 a year; but this he left in six months, to undertake the education of Lord Conyngham's second son, an engagement, however, in which he was disappointed; and therefore returned to his flock. Ultimately his destination was India. Having taken farewell, by letter, of his Leith friends, and obtained a doctor's degree, he sailed for Madras, and arrived there on the 2nd of June, 1787; and on the 10th of August was appointed chaplain to the 4th regiment, stationed at Aroot. He attempted to add to his means by the delivery of philosophical lectures, in which he was only moderately successful; and on the day on which he concluded his second course, sailed with his apparatus for Bengal and Calcutta, where he remained two months, and then returned to Madras to receive a shower of appointments.

We now approach the grand mission of his life. When the Madras Government desired Captain Dempster to leave Dr. Bell there, instead of carrying him on to Bengal, according to his original destination, it was in conformity to an application from the committee then employed in establishing a Military Male Orphan Asylum in that presidency. The committee made this application, because they looked on him as a person eminently qualified to superintend the education of children. The opinion so justly formed at this time of his peculiar talents, placed him in the way of preferment, and enabled him to lay the foundation of his fortune; and the office to which he was in consequence appointed, called forth those talents in the manner which has signalized his name. Dr. Bell offered his services without salary. The successive appeals to the public were successful, and application was from time to time forwarded to the Court of Directors to increase their funds. Though the Company at first refused, they had help from other quarters, and the affair went on prosperously, so that they were soon able to provide for 200 boys. Rules were of course appointed; an acting president and select committee were nominated; an annual examination was had; and while Dr. Bell's solicitude increased, the establishment grew into reputation and influence.

It remains to trace the origin and growth of the system of edu-

cation, which originated at the Madras asylum, and has since spread its branches over divers lands. The following fact is curious:—

Dr. Bell was dissatisfied with the want of discipline, and the imperfect instruction in every part of the school; but more particularly with the slow progress of the younger boys, and the unreasonable length of time consumed in teaching them their letters. They were never able to proceed without the constant aid of an usher, and, with that aid, months were wasted before the difficulties of the alphabet were got over. Dr. Bell's temper led him to do all things quickly, and his habits of mind to do them thoroughly, and leave nothing incomplete. He tells us, that from the beginning he looked upon perfect instruction as the main duty of the office with which he had charged himself; yet he was foiled for some time in all the means that he devised for attaining it. Many attempts he made to correct the evil in its earliest stage, and in all he met with more or less opposition from the master or ushers. Every alteration which he proposed, they considered as implying some reflection on their own capacity or diligence; in proportion as he interfered, they thought themselves disparaged, and were not less displeased than surprised, that instead of holding the office of superintendent as a sinecure, his intention was to devote himself earnestly to the concerns of the asylum, and more especially to the school department. Things were in this state, when, happening on one of his morning rides to pass by a Malabar school, he observed the children seated on the ground, and writing with their fingers in sand, which had for that purpose been strewn before them. He hastened home, repeating to himself as he went, "Ευρηκα," "I have discovered it;" and gave immediate orders to the usher of the lowest classes to teach the alphabet in the same manner, with this difference only from the Malabar mode, that the sand was strewn upon a board. These orders were either disregarded, or so carelessly executed, as if they were thought not worth regarding; and after frequent admonitions, and repeated trials made without either expectation or wish of succeeding, the usher at last declared it was impossible to teach the boys in that way. If he had acted on this occasion in good will, and with merely common ability, Dr. Bell might have cried *Ευρηκα* a second time. But he was not a man to be turned from his purpose by the obstinacy of others, nor to be baffled in it by their incapacity; baffled, however, he was now sensible that he must be, if he depended for the execution of his plans upon the will and ability of those over whose minds he had no command. He bethought himself of employing a boy, on whose obedience, disposition, and cleverness, he could rely, and giving him charge of the alphabet class. The lad's name was John Frisken. He was the son of a private soldier; had learned his letters in the asylum, and was then about eight years old. Dr. Bell laid the strongest injunctions upon him to follow his instructions, saying, he should look to him for the success of the simple and easy method which was to be pursued, and hold him responsible for it. What the usher had pronounced to be impossible, this lad succeeded in effecting without any difficulty. The alphabet was now as much better taught, as till then it had been worse, than any other part of the boys' studies; and Frisken, in consequence, was appointed permanent teacher of that class. Though Dr. Bell did not immediately perceive the whole importance of this successful experiment, he proceeded in the course into which he had been, as it were, compelled.—What Frisken had accomplished with the alphabet class, might, in like manner, be done with those next in order, by boys selected, as he had been, for their aptitude to learn and to teach. Accordingly, he appointed boys as assistant teachers to some of the lower classes, giving, however, Frisken the charge of superintending both the assistants and their classes, because of his experience, and the readiness with which he apprehended and executed whatever was required from him. This talent, indeed, the lad possessed in such perfection, that Dr. Bell did not hesitate to throw upon him the entire responsibility of this part of the school. The same improvement was now manifested in these classes as had taken place in teaching the alphabet. This he attributed to the diligence and fidelity with which his little friends, as he used to call them, performed his orders. To them a smile of approbation was no mean reward, and a look of displeasure a sufficient punishment. Even in this stage he felt confident that nothing more was wanting to bring the school into such a state as he had always proposed to himself, than to carry through the whole of the plan upon which he was now proceeding. And this, accordingly, was done. The experiment which from necessity had been tried at first with one