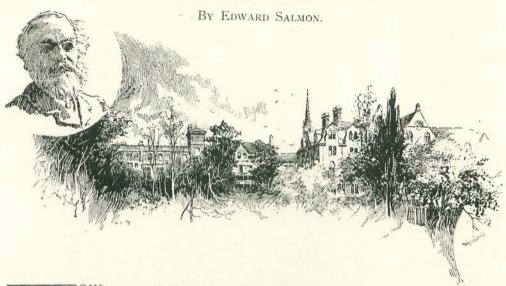
## How the Blind are Educated.





OW many of the thousands who go every year to the Crystal Palace remember, or even know, that hard by is an institution which should claim the support of all who

have hearts to feel for the afflictions of their fellows? Perhaps if some of us, on pleasure bent, knew as much of the working of the Royal Normal College for the Blind as we do of the neighbouring giant palace of glass, we should appreciate the blessing of sight at a truer value. It is to be feared that few who go through life noting its facts, observing the beauties of Nature, regarding the faces of those they love, and transacting their private business without help from other people's eyes, give the thought they ought to the precious nature of the vision they boast, however limited it may be. Still fewer are they who take the trouble to inquire what is being done for those who share not the glories of God's Yet to be plunged in a lifelong darkness; to be doomed, whilst breath lasts, to a constant round of blind man's buff; to be able to walk, but not to see where one is going; to be able to talk, but not to know, by the expression of another's face, whether one's remarks are welcomed or not; to be able to listen, and not to watch the speakerin a word, to be robbed of half life's joys, is surely a fate which should command sympathy, prompt, practical, and universal.

The writer of this paper has, during the last twelve or thirteen years, been more or less intimately associated with the blind. Nothing ever strikes him as more extraordinary than the genuine happiness of most of them. What ought, it would What ought, it would seem, to have proved a crushing blow, has apparently had little or no effect on the brightness of their lives. Nor does the infirmity prove any great bar to their independence. Think of, among many others, Milton undertaking his "Paradise Lost," his history of England, and his Latin dictionary after he became blind; of Philip Bourke Marston-whose sorrows were not primarily due to his affliction-mastering the typewriter, so that he could communicate with his friends and produce his poems without the aid of an amanuensis; of Henry Fawcett, who refused to allow the accident which cost him his sight, to change his life, and who not only kept up his riding and his fishing, but won his way to Cabinet rank. To men like Mr. Fawcett, no doubt the possession of a life's partner means much, and indeed ample material exists for an interesting article on the wives of blind men, who have been to them what Francis Huber's was to him-" A good pair of eyes, a right hand in all his troubles, and a light for his darkest days."

We are, however, not now concerned with blind men but with blind boys and girls, and with those especially who are receiving their education at the Royal Normal College at Upper Norwood. This institution owes its existence to two men, whose efforts on behalf of their fellowsufferers cannot be too gratefully acknowledged—to the late Dr. Armitage, and to Dr. Campbell, the president, whose portrait, together with a picture of the college, is shown at the head of this paper. The meeting of these gentlemen in London sometwenty years ago revolutionised the whole system of education for the sightless. Dr. Armitage spared no trouble, no money, no time to advance the interests of the blind, and it was a fortunate circumstance which threw one so ready to place his energy and his

wealth at their disposal, in contact with another who, like Dr. Campbell, wanted only such support to enable him to enter on the experiment of helping the blind to take their part in life's battle with the confidence and the same chances of success and independence as the seeing. How completely they worked together is shown by a little anecdote which Dr. Campbell is fond of relating. They had been to a conference at York, and, as was their custom, travelled third-class. Some other congressmen, with firstclass tickets, were considerably astonished, and exclaimed:-

"What, are you going third-class?"
Dr. Armitage's reply was characteristic of the practical and cheery kindliness of the

"Campbell and I have too many children to be able to afford to travel first," he said. "Have you a large family, doctor?"

asked one of his friends in surprise.
"Yes," he answered, "our English family

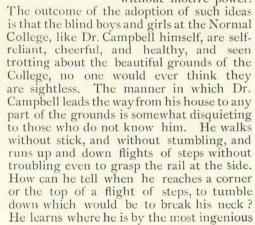
alone numbers about 32,000, and they have relatives in all parts of the world."

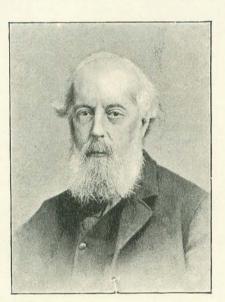
The moral was plain. The few shillings Dr. Armitage and his colleague were saving, were destined to assist the work of amelioration, and the gentlemen paid them a chivalrous and graceful compliment by exchanging their tickets and travelling in

the same compartment with the two benefactors and servants of blind humanity.

To such self-denying spirits as these is England indebted for the institution which forms the subject of this paper. The *régime* adopted by Dr. Campbell—who by the way it should be said is an American—was flat rebellion against the systems previously in vogue, and still maintained by other bodies. Dr. Campbell's belief in physical training amounts to a religion. He does everything with reference to it and it alone. A quarter of a century ago he himself was to have died of consumption, but what did he do? Quietly sit down and wait for the end to come? No; blind as he was, he took the boat

to Europe and climbed Mont Blanc. There are a good many thousands in the world who would like to have the health he enjoys to-day. What physical exercise has done for him, he believes it will invariably do for his pupils. Determination to conquer obstacles is the only thing which will make a two-legged creature a man or woman, he says; determination is only possible to a vigorous and healthy mind; a vigorous and healthy mind can only come of a vigorous and healthy body; and a man who has not been trained physically, is, to Dr. Campbell, an engine without motive power.





THE LATE DR. ARMITAGE.

contrivance imaginable. Wherever there is a turning, or an obstacle, or a step which might prove a source of danger or embarrassment, the asphalted pathway is slightly raised. It is high enough to prevent one's stepping over it without noticing it; it is too low to cause one to catch one's toe and trip up. Hence, it is only necessary for the blind promenader to keep his or her wits moderately alive to be able to go wherever he or she pleases in perfect ease and safety.

The Armitage Gymnasium, which we visit first, is declared by an expert to be one of the most complete he has ever seen. Lads of all ages are going through every form of exercise; here two or three are vaulting the horse with a neatness incredible almost to those who have not seen it; there another is working his way along the parallel bars; here one stretches himself at length on the long incline, a machine used for pulling up one's own weight, for strengthening the muscles and broadening

the chest; there another turns a nautical wheel or is doing a mile or two on a home trainer. This last is

siasm among the lads than any other athletic or gymnastic feat. Ordinary home trainers, of course, have a dial which indicates the distance ridden. In order that his boys, even in such a matter, should be made as independent of other people's eyes, as it is the object of the school to make them in all details of life, Dr. Campbell has had fitted to the machine a bell which strikes at the completion of every quarter of

a mile. How this broad-shouldered, stronglimbed lad astride it works away with might and main, bent, apparently, on making a record; how keenly he enjoys the effort, and how utterly and happily oblivious he seems of the fact that he is not as the majority of

his fellows are!

From the boys' gymnasium let us make our way to the girls', where roller-skating is going on. It is an apartment some 24 feet long by some 18 wide. Here are a dozen or more girls moving on the tiny wheels rapidly round and round. They touch neither the wall nor the seats by the wall, whilst the immunity from collisions induces one to exclaim: "Surely here we are not in the presence of the totally blind, whatever may have been the case in the gymnasium." We are, indeed. But how is it these sightless young ladies move so rapidly, and yet with a safety and precision which might make their seeing sisters envious of their skill? Solely by instinct When roller-skating was and practice. introduced, Dr. Campbell electric bells ringing on the walls, but he has now accustomed his pupils to do without these disturbing guides, and for all the spectator can see they find no sort of inconvenience from their reliance on their own senses. Here they go two



perfect care, and are capable of going through the most involved manœuvres. Those who observe them skating in lines, parting, wheeling, crossing and recrossing each other's paths, may imagine that this sort of performance is only possible in their own rink, but last year I had a privileged opportunity, at

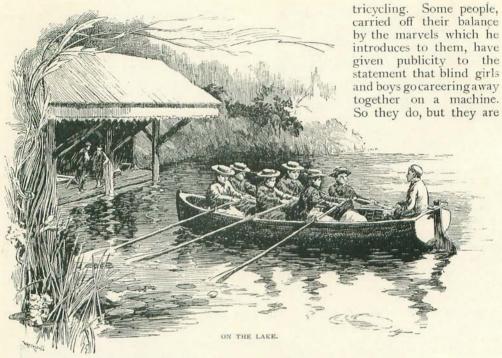
see.

on the skates begin and

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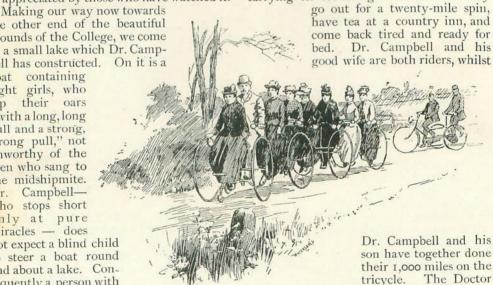
St. James's Hall, of seeing that they are as much under control in a strange place and in the presence of a considerable public as in their own grounds. Moving solely by word of command, they go within a few inches of obstacles in entire safety. It is a performance, the wonder of which can only be appreciated by those who have watched it.

the other end of the beautiful grounds of the College, we come to a small lake which Dr. Campbell has constructed. On it is a boat containing eight girls, who dip their oars "with a long, long pull and a strong, strong pull," not unworthy of the men who sang to the midshipmite. Dr. Campbell who stops short only at pure miracles - does

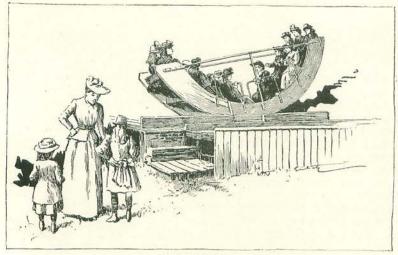
not expect a blind child to steer a boat round and about a lake. Consequently a person with eyes occupies the stern So, too, with invariably steered by someone who can see. To have such a person with every blind rider, however, would mean the employment of an immense number of people. An eight-in-hand is, therefore, devised, and this machine may often be seen on the country roads of England, carrying its seven sightless riders. They

gives an amusing ac-

count of a tour in



CYCLING



THE ROCKING-BOAT.

Norway. His tricycle was probably among the first seen by the Norwegian peasant, and he relates how one man with a pony-cart on a country road followed them for hours, and when they put up at an inn and wanted water, how he ran off to get some from the mountain spring as joyously as though the tricyclists had been creatures of a celestial world, and how, when they were having their feed at the inn, this rapt admirer rang the bell of the machine, to the delight of a crowd of enthusiastic onlookers.

Other forms of outdoor amusement and recreation to be seen at the College are swinging, running, skittles, and the rocking-

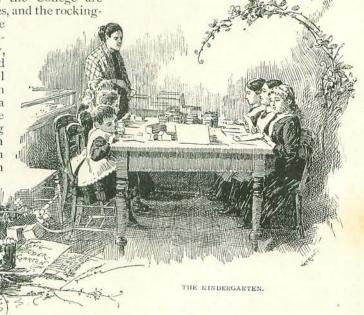
boat. Ingenuity is the characteristic of everything we examine. How, for instance, can the blind play skittles, you may well ask? Thus: The men are placed at the end of a long platform, and are prevented from rolling away by a cord which passes through a hole in the board and holds them

where they fall. The ball having rolled to the end of the platform, drops over on to a slope, and returns to the players.

So having made a shot, they can find out how many men have been bowled over, and there is never any risk of losing the ball. Whilst several boys amuse themselves in this way, a dozen girls get into the rockingboat close by, and they swing themselves backwards and forwards sing softly and melodiously to the roll of the boat.

Even now we have not exhausted the possibilities of enjoyment which the grounds afford the pupils of the College. During the summer time many of the girls have their little plot of flower garden. They take the greatest interest in the cultivation of plants which they cannot see, and to place in their bosoms a flower which they have grown themselves, is one of the delights of their lives.

So much for what Dr. Campbell properly regards as the generation of the motive



power of his young people's lives. The steam being ready, along what lines does he make the human engine travel? We start with the Kindergarten class. dozen little girls are sitting at a table interweaving slit paper which presently is to decorate baskets and other things. One is a mite recently from Port Elizabeth, South Africa. She has mastered the theory of her work, and her little fingers only need practice to make them as efficient as those of her older companions. In this room is a glass case containing some clay models of pea-pods, buttercups, and other things that grow-which one would imagine they could never readily grasp in detail-every one executed by the pupils of the College. Even a small dog

has not proved beyond the powers of these magic modellers. From the Kindergarten to the Geography class. Embossed maps lie on the table, and the pupils put their fingers on The Wash in England, or on the Andes, or on Tasmania, as quickly almost as one's eyes can travel from point to point. They answer questions as to what grows

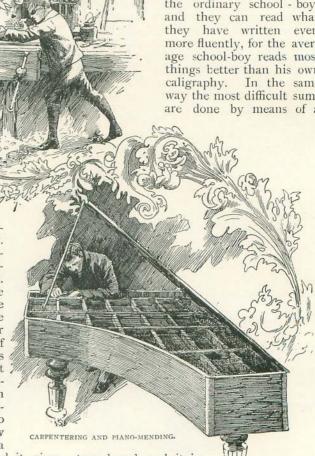
in a certain place, or who discovered it, accurately and readily. Other classes are learning geometry, the rudiments of agriculture, French and arithmetic. The reading class is one of the most interesting. Books in the Braille system lie before the pupils, who are running their fingers deftly over the mass of dots, and delivering passages from "Hamlet," with sufficient hesitation to prove the genuineness of the reading, and yet with an intelligence not always displayed by those with eyes who read Shakespeare aloud. Now and again the pupil comes to a

word such as "Fortinbras," and it gives type board, and it is her just a moment's pause, creating an im-

pression on one's mind of difficulties overcome, which only naïveté or the highest art could convey. Some idea of the extraordinary pains necessary to teach the Braille system—and it is unquestionably the best invented-may be gleaned from the fact that it has to be written backwards. For instance, the paper is placed between two strips of brass, the under strip being impressed with a succession of holes, and the upper divided into small squares through which the stylus or punch is passed.

As the writing has to be done from the back of the paper, it is easy to understand that the reading runs in the opposite direction - a circumstance adding im-

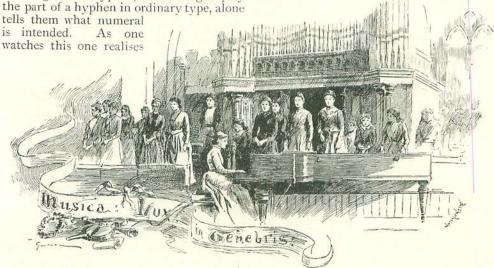
mensely to the labour of the learner. All sorts of contractions have of course been adopted, and the blind write from dictation certainly as fluently as the ordinary school - boy, and they can read what they have written even more fluently, for the average school-boy reads most things better than his own caligraphy. In the same way the most difficult sums are done by means of a



simply astounding

how rapidly the pupils write down figures delivered as units and read them off as billions, millions, or hundreds of thousands. The angle of a cypher, which might play the part of a hyphen in ordinary type, alone

organ recital and some glees fittingly bring this succession of wonders to a close so far as the visit to the College is concerned, but



the force of Mr. W. W. Fenn's words:—
"Give the blind man in his fingers an
equivalent for his eyes, and the darkness
in which he lives is dispelled." On this
condition the Normal School at Norwood

is a veritable creator of light.

Let us now take a glance at the workshop, where the boys are using plane and chisel, pointing and dovetailing pieces of wood which not only answer ends in themselves, but the treatment of which serves to make the blind useful with their hands. They seldom cut their fingers, extra care no doubt giving greater immunity. Another workshop near at hand is occupied by young men perfecting themselves in all the branches of pianoforte making and tuning. They learn to do everything, from tightening a wire to putting a new one in, and hundreds of testimonials from those who have employed blind tuners speak for the thoroughness with which they do their work. To enable the learners to familiarise themselves with the parts of an instrument, Messrs. Broadwood made specially for them a model which can be taken to pieces and put together again till they know all about it. The interest which Messrs. Broadwood have shown in the College has assumed very practical shape, and it is noteworthy that among the employés of the firm is an old pupil of Dr. Campbell's.

Music of course is the principal means of gaining a livelihood with the blind. An

really only lands us on the verge of the great question of life after the College training is ended. Throughout the world blind musicians, who owe their education and their skill to Dr. Campbell and his wife, are earning their own livelihoods. In 1886 the aggregate earnings of ex-pupils amounted to nearly £10,000. Last year the sum was £15,000. This great result, however, has been accomplished in the teeth of a mountain of prejudice, ignorance, and I must add injustice, to surmount which has cost Dr. Campbell a mightier effort than the ascent of Mont Blanc. All he asks on behalf of his pupils is a fair field: he wants no favour. Two instances of the difficulty of securing even this may be given. An organist was wanted for a large church; Dr. Campbell was anxious that one of his pupils should compete. From the first the authorities declared it was impossible a blind man could hold the position, and to make it impossible the candidates were to be called on to play any two tunes from the hymnbook which any two people in the congregation might select. Here was a test which it was believed would defeat the blind man's chances. It reached Dr. Campbell's ears, and he forthwith obtained a list of the 250 tunes which had been most sung in that particular church during the last few years, set his man to translate their score into his own Braille, and to master them by heart. The day of trial came, and the first

hymn called for was played by the blind candidate not merely as it was written, but with variations. The authorities marvelled, but said it was chance. The second was called, and still the blind man was ready. "It's a miracle!" was the exclamation, but the blind man won, and holds to-day, the position competed for against not only the world but the world's uncharitableness.

A second instance is equally eloquent of the completeness with which these sightless lads are equipped by Dr. Campbell to battle with the world. An organist and choirmaster was wanted, and the idea of putting a blind man up for the post was scouted as ludicrous. In the organ part of the business, the blind candidate came out indisputably first.

"But," said to him the gentleman with whom the appointment rested, "you could

not possibly teach our boys."

"İs it fair to say I could not till you have have given me an opportunity of showing

whether I could or not?"

The only way to dispose of the claims of this sightless irrepressible was to have the boys in. He immediately put them through their exercises, and handled them in a way which argued greater knowledge of what is wanted than most seeing masters display. Some even of the rival candidates declared the blind man to be the best among them, and he secured the appointment, to the advantage of all concerned.

In the old days the poor blind were educated as beggars, and the more intelligent of the indigent blind were appropriately nick-

named by Theodore Hook the indignant blind. Dr. Campbell does not mind where his pupils come Whatever from. they may be when they are admitted to the College, there is only one thing to be said of nearly every one of those who leave it—they are ladies and gentlemen in education and deportment, equally able to earn their

own living and to grace the society in which they may find themselves. Such a result has been accomplished by terribly hard work. Like Milton, Dr. Campbell "steers right onward." He is a sort of Napier, and only expects others to do what he does not shrink from himself. He is the most kindly of martinets. Blindness with him is no reason for non-punctuality, and if a boy is late in getting out of bed, he orders him to retire at night half an hour earlier, so that he may have the sleep he seems to need. Such punishment is, we may be sure, felt all the more keenly, because the doctor himself sets the example of what is right. For instance, every boy is supposed to be ready for a swim in the splendid bath of the College at a certain hour, and he cannot excuse himself, even to his own mind, for being absent or late on the score that the Doctor enforces rules he does not carry out, for every morning Dr. Campbell takes his plunge with his scholars. He is determined that in everything possible his boys and girls shall go forth into the world unsurpassed by their more fortunate brothers and sisters. His efforts to rob the blind of any sense of dependence on others, which they find so humiliating-efforts which Dr. Armitage fostered with such lavish generosity-and to make them useful citizens instead of the helpless recipients of local doles, are deserving of a support which has hardly been accorded to them. The Royal Normal College for the Blind is a wondrous illustration of the adage that even the darkest cloud has its silver lining. Here, at least,

> we find the drawbacks consequent on one of the most appalling of human infirmities reduced to a minimum. God alone can restore the light of day to the brain from which it is now excluded, but that He has delegated to man the power to do almost all else, let the College we have now described so fully bear witness.

