

M. BROWN-SEQUARD experimented upon the stiffened arm of an executed criminal, by injecting warm blood into it; the muscles regained their contractility and their nerves their irritability. As the cutting off the blood is paralysis of nerve element, so a deficiency of blood is a cause of degeneration of nerve element. Fellows' Compound Syrup of Hypophosphites will cause the formation of healthy blood, and consequently increase nervous power, induce vital activity in debilitated constitutions, and tone all the organs dependent for health on muscular or nervous strength.

Correspondence.

For the Christian Messenger.

FROM HON. DR. PARKER.

13 SALISBURY PLACE, NEWINGTON, EDINBURGH, JAN., 16th, 1872.

My Dear Editor,—

THE UNIVERSITY OF EDINBURGH.

This fine old school founded, in 1582, is still pursuing its course; extending its bounds; and more than retaining its former position as the head quarters or centre for the higher education in Scotland.

This year, under 36 Professors, between 1700 and 1800 matriculated students are receiving instruction in the departments of Literature and Philosophy, Theology, Law and Medicine—and I am informed by the officials in the Secretary's office, that when the matriculation for the Summer Session is closed, this year's roll will probably reach 1850.

The number of Medical students is larger than for many years past—over 700—a very large majority of these young men belong to the British Isles, but all quarters of the globe are well represented. Under the first division (Literature and Philosophy) there are 14 Professors teaching the following subjects:—I. Latin. II. Greek. III. Mathematics. IV. Logic and Metaphysics. V. Moral Philosophy. VI. Natural Philosophy. VII. Rhetoric and English Literature. VIII. Practical Astronomy. IX. Agriculture. X. Sanskrit and Comparative Philology. XI. Theory of Music. XII. Engineering and Mechanical drawing. XIII. Geology and Mineralogy. XIV. Commercial and Political Economy and Mercantile law.

I have enumerated the subjects in this division, some of which would hardly be recognised elsewhere, as belonging either to Literature or Philosophy—to give you an idea of the ground covered by it. Theology has its four Professors; Law six, including the Professor of Medical Jurisprudence, who is also a Teacher in the Medical department—and Medicine twelve (exclusive of the chair of Medical Jurisprudence), two of these 36 Chairs have been quite recently founded and liberally endowed. That of Geology and Mineralogy by the late Sir Rhoderick Murchison, and the chair of Commercial and Political Economy and Mercantile Law, by the Merchants' Company of Edinburgh, who, as you will have learned from an earlier part of this letter, are by their liberality, and the great interest they are taking in the subject of education, setting a bright and admirable example to the Mercantile profession of the world.

IN THE MEDICAL DEPARTMENT

but one of the Professors still fills a chair in the University who occupied that position when I graduated in 1845, and he, Sir Robert Christian, Bart, is about to be entertained at a great banquet to be given by the profession of Edinburgh, and the whole country, on the occasion of the 50th Anniversary of his appointment to the position. New men sit in the places of the great and honoured dead, but they are labourers admirably equipped for the work and certainly the thoroughness of the course of instruction imparted, and the facilities afforded for acquiring both a practical and theoretical knowledge of the profession can hardly, I think, be surpassed. The largest Infirmary contains between six and seven hundred beds, divided into Surgical and Medical departments in which are wards set apart for the treatment of special diseases, as of the eye, &c., &c. Connected with this Infirmary and under the same management is a large Convalescent Hospital, built, and to some extent endowed by the bequest of a single individual, situated three miles from the city in a beautiful and healthy locality, to which patients are sent when it is found they require change of air and scene to finally restore them to health.

The Infirmary for sick children is very pleasantly situated and well managed, and receives to its wards a class of poor children who could not be treated successfully at their own homes; but here obtain the same professional care, generous diet, kind attention and nursing that they would were they the offspring of wealthy parents dwelling in luxurious homes.

This institution affords an admirable opportunity for students to practically study the diseases of children. One of the neatest and best constructed Infirmarys I have seen, is called after its founder, Chalmers, a plumber, who died some years since leaving a sum of money to erect and endow a small hospital for the treatment, I believe, of the more respectable poor.—I mention it, as rather an unusual circumstance attracted my attention when I visited it:—The Physician who accompanied me to the building, one of the staff—treated, I observed, one of the nurses as if she were socially his equal. I was struck with her appearance and address, and shortly after learned from my friend that she was the daughter of a Lord, who had left all the comforts of a rich and elegant home to take a nurse's position in a male ward of this institution—a very unusual thing in this country, but I have seen wealthy and accomplished ladies connected with a kind of Protestant Episcopal Sisterhood, performing the same duty in St. Luke's Hospital, New York.

The managers of the present Royal Infirmary, have purchased a large piece of ground in a very eligible locality, and are about to commence at once the construction of one of the finest hospitals in Great Britain or any other country. The architect's plans have been long under consideration; and are now completed, but so extensive is the work that it will take five years to finish and equip it for the reception of patients.

With a national spirit and from the best of motives, these gentlemen have determined that the new Edinburgh Infirmary shall contain everything that the most advanced Physicians, Surgeons and specialists can desire. To those who in future years shall obtain their medical education here, as to the sick who shall be treated therein, this institution will be a great boon, and will aid in giving still further importance to the Edinburgh Medical School, and to swell its already plethoric classes.

Large as is the old Quadrangular University, (its two sides measuring each 360 feet and its ends 255 feet; one of its rooms, the principle library, being 200 feet long by 50 broad). Immediately in its rear, and connected with it by an arched, glass-covered corridor—crossing West College Street—is a still larger structure,

THE GREAT MUSEUM

of Natural History, Science and Art. This building, now nearly finished, will have the greatest capacity of any public building in Scotland. Its height being 90 feet, its length 400 feet, and its breadth 200 feet. I cannot commence to describe it architecturally, or to give you a detailed account of its objects, suffice it to say that in addition to the instruction, it, like other Museums, imparts on the varied subjects connected with Natural History, this institution is intended to illustrate Mechanical and Chemical Science, and the industrial arts, as applicable to the principal manufactures of the country; and when practicable to exhibit the machinery and appliances used in the production of these manufactures. Thus, as an example from among the metals, a piece of crude iron ore is placed before you, as it is taken from the bowels of the earth, and you are shewn the varied changes it undergoes until, as steel, it is converted into the polished needle, the finest cutlery or the most approved and deadly fire arms, used in modern warfare. So in the manufacture of glass—you first see the sand and other raw material, and follow these through their varied changes until the most perfect bottle and the finest glass ornaments are brought under supervision. In the manufacture of silk, cotton, linen and wool; you first see the changes in animal life which precede the coming of the silk worm. Then you have exhibited casts of the internal economy of this animal, with the glands which secrete or form the raw material. You have the cotton seed and plant, the hemp seed and plant in various stages of development, and every variety of wool; then follow in regular order the many changes which occur until at length the many beautiful and useful fabrics of commerce are evolved.

You can then witness the changes effected by chemical agency, on all descriptions of animal and vegetable food, from the raw state until you observe it in that con-

dition, in which it is found best adapted for conversion into healthy blood. If you wish to study the mode by which the engineer constructs vast bridges of stone or iron, the whole process is before you; or, if you desire to know how and by what mechanical and engineering appliances he rears far away from the shore on some partially sea-covered rock, a great stone lighthouse that will resist effectually the force of wind and sea, and serve in the future as a beacon to warn the mariner of his proximity to danger, you can here study the whole process from the laying of the foundation layer of stones in prepared beds of cement until the strong and graceful structure is at length fitted for the reception of its lamps and the human beings who are to inhabit it. From the few descriptive words here written your readers will perhaps be able to form some idea of the nature and objects of this great educational institution, the Museum of Science and Art. As an adjunct to the teaching of several of the chairs in the University, and as a means of imparting practical knowledge to the students in attendance thereon, its value cannot be given in words or figures. A historic interest will always attach to this great structure from the fact that laying its corner stone in October 1861, was the last public act of Prince Albert, the lamented husband of our Queen.

It would occupy too much time and space to enlarge on other educational institutions. The justly celebrated

HIGH SCHOOL OF EDINBURGH,

which has given to Scotland and Great Britain, many men celebrated in literature, the learned professions, in the Senate and by deeds of arms, has a past history, and is doing a present work, guided by an able head, keeping abreast of the times, and of schools of a like character; and well merits a prolonged notice, but all I can do is to name it as one of the institutions of the city.

The denominational schools of the United Presbyterians and of the Free Church of Scotland have here in Edinburgh, as throughout the country, done a great work, not for these churches only, but for the people of the land.

The private institution for the care and education of imbecile children under the charge of my friend Dr. Brodie, situated in the beautiful old village of Tileston, a mile or two south of where I am writing, is well worthy the attention of all who take an interest in this department of labour.

The Institutions for the education and training for future usefulness of the Blind, have long been doing a noble work in Edinburgh.

I have visited with great interest

THE INSTITUTION FOR THE DEAF AND DUMB

in this city. The inspection and the comparison made between the Edinburgh building, and that in which so much valuable work has been done in Halifax by Mr. Hutton, under disadvantageous circumstances, makes me more desirous than ever of seeing a suitable building erected, specially for this object in our own capital.

The last wing of the Insane Asylum at Dartmouth, I am pleased to hear is to be commenced forthwith. When that is completed, the finances of the country being now quite equal to this small undertaking, I hope soon to see a Provincial Deaf and Dumb Institution, taking the place of that which in Gottingen street, although small and inconvenient, has proved a blessing, not only to Nova Scotia, but to all the Maritime Provinces.

I had almost forgotten a very important class of educational institutions—not confined to Edinburgh, but now found pretty generally scattered over the country. I refer to

RAGGED SCHOOLS.

Those first commenced in the city by Dr. Guthrie are designated "the Original Ragged Schools," in contradistinction to others more recently organised. The Marquis of Lorne presided at the last annual meeting of Guthrie's division of these schools, in connexion with which a few words may interest your readers.

The meeting took place in December in the great Music Hall in George Street, and although my family were at the place nearly an hour before its commencement we had difficulty in getting seats. The building was densely packed. Some capital music, vocal and instrumental, was given the audience by some hundreds of little arabs, and by the band of the Guthrie brigade, and when the time for the commencement of business had arrived, the latter reminded the noble chairman that his presence was required by striking up "the Campbells are coming."

The Marquis is a mere lad in appearance. He has a good head and a pleasant countenance, and will eventually, I dare say, make a good public speaker, but as yet he wants confidence and practice.

Dr. Guthrie's speech was characteristic and amusing. He said he had promised the Marquis "a bumper house," and the promise had been fulfilled. In inviting him to take the chair, he, the Doctor, stated in his letter, that if Her Royal Highness the Princess would accompany him, it would not only be "a bumper," but that the house would overflow, even until it reached "the other side of Jordan." The point of the joke I did not understand until I was subsequently visiting the Royal Insane Asylum at Morningside, when the site of Dr. Guthrie's Jordan was pointed out to me running close to its southern wall, a "burn" or brook so small that a foot rule would span it, and two or three inches would sound its depth. A capital Pædobaptist Jordan! but happily for our side of the question, there's another somewhere else broader and deeper. Among the speeches were eminent divines, a law lord, a soldier, and others, but this noble old veteran, wherever he goes, although in feeble health still draws the multitude, and by his eloquence and original Scotch humour carries along with him, and "brings down the house," as but few living men can do.

There are several Ragged Schools in the country where the children are only cared for educationally. In these, Dr. G. informed us the attendance was most irregular, and the results unsatisfactory. His mode is to get at their heads and their hearts through their stomachs, by providing out of his pockets, those who cannot be taken into the reformatories, with warmth, good porridge and broth, which these poor children cannot get at their own miserable homes.

He told us of a Ragged School in London which he had recently visited, in which the children are fed as well as educated, and I presume, housed and clothed—where 1200 are now being cared for by the benevolent contributions of the wealthy who are interested in this very numerous class of residents of the great capital of England. This institution has an annual income of £20,000 stg., and sustains a training ship in the Thames to fit its boys for sea-faring life.

Dr. Guthrie said when he inspected this institution, of which he had often heard before, he was constrained to address the managers in the language of the Queen of Sheba on the occasion of her visit to the court of Solomon, "It was a true report I heard in mine own land of thy acts and thy wisdom. Howbeit, I believed not the words until I came, and mine eyes had seen it, and behold the half was not told me."

In closing these very general remarks on the educational institutions of Edinburgh, allow me to say that you are not for a moment to suppose that an abounding and a continuous liberality in relation to these objects has been confined to the capital, or even to the great centres of population and commerce, on the contrary it has extended itself widely in all directions, and has produced its results on the character of the whole people.

The population of Scotland to-day is small when compared with that of the whole country, but small though it is, I am fully convinced that it is a great element of strength—a strong right arm to the nation, a liberal conservative element, that in these days of national restlessness, and threatened upheavals of the social and political structure will be in the future, as now the firm fast friend of order, and of monarchial institutions. And this constitutional and national stability is to be largely attributed to the pulpit teachings of a doctrinally stable and educated ministry, and to the general diffusion of a wholesome education among the people of all classes. It would have done you good to have seen the loyal universal sympathy exhibited by the whole people of this city, for the Queen and Royal family during the recent dangerous illness of the Prince of Wales. There was no cold formality connected with it. No surface show, but simply the "welling up" from the hearts of all classes of the deep feelings, called forth by the trying family and national occasion.

You may perhaps think that because I am half a Scotchman, and have a "Mac" in my name, I am prejudiced in favour of the land and its people, but although there is a large admixture of Scotch blood in my veins, for which I am rather thankful than otherwise. I still hope I am not so prejudiced, but that I can look upon things as they are and draw fair conclusions. I am not one of those who think that everything

of value in the heavens above and in the earth beneath is of Scotch origin, as some of the sons of the heather are apt to conclude. An illustrative case in point comes to my memory.

Many years ago as I was viewing Rosslyn Chapel—a fine old Gothic ruin of the 15th century, some seven or eight miles from Edinburgh, my attention was called by the worthy old Scot who was earning his shilling by detailing its history, and describing its architectural beauties, to certain carved figures on the upper part of the ruin, which with distended cheeks were engaged in blowing or playing on some kind of wind instruments. With great gravity pointing to these objects, he observed: "Yon are the angels playin' the Baggpipes." This was the first intimation I had had that the national musical instrument of Scotland was of heavenly origin. Personally I rather like the music, but if such were the fact, I fear there are some even of Scotland's own children who would almost prefer remaining outside, to enjoying that sound throughout a future existence.

Correspondents sometimes have a way of concluding their letters by saying "Excuse brevity as the mail is just off." I have to beg to be excused for my want of brevity, but for the abruptness of my manner of closing must plead that the mail for Halifax, via., Queenstown is about being closed in reality.

Ever sincerely yours,

D. McN. PARKER.

For the Christian Messenger.

ONTARIO CORRESPONDENCE.

THE SCHOOL REPORT FOR 1871. INCREASE IN MONEY AND PUPILS. SALARIES OF TEACHERS. DECREASE OF CRIME IN TORONTO. BAPTIST STATISTICS FOR 1871, &c.

The yearly report of Dr. Ryerson the Superintendent of Education in Ontario, has recently appeared. A few facts gleaned from it in reference to the state and progress of Education in this province may not be destitute of interest to the readers of the Messenger.

Taking the two items of money expended and attendance of pupils as criteria of progress, we reach the following encouraging results. The whole amount raised from all sources for school purposes during the year was nearly two millions of dollars, an increase over that of the preceding year of nearly \$117,000. This sum includes the regular Legislative grant amounting to about \$180,000; over \$14,000, apportioned by Government for maps and other school apparatus; clergy reserve balance appropriated to educational purposes to the amount of about \$370,000; while the greater portion of nearly \$1,340,000 was raised directly by the Municipal and Trustees' School Assessments. Of these large sums about \$1,220,000 was expended in payment of teachers' salaries—an increase over that similarly expended in the preceding year of over \$45,000—; nearly \$34,000 was disbursed in the purchase of maps, globes &c., and the balance for various purposes such as rent and repairs of school-houses, school books, fuel, &c. Notwithstanding these large figures and the very encouraging advance, it is quite evident that the profession of teaching has by no means yet reached that high level in public estimation to which the incalculable influence it cannot fail to exert, and the tremendous interests entrusted to it, entitle it. This is clear from the fact that the average salaries of male teachers in counties was but \$260, and in cities \$397; of females in counties \$187, in cities \$231!

The highest salary to a male teacher in a county was \$600, in a city \$1000. By comparing the average of these pittance with the incomes deemed suitable in the other learned professions—we except the ministry, amongst Baptists at least—we must arrive at no very favourable conclusions as to the prospect of retaining a large number of the best men in the teaching service. In about three fourths of the schools the exercises were begun and closed with prayer. This is satisfactory, i.e., if it is not in too many instances a mere matter of form. The Scriptures were read in nearly the same number.

As to attendance the report shows an aggregate within the "school age," (5 to 16.) of over 420,000, while there were in addition pupils of other ages to the number of 22,000. The increase in attendance on the whole was over 10,000, while over 31,000 are reported as not attending any school. This last number is a decrease of about 3,400 upon that of the preceding year, but is still too large for a country in