# OPEN AIR SCHOOLS.

### By Dr. Alice Vowe Johnson, F.R.C.S.I., D.P.H. Cantab.

Med. Off. Lambeth Poor Law Schools, M.O. Central Foundation School and Kennington Secondary and Cripples' Hostel, Camberwell, formerly Asst. M.O. L.C.C. Education and M.O. Birley House Open Air School.

In Germany a thorough system of school inspection has been carried out for the last sixteen years. Six years ago the school doctors in that country found that from 3 per cent. to 5 per cent. of children who were able to attend school were not benefiting by the instruction, and were deteriorating physically. These children were not mentally defective, neither were they suitable for a physically defective school. They were children who were suffering from anæmia, tubercular glands, chronic bronchitis, and early phthisis, nervous and undersized children, whose physique had been impaired by under-feeding and bad housing. Six years ago in Berlin it was deemed necessary to start an open air school for this class of children, and a site of five acres was found about three miles from Charlottenburg, conveniently near a tram line, in a pine forest, where the soil was sandy. Here 100 children of this type were taken and kept there during the day for three summer months, and even this short experiment showed excellent results. At the end of the three months 23 per cent. were cured, and 45 per cent. greatly improved. The next year this school was open for five months, during which time half the cases of anæmia were cured and one-third of the scrofulous. The increase in their weight was remarkable, averaging 6 lb. to 7 lb. per child.

The buildings at Charlottenburg consist of several open sheds, where the children are taught and fed in bad weather. In addition to these they have an open air gymnasium, many hot water baths and a sun bath. The children arrive in the morning at 8.30 and remain until the evening. They receive four meals a day, and sleep in the open during the afternoon for two hours. They are provided with a mackintosh for wet weather, and a rug for cold, a deck chair and a pair of wooden clogs. The ordinary school lessons are reduced to half, nature study and games taking a more prominent place than in a normal school. Not more than 25 children are given to one teacher, and a trained nurse is in attendance all day. For defective vision, tonsils and adenoids, the children are treated and operated on in neighbouring hospitals. They increased visibly in mental attention and alertness, their behaviour improved, they became more orderly, cleanly, punctual, obedient, better tempered and kinder to each other. The improved health and absence of bad surroundings account for the greater part of this.

The London County Council, finding after some years of medical school inspection that they, too, had about 3-5 per cent. of children who were deriving no benefit from the ordinary school curriculum, started their first open air school four years ago at Bostal Woods, near Woolwich, and the year after schools were started at Shooter's Hill, Kentish Town, and Forest Hill, about 90 children between the ages of seven and fourteen being admitted into each school. The children arrive by trams to the schools at 9 a.m. They then have breakfast of milk, porridge and bread and butter. Two and a half hours of lessons follow, judiciously broken by games, and a lunch of bread and butter in the middle of the morning. Dinner at 12.30 consists of meat, two vege-tables, and a pudding. The children eat at small tables, and each table is presided over by a father and mother, who look after their small family. After this a two hours' sleep in the open, either in a deck chair, or what is better-a hammock. The Council's hammocks, invented by Dr. Rose, are made of sail cloth through which two poles are passed, and fixed on wooden uprights I ft. 6 in. from the ground. A rug is provided in cold weather, and a mackintosh in wet. After the rest, they do lessons for an hour and three quarters, followed by a tea of bread and butter and jam or fruit. Some games finish the day, and they return home by 6.

The trained nurse undertakes the bathing and the diet, and sees daily to any mild cases of eyes and ears, &c.

All the children start the day with breathing exercises for a quarter of an hour—and for weak backs there are remedial exercises too.

The lessons consist of practical arithmetic, measurements being made, with an inch tape, of trees and other objects in the open, and calculations based on them.

Geography is taught by the children making a large map to scale in clay or sand on the ground. They indicate the rivers by string in a depression, the hills raised, the towns shown by clay buildings, the manufactories of pottery, cotton, chains and so on are shown by a deposit of their own materials. Coal and tin mines are indicated in a like manner. The main routes to Ireland, Germany, France, Holland and America are shown by lines of little boats from the coast. The railway lines are laid down by spokes of old umbrellas. In a map of Canada, the colonists' homes were marked by domestic animals which the children had carved in wood, and surrounded with upright twigs for primeval forests. In a more detailed map of London, made in the school where I was Medical Officer, the commons were marked out in powdered green chalk, the bridges over the Thames and the principal buildings, such as the Tower, St. Paul's, and Westminster were moulded in clay.

Physical geography is taught by means of the natural features in the school grounds-for instance, a small rivulet was made to run through one side of the garden, islands and lochs were inserted, and a watershed shown. History is taught by taking a period for a time, pretending to live in it, and acting leading parts, in costume if possible. The pre-historic period was the first taken. A rough hut was made of branches, the children, dressed in savage costume, made pre-historic pots and implements in close imitation of those they had at hand as models in Horniman's Museum. Stonehenge came next, and the different sun tracings shown there. Then a lake dwelling was built up on stakes in a pond, and little boys and girls amused themselves by fishing out of their watery habitation. They next lived in a Roman Fort, greened over with quick growing cress. Finally a frowning Norman Castle was built with paving stones kindly lent by the Municipal workmen who were mending roads, and who thoroughly entered into the spirit of the thing. A flag fluttered proudly over the ramparts. In a corner of the garden there was a miniature coal mine constructed, and in another a lily pond was made with clay and cement, and real water lilies grew there.

The children also went through a course of historical colonization, beginning with the Roman occupation of Britain, and ending with South Africa.

As Colonists, the children are taught the art of lighting fires in the open and primitive cooking, the care of poultry, gardening, and felling trees. Boy Scouts and Girl Guides parade in costume.

#### (To be concluded.)

#### Varnish for Surgeon's Hands.

Dr. Elsie McDonald recommends in the *Medical Record* a varnish for coating the hands which is impervious, sterile, and easily applied and said to be far superior to rubber gloves. It is composed of a base of pyroxylin (soluble cotton), dissolved in amyl acetate and acetone with propyl and ettyl alcohol and other ingredients.

# STATE REGISTRATION.

### How to PAY FOR THE PETITION.

The great amount of propaganda required to interest Parliament, and the public, in the urgent need for State Registration of Nurses, is a very costly matter. For a quarter of a century nurses and their friends have out of their limited means financed this great movement for the public health, and therefore for the benefit of the community. Just recently  $\pounds_{20}$  has been expended in the Petition to the Premier from the Central Committee for State Registration, and the Appendix signed by upwards of 500 Matrons and Superintendents of Nurses. Let us hope that the members of the constituent societies will loyally support the Registration Reunion, to take place at the Connaught Rooms, London, on June 26th; and that they will attend and bring friends in such numbers, that through the sale of tickets we may be able to wipe out that little debt on the Petition. It can easily be done by energetic co-operation.

We regret that we have not space in this, our special Birmingham Conference Number, to deal with the correspondence between Viscount Wolmer, M.P., and Dr. Chapple, M.P., on the question of the Nurses' Registration Bill, which has been sent to the Press. In our next issue we shall refer to this matter at some length. Meanwhile the chief lesson to be gathered from it is, undoubtedly, how imperative it is that professional women should have the vote, so that their interests should not be dependent upon the change of opinion of those who have no intimate knowledge of, or conscientious convictions concerning, their life's , work.

Once more Sir Henry Burdett has given the Nurses' Registration Bill its coup de grâce in his pseudo-nursing journal. In his omni-potence he has killed and buried it once again, only, no doubt, to find that this imaginary legislative corse will rebound with renewed energy, as it invariably does after his absurd funereal prognostications ! Next week good friends will plead its cause on the platform at the Birmingham Conference, and on the 26th inst., its supporters will hold a Reunion in London in support of the Petition to the Premier, to find time, at the earliest possible moment, for its Second Reading. No amount of battening down will keep this vital spark quiescent, after the inspiration it received from the stupendous majority of 228, by which it passed its First Reading so triumphantly in the House of Commons on March 3rd.

# OPEN AIR SCHOOLS.

## By Dr. ALICE VOWE JOHNSON, F.R.C.S.I., D.P.H.Cantab.

### Med. Off. Lambeth Poor Law Schools, M.O. Central Foundation School and Kennington Secondary School, and Cripples' Hostel, Camberwell, formerly Assistant M.O. L.C.C. Education Board and M.O. Birley House Open Air School.

#### (Concluded from page 500.)

The school has many pets—newts, tadpoles, water beetles, dragon-fly larvæ, and sticklebacks. In connection with these a great tragedy happened. The Lady Stickleback, following her family tradition, ate her husband, and we have to draw a veil over the explanations offered by the teacher from a humanitarian point of view. They also have chickens, ducks and rabbits, a puppy dog, and, last but not least, a real live baby, who, reversing the old nursery rhyme, has so many fathers and mothers he doesn't know what to do.

The baby was four months old when it came, and the trained nurse taught the children how to feed, bath, and make clothes for it. *It*, also, lived out of doors all day and throve well. The children loved it, and it loved the children.

Vegetable nature study is shown by the development of seeds, plants, flowers, and fruit. The usual bean and acorn were made to grow in bottles.

The staff consists of a Head Teacher, three Assistant Teachers, a trained Hospital Nurse, a cook, a caretaker, and a visiting school doctor who looks in once a fortnight, or oftener if sent for.

The children are weighed and measured once a fortnight, and have hot baths once or twice a week. Their hæmoglobin (that is, the colour of their blood) is taken at the beginning, the middle, and the end of the six months.

The Schools are open all the year round with no break.

Our results have been excellent. The average gain per child in weight is 5-6 lb., and the gain of hæmoglobin is an increase of 20 per cent. The moral and intellectual improvement is equally satisfactory.

The children are seen before admission into the schools by the school doctor, and only such admitted as will benefit by an open air treatment. Advanced cases of heart and lung trouble, rheumatism, and bad eye cases are excluded, as they tend to get worse in an open air school. All cases of defective teeth, enlarged tonsils, adenoids, discharging ears and defective vision, are recommended for treatment and operation before admission into the schools, and in many cases this has been carried out. It is of little use admitting children to these schools when their noses and throats are blocked with adenoids and tonsils, and when they have a mouth full of decaying teeth, and are being debilitated by discharging ears.

The children are again medically examined shortly after admission, and careful notes made of the conditions of their hearts, lungs, the colour of their blood, and the condition of their urine.

I must here point out how necessary it is to test the urine of the children, as 20 per cent. of them are found to be suffering from Albuminuria. Careful dieting, warmth, and dryness are essential for these cases. One of our worst cases of this gained 7 lb. in weight and 30 per cent. of hæmoglobin, as the result of this careful treatment.

Frequent examinations of the children's chests and blood are made. The Teachers and Nurse notified as to diet, exercise, warmth and rest.

The Shooter's Hill School is splendidly situated, being on the top of a wooded hill with a fine view of Kent and the winding Thames.

The Kentish Town and Forest Hill Schools are simply adapted houses with large gardens.

Satisfactory as our results have been, they would be even more so, if the children slept the nights at these fresh open air schools, instead of returning every night to their stuffy insanitary homes. Very little further expense would be incurred, as no extra food would be required, and their tram fares, which amount to a considerable item, would be saved, and the hammocks they sleep in during the day would serve them for the night, with the addition of an extra rug. On fine nights they could sleep in the open, and in bad weather in the Doecker Sheds, with which each school is provided. All that would be necessary in addition would be a night attendant.

The Doecker Sheds are of canvas, portable, impervious to rain, with windows, and one removable open side, they are light and inexpensive. When new they cost  $\pounds_{120}$ , and hold 50 to 60 children. As there are in London alone some 35,000 to 40,000 debilitated children who should be in these open air schools, the question of building permanent schools will have to be considered.

523.

sandy or gravel soil, with a southern aspect, and protected from the north and east by trees. There should be ample bathing accommodation.

The Charlottenburg system of separate sheds should be followed, as they get air, light and sunshine on all sides, which is impossible in a large building, where inevitably some rooms are unsuitable for invalids.

I cannot too much emphasise the moral and physical improvement which takes place in the children under the Open Air System.

They come to us nervous, irritable, suspicious, unreliable, bad-mannered, and so listless that they grudge the least exertion, and cannot be induced to sing even one verse of a song. After a time they become smiling and cheerful, courteous and kind to one another, orderly, clean, attentive, reliable and trusting, and seem to enjoy singing, with vigour, songs with endless verses. They get a colour, their hair becomes glossy, they increase in size and in weight, their backs straighten, they become more alert and vivacious, and in some cases they are able to carry the gospel of cleanliness and open windows into their own homes.

# STATE REGISTRATION OF NURSES.

We shall be pleased to receive the names of those who are able to pay their own expenses who are willing to attend meetings in the country to speak to nurses on State Registration. Now that both the Houses of Lords and of Commons have shown by vote their approval of the principle of registration, it is realised by sensible people that legislation cannot be long delayed, and that the fatuous and vexatious opposition is merely kept up by the social influence of a few persons, and the quack nursing press.

We are asked by a well-known Matron to warn her colleagues against an ambiguous letter which is being circulated by Lord Knutsford, from the London Hospital, as a whip for his anti-registration protest. He writes :-"Have you been able to sign and get signatures to the Protest against the Registration Bill? We have received 160 letters from Matrons against the Bill, and only 38 in favour so far."

This would make it appear that Lord Knutsford is inviting signatures for as well as against the Bill, which is not the case. Naturally registrationists did not think it necessary to reply to his previous letter.

# They should be in or near a wood on a high. THE NATIONAL COUNCIL OF TRAINED NURSES.

#### THE CONFERENCE AND EXHIBITION AT BIRMINGHAM.

The opening of the Nursing Exhibition at the new Central Hall, Corporation Street, Birmingham, on Tuesday, June 9th, was a very memorable function, both because this is the first time that Birmingham has ever had a Nursing Exhibition, and for the sympathetic understanding of the work and aspirations of nurses by the Lady Mayoress, Mrs. Ernest Martineau, and the completeness and beauty of the Nurses' Exhibits.

The Lady Mayoress was received by the President of the Conference, Miss E. M. Musson, with Mrs. Bedford Fenwick, President of the National Council of Trained Nurses, in the Vestry Room, and some of the delegates of the various Leagues and societies affiliated to the National Council were introduced. A procession was then formed headed by nurses carrying the League Banners, including the banners of the Matrons' Council bearing its badge embroidered in gold and blue upon a white ground, the League of St. Bartholomew's Hospital Nurses with its wellknown shield, carried out in black and white, the General Hospital, Birmingham, Nurses' League with its red cross daintily embroidered on a charming buff coloured background, embroidered in blue and red, and the banner of the Royal South Hants Nurses' League with the characteristic roses of the city arms.

It was an impressive scene upon which those on the platform looked on entering the hall. The body of this large and handsome building was filled with the stands occupied by trade exhibits by well-known firms effectively arranged, and on the semi-circular tier behind the platform was to be seen first the group of League banners, and, on rising tiers, the model of a regulation Swiss hospital train and hospital tent, lent by the National Union of Trained Nurses, and the exhibit of the General Hospital, Birmingham, Nurses' League, an exhibit which, in the completeness of its survey and perfection of detail, has never before been attempted.

The proceedings began with the presentation of a lovely bouquet of pink carnations and asparagus fern to the Lady Mayoress by Miss K. D. Lloyd, Hon. Secretary of the General Hospital Nurses' League on its behalf, and the President of the League and of the Conference then invited the Lady Mayoress to open the Exhibition in the following words.

### THE PRESIDENT'S SPEECH.

#### MY LADY MAYORESS,

On behalf of the General Hospital Birmingham Nurses' League, I have the honour to invite you to open this Exhibition. This is the first Conference and Exhibition in Birmingham which has been organised entirely by Nurses. We have endeavoured to illustrate in a small way,

524















