THE ORGANIZATION OF THE MEDICAL INSPECTION OF SCHOOLS IN BELGIUM AND OTHER CONTINENTAL COUNTRIES.

THE proceedings of the Brussels Congress comprised the reading of two papers by Dr. Chauvin of Liége, and Dr. Mosny of Paris, and a subsequent discussion on this subject. From these sources and from a special report of Dr. Ensch, of Schaerbeek, the following particulars are taken. It will be convenient in the first instance to place on record the resolutions passed on this subject by the Brussels Congress:

The Congress, in view of the fact that the school has for its object the increase of the social value of the individual by the best cultivation of the physical, intellectual, and moral faculties of the child, considers that one ought to comprise under the term medical and hygienic inspection of schools whatever concerns the health of the scholars, not merely in the narrow sense of their protection against communicable diseases, but in the larger sense of their complete physiological culture and of the adaptation of their intellectual culture to the physical capacity of each.

The Congress therefore expresses the view that the medical and hygienic inspection of schools, by a competent person, comprises:

1. The surveillance of the salubrity of the school buildings;
2. The prophylaxis of transmissible diseases;
3. The periodic and frequent investigation of the normal functions of the body and of the regular growth of the physical organism and of the intellectual faculties of the child;
4. The rational culture of his physical organism;
5. The adaptation, in conjunction with the teacher, of intellectual culture to the individual physical capacity, and the sanitary instruction of the child.

In immediate application of this general view, the Congress, considering that medicine has shown the necessity of a special school régime for abnormal children, is of opinion that such children should receive special and separate instruction.

SCHOOL INSPECTION IN BELGIUM.

In the report[1] issued for members of the Brussels Congress it is stated that twenty-five years ago Brussels began a system of popular education, consisting of institutions logically superimposed from the kindergarten school to the primary school, followed by professional schools and schools of apprenticeship, the "universities of the people," as they have been called.

A pregnant sentence in this report states that "poverty is the most formidable enemy of the school," neutralizing a large share of the efforts at instruction; and stress is laid on the operations of a number of voluntary organizations having for their object the provision of food and clothing, and the sending of weakly children into the country or to the seaside. Thus in 1901-2 La Soupe Scolaire gave 266,745 meals (bread and soup) to needy children; 284 complete outfits and 4,423 articles of apparel were distributed in infant schools; and 2,030 complete outfits and 12,368 articles of apparel in the primary schools. These operations bring one into the debatable ground of parental responsibility. It is obvious that such help, unless most judiciously given, may have pernicious effects like those produced by the supplementing of the family incomes of labourers in the early part of the nineteenth century from Poor-law funds. The latter procedure greatly increased the amount of pauperism; the help given to poor children may similarly, unless most judiciously administered, favour the vicious habits of parents or discourage the operation of the forces working towards an increase of wages and an improved standard of comfort.

IN BRUSSELS.

Sixteen doctors have charge of the inspection of schools, each being instructed to visit a certain number of schools once in ten attendance sessions (*une fois par decade*). The Service d'Hygiène controls the number of visits by means of the thermometrical school records, which the doctors have to sign each time they visit the classes. These thermometrical records are made six times daily by the school *personnel* at 8.30, 11, 2, 3.30, at 8, and at 9.30 in the evening. Each week these records are put together and sent by the headmaster of the school to the Service du Gaz and afterwards to the Service d'Hygiène.

Each month the headmaster sends a tabular statement, with observations on the hygiene of the school and any cases of illness among the pupils. This table is submitted to the school doctor, who suggests any remedies required.

Preventive Medication.—Sickly children receive each day a dose of cod-liver oil or of *poudre zootrophique* supplied by the Administration de la Bienfaisance. These medicines are distributed by the *concierges* of the school under the supervision of the school staff. Each child possesses a glass which is washed daily. Once a month the school doctor supervises the distribution.

Dental Hygiene.—A dental surgeon makes a weekly visit to all the schools, attending to those pupils who are pointed out to him by the staff or whom he independently examines. He states in a special table everything done by him, and transmits this table to the Service d'Hygiène. (This statement of methods of working is obviously very vague.)

Infectious Diseases.—Special instructions are issued as to these, but the system is evidently imperfect.

Lessons in Hygiene.—The school doctors give monthly lessons in hygiene in the higher classes of the primary schools, the pupils being required subsequently to write out these lessons. The subject to be taught is decided at the monthly reunion of the doctors by the medical chief of the Service d'Hygiène. Each lesson does not exceed ten minutes in length.

Illness of Staff.—The verification of the causes of absence of these from school is in the hands of the school doctors, who also regulate the duration of leave.

In most of the suburbs of Brussels a system similar to the above is in operation.

AT SCHAERBEEK.

A special organization of medical inspection of schools has been inaugurated, of which a detailed account is given by the health officer, Dr. Ensch. This account gives particulars of school inspection in certain German cities, which have been utilized in later paragraphs of this article. In 1896 the communal administration of Schaerbeek ordered an inquiry into the sanitary conditions of its schools, and in 1902 the College instructed the school physician to report specially on the organization of school hygiene. It would appear that the attempts at school supervision preceded the creation of the Bureau d'Hygiène, a fact which must be borne in mind in considering the details of the special report from which we are quoting. With us the start is from the opposite point. Medical inspection of schools needs to be organized, but the public health department of each sanitary authority will be its central motive and controlling power. The following summary is given of the action taken:

1. The school doctor is charged with the duty of making a monthly inspection of schools, and of delivering certificates of illness to those in charge of each school.
2. The Bureau d'Hygiène receives information of cases of communicable disease among school children, and decides what action is to be taken. It also arranges for the carrying out of the instructions given as the result of the visits of the school doctor.
3. The school teachers can bring children suspected of illness to one of the doctors of the Service d'Hygiène at certain hours.
4. A school dispensary is to be created, where once a year the health of the children is tested.
5. This dispensary will be first established at a central address; but it is hoped that ultimately one will be established in each school.
6. Each day one class will be visited, and the observations made recorded on a special card.
7. This dispensary will be directed by the head of the Service d'Hygiène with a medical assistant.
8. A sum of Fr.1,200 is allowed for the medical assistant and of Fr.1,000 for the cost of starting the dispensary.
9. It is suggested that in conjunction with this dispensary shall be inaugurated a dispensary for nursing mothers, as well as the dispensary in connexion with the department of dental hygiene which is about to be organized.

From the above summary we gather that the action taken hitherto in Schaerbeek is limited by financial considerations, although procedure is laid down on lines containing the possibilities of great good.

IN FRANCE

the principle of medical inspection of schools has been long acknowledged, though it remains up to the present time an unrecognized ideal. In a circular dated November 14th, 1879, the Minister of Education stated to the prefects that in every centre doctors should be engaged to visit the public schools, from the standpoint of the sanitation of the buildings and the health of the scholars. This timid essay at administration was incorporated in the law of October 30th, 1886. This and a subsequent decree in 1887 embodied no administrative organization, and they were both inoperative. Recently it was found that in 36 departments there was no medical inspection of schools, and that in only 8 departments was

[1] *Guide de l'Hygieniste en Belgique.*

any payment made for medical inspection. In short, as Dr. Mosny puts it, "the medical inspection of schools, even when reduced to its narrow primitive rôle of a means for the prevention of the spread of infectious disease, does not exist in France."

In Germany

much more systematic measures have been adopted in certain towns. Thus at Breslau each child is made the subject of a special inquiry, the results of which are kept for future reference. Two sets of questions are asked respecting each child, the first filled up by the parent, the second by the medical inspector. Appended are the questions:

A.—*Questions for the Parents.*

1. Name of father.
2. Dwelling.
3. Date of birth.
4. From what diseases has the child already suffered, and at what age?
5. What have been the results of these?
6. Has the child been the victim of accidents leaving any durable result?
7. Does he hear well?
8. Is he near-sighted?
9. Does he present any anomalies?
10. At what age did he begin to speak?

From the point of view of the care of the child it is necessary that these questions should be exactly answered.

B.—*Form for the Medical Inspector.*

1. Bodily condition: head, vertebral column, chest, extremities.
2. Appearance of health and bodily force—good, medium, bad.
3. Constitutional anomalies.
4. Vision.
5. Hearing.
6. Teeth.
7. Naso-pharynx.
8. Voice.
9. Skin diseases.
10. Defects of development.
11. Nervous system.
12. Mental condition.

The above scheme is clearly very complete, and if carried out in its entirety must involve great expenditure of time and money. We should prefer a more elementary examination, and particularly the addition of a yearly record of the weight and height of each scholar.

Some Results of Medical Inspection of Schools.

In various cities the hearing of school children has been made the subject of systematic examination. Among the more recent of such inspections may be enumerated the following: In 1888 Lunin examined 280 children in St. Petersburg, of whom 14 per cent. presented considerable defects of hearing. In 1901 Ostmann examined 7,537 children at Kreise, and 28.4 per cent. showed considerable enfeeblement of hearing. In 1902 Cheadle examined a number of children in London of whom 43 per cent. showed defects; and Richter examined 700 children at Grosswartenburg, of whom 15 per cent. were defective.

The enormous variations in the above percentages almost certainly indicate variations in the methods adopted for testing hearing; and it is almost certain that nearly all the percentages overstate the facts, allowance not having been made for nervousness or dullness on the part of children not due to defective hearing. When full allowance is made for these considerations it is, however, manifest that a considerable proportion of scholars are under present conditions being submitted to teaching which is unsuited to their special needs, or are probably not being placed as close to the teacher as their condition requires.

One great cause of deafness in children is the presence of adenoid vegetations in the naso-pharynx. At Bingen Dr. Wilbert (*Deut. med. Woch.*, 1903) found that of 375 children examined 33 per cent. had adenoid vegetations, and that 27 per cent. of these suffered from defective hearing. The importance of being able to direct the attention of parents to these undetected sources of ill-health and defective development is very great, and this can be done without any interference with the province of the family doctor.

At Wiesbaden Dr. Ensch states that the annual report of the school inspections for 1895 gives the following results of the inspections made during the year: From 8 to 9 per cent. of the children had undetected hernias, 7.6 per cent. had spinal curvatures, 10 to 13 per cent. had defective vision. At Zurich the school doctor finds 19 per cent. of abnormal eyesights.

There is much to be said in favour of familiarizin parents with the necessity for medical inspection in schools, and the possibilities of thus detecting unrecognized disease, with a view to its early cure. Thus at Wiesbaden the necessity for some form of medical treatment has been recognized, and the parents have been advised accordingly in 25 per cent. of the pupils whom the doctor has examined. Presumably this percentage is obtained from a systematic examination of all school children, and not from an examination of suspected children; and the significance of such a statement is very great.

LITERARY NOTES.

It has been decided by the Council of the New Sydenham Society to devote almost the whole of its income during the next five years to the production of an *Atlas of Clinical Medicine, Surgery, and Pathology*, selected and arranged with the design of affording, in as complete a manner as possible, pictorial aids to diagnosis in all departments of practice. Of this work eight parts, completing the issue for 1901 and 1902, are now ready. The following subjects are in forward preparation: Ringworm and other forms of tinea; Raynaud's malady; Colles's fracture; radiographs of fractures and dislocations; injuries to epiphyses; morphoea and sclerodermia; drug eruptions; elephantoid hypertrophies; variola, vaccination, and vaccinia; tuberculous diseases of the skin. All communications respecting the literary part of the work, suggestions, offers of drawings, etc., should be addressed to the Honorary Secretary, Mr. Jonathan Hutchinson, at the Polyclinic, 22, Chenies Street, Gower Street, W.C. The chief issues for the next five years will be fasciculi of the *Atlas of Clinical Medicine and Surgery*, but should the funds permit a volume of translated monographs will from time to time be added.

In a recent number of the *Revue Clinique d'Andrologie et de Gynécologie*, Dr. P. Hamonic puts forward a claim to have succeeded in inoculating syphilis in a monkey in 1882. At that time he had arranged a kind of laboratory at the Lourcine (female venereal) Hospital, Paris, in which he studied the contagion of syphilis, and isolated the bacillus before Lustgarten. He obtained possession of a very large macaque monkey, which was appropriately named by the residents of the hospital "Fracastor." This animal he inoculated with syphilis, and he says there was absolute identity in the manifestations of the disease in the monkey and in man. The lesions quickly disappeared and the disease ran a mild course, as is seen in certain human subjects where the soil is unfavourable to the development of the disease. Dr. Hamonic concludes that syphilis is to some extent attenuated in the monkey. He adds that he did his best to prepare a favourable soil by allowing the animal to indulge without control his craving for alcohol. Dr. Hamonic refers to the many professional brethren who knew Fracastor, and were in the habit of fondling him and letting themselves be bitten by "that interesting animal, who was truly the first monkey duly convicted of syphilis." If these brethren allowed themselves to be bitten by Fracastor after the inoculation, it would be interesting to know whether the bites were followed by any results tending to prove the transmissibility of syphilis from the monkey to man.

In the *Bulletin* of the Johns Hopkins Hospital for November Dr. Thomas F. Harrington gives an account of Dr. Samuel Fuller of the *Mayflower*, the pioneer physician of America. Born in the county of Norfolk in 1580 he was, like Cardinal Wolsey, the son of a butcher. At Leyden he was a prominent member of the Puritan congregation, and he played an active and influential part in the preparations for fitting out the *Speedwell* and the *Mayflower* (1617-20). For more than twenty years prior to the emigration of the Pilgrims from Leyden the Puritan clergy were educated to the medical profession in anticipation of their pilgrimage which persecution at home was surely forcing upon them. Oxford, too, foreseeing the difficulties in store for the clergy, incorporated the study of physic in the course for the divinity student. A part of this education consisted in the study of the ancient medical authors, as Hippocrates, Galen, Breteus, Celsus, and others. Thus it was that many clergymen were eminent practitioners of medicine before they crossed the Atlantic, where necessity often forced the two duties into one. Fuller was not a clergyman who had studied medicine, but a regularly-educated physician, and it was in that capacity and not as a minister of religion that he went to America. In the list of the passengers on the *Mayflower* his occupation is given as physician. Before the arrival of