also been the adopted method of torment. When Alison Balfour was accused of witchcraft she was put in the caspic-claws, where she was kept for forty-eight hours; her husband was put in heavy irons, her son put in the boots, where he suffered fifty-seven strokes, and her little daughter, of about seven years of age, put in the pilnie-winks, in her presence, in order to make her confess. She did confess. She retracted her confession in the course of the trial, and publicly, at her execution, declared that the confession was extorted from her by the torments." This account of Alison Balfour is quoted by Arnot from the "Records of Justiciary," June 4th, 1596.

What evidence! what justice! Need anything more be said to show that in the matter of witchcraft society not only created the crime, but also manufactured the criminals?

(To be continued.)

On the Education of the Insane, and the School System as Carried out at Richmond District Lunatic Asylum, Dublin. By John Fox, Schoolmaster of the above Asylum. Being a paper read at the Dublin Meeting of the Social Science Congress, October, 1881.

In attempting a description of the School System as carried out in this institution, I am undertaking a task the accomplishment of which I feel at the outset must be very imperfect indeed; but considering how often I have had to answer such questions as the following—"What is the use of a school for lunatics?" "What can you possibly teach them?" I think it is due to my position to describe as well as my abilities permit our system, inviting at the same time all interested in the welfare of the insane to come and see for themselves its beneficial influences.

It is not surprising to hear such objections as the above questions indicate urged against our system, especially in this age of progress, which invariably connects the idea of a school with that of literary and scientific advancement; but I would submit, they evince a total misconception of the end and aim of our School System.

It is my most earnest desire to remove such misconceptions, and with this view I have endeavoured to put together, as briefly as possible, a description of the School System as carried out in our asylum.

It would be quite beyond my reach to deal satisfactorily with the beneficial influences of education on the insane; besides, the subject has been ably dealt with on many former occasions at psychological and kindred associations by our Superintendent, Dr. Lalor, who may justly be styled the "father of the system," and to whose guiding spirit and untiring zeal in the care of a suffering humanity the efficiency of our School System is entirely due.

It is important to bear in mind, in examining the system, the principles upon which it is based, with the object held in The treatment pursued in a case of bodily disease might be not inaptly used as an analogy to illustrate our system. To deprive the stomach altogether of nourishment would be fatal; but by food, varied, simple, and palatable in quality, and small in quantity, a diseased stomach may be restored to a healthy condition; so in the treatment of the mind, whilst securing from all danger of starvation the School System affords to the inmates intellectual food, varied, simple, and palatable in quality, and imparted in quantities small and proportioned to the different capacities of the This system must be, in the eyes of any impartial observer, admirably calculated to heal the disordered faculties, bringing into action those which had lain dormant, and so restoring the sufferer to society; or, at least, if that be not possible, alleviating the monotony of his existence, and infusing a spirit of order and cheerfulness into the everyday life of the asylum.

Whilst my remarks shall be confined to the male school, I may observe in passing that the system pursued in the female school being the same as that carried out in the male, a description of the one conveys a fair idea of the

other.

The daily average number of male patients is about 450, and they are grouped into five divisions, which may be conveniently designated the Receiving, the Farm, the Epileptic and Suicidal, the School (so called because the more intelligent patients are in this division), and the Hospital. With exception of the Hospital, numbering 42 patients, school exercises are carried out in each of these divisions.

The patients of the Farm division, numbering about 84, are engaged for the greater part of the day in garden, smith work, and carpentry. Of this number about 70 attend school on three evenings of the week for an hour after supper.

xxvIII. 2

School exercises are held, in the other three divisions, for about four hours daily.

The Receiving division numbers 50 patients; about 30 of these attend school, and 16 work at farm labour. There are generally to be found two or three patients who, owing to their mental condition, are incapable of taking part in any exercise; it is, however, to be observed that the same individual rarely continues so incapable for many days. Every other patient in the division being engaged at some occupation, these few, finding themselves completely isolated, are attracted to the school classes, and subsequently to that employment which is best suited to their condition. There are many cases of patients who persisted for a lengthened period in refusing to do anything, but who were ultimately induced to take part in the school exercises, and some of the most useful inmates to-day of the institution were of this class.

In the Epileptic and Suicidal division, with 130 patients the school exercises are carried out in the two day rooms, one for each class of patients. About 90 attend school, and they are equally divided between the two rooms; the remaining 40 are employed at painting, mason, farm, and wire-basket work, chimney sweeping, shoe and mattress making. A few patients, varying from two to six, are to be found here, as in the Receiving division, unwilling to do anything from the same cause, and the observations made with respect to that class in the Receiving are equally applicable to those in the Epileptic and Suicidal division.

The School division, with 144 patients, has about 90 in daily average attendance at school, and, as in the Epileptic and Suicidal division, the exercises are carried out in the two day rooms; but in this division it is usual during school hours to keep the more intelligent patients in one room, whilst their less gifted brethren occupy the other. Fifty-four patients of this division are engaged wholly in office, mason, and farm work, tailoring, shoemaking, and plumbing; and there are here, as in the other division, a few who from time to time refuse to join in any exercise. The Blotter, a summary of the numbers at the various occupations, and under medical treatment, &c., each day, is kept by a patient in this division, and another patient records daily the height of the barometer and the wet and dry bulb thermometer.

It will be observed in this cursory review that besides the patients who are wholly engaged in school exercises, there are in each division a number who are employed at various industrial pursuits. This arrangement has many advantages, for besides affording a convenient means of varying the occupation of the patients, it brings those who are wholly engaged at industrial works within the influence of the School System. Although such patients are not included in the school averages, they yet enjoy many of its advantages, such as association with school patients, the instructive prints and school charts, the library, &c.

Thus the beneficial influence of the School System is brought to bear on every patient in the institution, whilst at the same time the extensive structural and other improvements effected wholly by the patients within the last few years show that industrial occupation has progressed equally

with that of the School System.

The patients are divided for educational purposes into six classes, taking the National School reading books for standard. Not that it is to be supposed that all the pupils are up to the requirements of the programme laid down for each of these classes, but that the programme is kept in view in such subjects as are taught. A patient may be up to the standard of a fifth or sixth class pupil in one or two subjects, and below that of a second class pupil in another. Reading, arithmetic, and geography are the principal guides to the school classification of the patients. The proportion of pupils in the higher classes is, as might be expected, greater in the School than in the other divisions.

The mind, as a whole, being divisible into moral, mental, æsthetical, and physical faculties, the subjects embraced in the educational system of the insane must be such as are best calculated to develop each of these faculties, whilst the order observed must be such as will not unduly exercise one

faculty at the expense of another.

The moral faculties are developed by religious instruction, moral reading lessons, and judicious moral deductions, which may be drawn from almost every school lesson. The mental faculties are developed by object lessons, lessons on colour and form, reading, geography, and arithmetic. The æsthetic faculties by writing, drawing, and music, and the physical by drill and marching; the latter may be considered as combining exercise of the æsthetic as well as of the physical faculties of the mind.

Religious instruction takes place once each week, at which

about 90 Catholics and 25 Protestants attend. It is held in the respective places of worship, and consists chiefly in catechetical instruction and hymns. Each chapel is furnished with a very good harmonium, and the sacred music for the following Sunday is rehearsed. Some of the best-conducted

patients join in the choirs on Sundays.

The object lessons and lessons on colour and form, being most important in the education of the insane, have received that amount of attention which their importance demands. The lessons are given either from real objects or from pictures. The system followed in lessons on real objects is that laid down by Miss Mayo in her valuable work, "Lessons on Objects;" and to illustrate these lessons, "Edwards's Educational Cabinet" is of very great assistance. This cabinet has been obtained at a reduced rate through the National Board of Education. The form adopted in these lessons is to hand a real object, such as a piece of indiarubber, to one in the class, asking him at the same time to name it; its colour is then asked, its shape, and its qualities, getting the patients by experiment to find out that it is smooth, tough, flexible, opaque, inflammable, and elastic, winding up with a few questions on its uses. Patients will answer on such a subject as this, although on other points they are quite reticent. The lessons from pictures are principally natural history subjects, and are used to vary those on real objects. The natural history illustrations, obtained at a reduced rate through the National Board of Education, furnish an ample supply of interesting subjects for lessons of this kind. Lessons on colour and form are a species of object lesson, and consist in spreading out on a table a number of square cards of various colours, or a number of pieces of wood shaped as circles, and the several kinds of triangles, quadrilaterals, &c. The patients are asked to pick up the colour or form corresponding to that which is pointed out on a chart hung up before the class.

Reading lessons are a favourite subject with the senior classes. The excellent reading series of the National Board abound in subjects of an attractive and interesting as well as of an instructive nature, examination on the subject-matter forming the most important feature of this exercise. The descriptive or other lessons afford an opportunity to one or two in the class of expatiating on a subject in which they are better informed than their fellows. Digressions from the

subject-matter in the reading, as well as in most of the other lessons, are not uncommon, and are frequently productive of much good, serving to engage the attention of the whole class, and tending more in the direction of the end and aim of the system.

The geography for the lower classes consists chiefly in the outlines of the map of the World and Ireland; but in the senior classes there are, in addition, the maps of the five continents, England and Scotland, interrogatory maps being frequently used. Mathematical geography forms an engaging feature of this subject, and is generally listened to with great attention.

The arithmetical lessons of the first and second classes consist in counting with the ball frame, putting down and reading two places of figures, totting sums of three addends, and questions in mental arithmetic such as might arise in buying and selling the simplest articles. The third and fourth classes have, in addition, the other elementary rules and simple questions in the compound rules. The arithmetical exercises for these lower classes are more attractive when given in the form of questions entering into everyday life, and not mere abstract principles. The fifth and sixth classes are exercised by simple questions in proportion, practice, and interest, in which they exhibit a very fair proficiency.

Writing in copy books from head lines is principally confined to the third and fourth classes, the fifth and sixth having sufficient exercise in the writing of the school songbooks and official documents, &c., connected with the asylum; the junior classes are practised in writing on slates, promotion to paper, to which they frequently aspire, being the re-

ward of carefully written slate exercises.

The drawing class is supplied from patients of the fifth and sixth grades, and the subjects they are exercised on are included in "Vere Foster's Drawing Copy Books." They are not, however, confined to these copies, as whenever a patient exhibits a taste in this line he is afforded every opportunity of developing it, and the large number of sketches which have been executed by former patients, being carefully preserved, are a proof that this principle is not lost sight of. It might be remarked here that not in drawing only, but in any other occupation for which a patient exhibits a particular aptitude, he is (should his mental condition allow) encouraged to follow his favourite pursuit, and does not take

part in the other school exercises. The great number of patients who here act as monitors, assist in the offices, and keep the permanent records of the institution, is to be attributed to this custom.

Music might be termed the backbone of the system, for it interests the greatest number, and when all other means fail in engaging the attention of one suffering from an acute form of mental disorder, the singing class is the first to attract his notice, gradually inducing him to join in it, and in a few days he may be found occupied in every one of the school exercises, thus falling into the regular and orderly habits of the school patients. As might be supposed from its rank in the School System, music has received much attention and development. The school song-book is the fruit of many years' experience, and consists of a choice selection of lively operatic airs, Christy Minstrel songs, Irish melodies, &c., and from time to time modern compositions, if they are likely to be attractive, and not too difficult of execution, are added to the collection. The number of copies of songs required, in order that each patient in the singing class may have one song-book, supplies a fair amount of writing exercise to the senior classes, as was referred to on the sub-The singing is accompanied with instruject of writing. mental music, a patient usually playing on the harmonium, whilst the teacher conducts. The theory of music is not overlooked, a portion of the singing half-hour each day being devoted to practising the scale, which is pointed out on the hand, following Hullah's admirable system. Exercises in unisons and seconds from Hullah's sheets are also practised.

The subject of music leads naturally to drill and marching, being closely connected in an æsthetic and physical point of view. The drill consists in extension motions and falling into line, marching being usually combined with music, especially in the winter season. It serves wonderfully to infuse life and vigour into the most inert, who, by being placed here and there through the more active patients in marching, are induced to use faculties that no other means will bring into play.

The foregoing may be called the school exercises proper, but games and recreation, forming an essential portion of the School System, require some reference. Outdoor games consist in cricket, lawn tennis, football, skittles, ninepins, &c. Of these cricket, lawn tennis, and football are the most

popular. Football is the winter substitute for cricket and lawn tennis. The cricket or football matches are drawn once each week, played daily at recreation hour, and regularly scored by one of the patients. There are generally eleven on each side at cricket, but in football it is not unusual to see forty patients taking part in the game. The indoor games consist in billiards, bagatelle, chess, draughts, dominoes, cards, &c. There are some patients very expert at each of these games, who would be a match for many more

sane players.

Besides these games there is a library of over 200 volumes, the books being lent to the attendants in charge of divisions, and returned periodically. A daily paper or two is supplied to each division, the Express, Freeman's Journal, Irish Times, and Mail being taken daily at the asylum. A copy of the Graphic or of the Illustrated London News is also provided for each division, and a monthly periodical or two, "All the Year Round," "Belgravia," "Cassell's Magazine," "Chambers' Journal," "Cornhill Magazine," and "Scribner's Monthly" being the magazines supplied. The weekly and monthly journals, after remaining their allotted periods in the divisions with the patients, are taken up to be preserved for binding. The good condition generally in which they are returned would be creditable in the most orderly family, whilst marginal and other notes, drawing attention to important passages, are not uncommon, and are evidence of careful perusal.

The order in which the school exercises are carried out is as follows:—The patients are arranged in a line at a quarter to nine o'clock in each division for inspection as to cleanliness, and those who are to be engaged at industrial employments are conducted by attendants to their respective workshops. The literary subjects commence at nine o'clock.

The patients in the Receiving division are collected into one class, being allowed to sit on chairs. This arrangement, after much experience, has been deemed (especially with recently admitted patients) the most desirable one. They are thus more easily attracted to the classes, and when promoted to the School division at once fall into its regular routine.

The system followed in the four rooms of the other divisions is a modification of that known as the "tripartite," which is so well expounded in Dr. Joyce's excellent "Handbook of School Management." This plan provides sitting

accommodation for two-thirds of the patients in each room, and no single patient is in a standing position for a longer

period than half an hour at a time.

The time table is so constructed as to exhibit the teaching of as many different subjects at the same time as possible. The duration of each lesson is limited to half an hour, and in the more orderly rooms the patients march to music whilst changing places.

The singing class is formed at ten o'clock in one room, and the drill class in the other, of each of the two divisions designated School and Epileptic and Suicidal. About one-third of each division is engaged in the singing class, a little more than a third in the drill, and the remainder, not being singers and too old or feeble to be improved by physical exercises, are arranged on chairs in the singing class room and entertained with the school songs.

The recreation occupies from half-past ten till half-past eleven o'clock; it takes place in fine weather out of doors, and indoors in wet weather. Those patients who in outdoor recreation are not engaged in some of the games are kept marching in order round the walks for a portion of the recreation time, and are allowed to walk about the grass plots or sit on the garden seats for the remainder of the time.

The literary instruction is resumed at half-past eleven and continued till half-past twelve o'clock, the classes making one change of place and subject during the hour. This hour

is on Thursday devoted to religious instruction.

Dinner takes place at one o'clock; it is presided over by the teachers. Grace is sung by the patients, accompanied with the harmonium; the patients who sing the grace dine on a platform at one end of the refectory.

The same order is observed during the winter six months, but each of the foregoing subjects takes place one hour later

in the day.

A mixed concert class is held in the female school on Wednesdays and Fridays from three till four o'clock, in which from thirty to forty of the best-conducted male patients and about the same number of females take part.

Those patients who in the forenoon are principally occupied in school exercises are, on Mondays, Tuesdays, and Thursdays, provided with industrial employment, such as light farm work, for an hour from three to four.

The evening school in the Farm division is carried out on Monday, Wednesday, and Friday evenings from half-past six

till half-past seven o'clock. The patients are allowed to sit on chairs, and the subjects which obtain the greatest favour with them are geography, mathematical and descriptive,

object lessons, and arithmetic.

The school patients, and all who can be spared, are on Mondays at ten o'clock, weather permitting, taken to the Phœnix Park, and return in time for dinner. This recreation is highly valued, and tends very much to promote the feeling of freedom from restraint which is so marked a characteristic of this asylum.

A select number are, during the summer season, brought to visit the Zoological and Botanic Gardens weekly. They are very much amused and instructed by these walks, the object lessons at this period taking the form of an introduction or supplement to the visit.

The highest number taking part in the country walks is attained on the Queen's birthday, when as many as 140 are

sometimes brought to the review in the Phœnix Park.

The fortnightly dance, held from April to November each year, and which is conducted by the teachers, acting as stewards alternately, is a great source of recreation, and is much enhanced, when held within doors, by a concert of school songs, in which about sixty patients, male and female, join.

The midsummer games and Christmas amusements are another great source of pleasure, being enjoyed by anticipation for weeks previously, and it is not uncommon to hear patients asking two months prior to the usual time what day is fixed for the amusements.

My task is now completed; I have endeavoured to pass in review the School System, bringing into relief its main features, which are, firstly, to provide occupation for a large class, who otherwise would be unemployed; secondly, to vary the occupation of all the patients; thirdly, to apply a system of education to the relief of mental disorder; and, fourthly, to promote the happiness and welfare of all the inmates.

That the School System of the Richmond Asylum attains the first end, I would point to the large number on the school rolls who from their mental condition are incapable of being employed at any other occupation, or who, from their social position and habits previous to admission, cannot but look on industrial employment as a punishment: that it fulfils the second, I would draw attention to the admirably conceived arrangement above portrayed, which brings the school classes into every division of the asylum; that the third end is attained, the School System, which exercises, moderately and judiciously, the faculties of the mind as above described, is a proof; and the spirit of order and cheerfulness pervading every part of the Richmond Asylum proves the fulfilment of its fourth aim.

A study of this description, supplemented by a visit to the asylum, will, I am convinced, amply repay the trouble, and serve to extend the knowledge of a system of moral treatment of the insane as near perfection as can well be of any institution of the present day.*

Hallucinations in General Paralysis of the Insane, especially in Relation to the Localization of Cerebral Functions. By Wm. Julius Mickle, M.D., M.R.C.P. London.

(Continued from Vol. XXVII., p. 511, Jan., 1882.)

In the next place we arrive at the consideration of—

B. The supposed cortical auditory centre. (First temporosphenoidal convolution.)

In treating of the localization of the cortical auditory centres, the same plan will be pursued as has just been carried out in reference to the visual.

Case XVI.—Hallucinations of hearing were marked; and incomplete deafness came on at an early period. Here the assumed cortical auditory centres were affected, but less than certain other cortical centres.

Interlobar adhesions and congestion of the meninges were present. Also, thickening of arachnoid and pia mater, and serous infiltration of the latter, especially over the convexity of the frontal and of the anterior part of the parietal lobes, where the sulci were somewhat wide and rounded, and the convolutions somewhat wasted.

Adhesion and decortication were found over the frontal convolutions, over those of the anterior part of the parietal lobes, and, to a moderate degree, over those of the temporo-sphenoidal. The superior and external surfaces of the first two of these lobes, the external surface of the last, were those principally affected. Adhesion did not involve the occipital lobe, but was found strewn in patches over the internal surfaces of the cerebral hemispheres, and to a moderate degree on their inferior surfaces. It was nearly symmetrical in its

^{*} See "Richmond Asylum Schools," by Dr. D. Hack Tuke, "Journal of Mental Science," Oct., 1875.