In 1861 there was, therefore, one lunatic to every 375 of population, and in 1871 the proportion increased to one in 319, and at the last census (1881) the proportion amounted to one in 271. These figures speak for themselves, and, compared with similar returns from other counties, it is found Wiltshire stands third in possessing the highest number of lunatics in proportion to population. Two other counties have proportions of one in 243 and one in 246 respectively. The proportion is highest in agricultural counties and lowest in Northern and Midland counties. Two of the latter present proportions of one in 576 and one in 574. This fact points to low wages and deficient food as being an active generator of insanity in agricultural districts.

Wonford House.—The estate has been increased by the purchase of thirty acres of land at a cost of £7,250. This will permit of various improvements, among others, the erection of detached villas and cottages.

Worcester.—Although this asylum appears to be in a thoroughly efficient state, the weekly cost per patient during last year was

only 6s. $11\frac{1}{2}$ d.

York Retreat.—One of the good things done at the Retreat has been the introduction of the Turkish Bath. Instead of commenting on this and other features of the institution we refer the reader to Dr. Baker's article on this mode of treatment in the current number of the Journal.

Yorkshire. East Riding.—A portion of Dr. Macleod's report is devoted to a short account of the asylum since its foundation.

Yorkshire. North Riding.—A new building to accommodate fifty female patients is nearly ready for occupation. New shops are in

The final report of the Committee gives a short history of the asylum since its foundation.

Yorkshire. West Riding.

Wadsley.—Small-pox attacked eleven patients, two of whom died.

To be under the supervision of one medical superintendent this asylum has long exceeded its proper size. During part of the year the number resident was nearly 1,700. Can it be a matter of wonder that Dr. Mitchell sank under such a burden?

Dr. Kay reports that the introduction of Perkins' system of heating by hot water under high pressure has been attended with very gratifying results.

2. German Retrospect.

Pathological changes in the Brain in Dementia Senilis.

S. Beljahow communicated to the Psychiatric Association of St. Petersburg his observations on four brains of senile dements ("Neurologisches Centralblatt," No. 3, 1887). Three of these subjects were women. The weights of the brains were 1030, 1035, 1080, and 1100 grammes. Their ages ran from 64 to 75 years. The pathological alterations were similar in all the four XXXV.

cases. There was hardening of the cranial bones; in some cases the diploe had entirely disappeared. The dura mater was found united with the cranium; there was also pachymeningitis hæmorrhagica. The pia mater was thickened, and when detached from the cortex brought away a portion of matter with it. The convolutions were slender; the fissures wider than usual; the cortical portion of the brain diminished in thickness; the vessels of the base of the brain, especially the basilar carotids and the arteries of the Sylvian fissure, were sclerosed and their walls in some places calcified.

On microscopic examination the subadventitial spaces were found to be widened and to contain fatty granules, pigment, and blood corpuscles; the walls of the vessels were thickened, sometimes so much so that the lumen had entirely disappeared. In some places there were miliary aneurisms, and atheromatous and fatty degeneration around the vessels—there was plastic exudation in many places. But the most notable changes were in the nerve cells of the cortex; the layers of this tissue were not well marked, and in many places no normal looking cells could be found. In some places there was an accumulation of numerous brown pigment granules, in other places small, round, fatty particles. Many of the cells seem to be altered in shape, and the nuclei pale and indistinct; in some places the cells seemed to be broken down into formless clumps. The nerve fibres of the cortex as well as the processes of the nerve cells took part in the general degeneration. These pathological alterations were most marked in the frontal and central convolutions, and here also the vessels were most affected.

On the Sequelæ of Ergotism.

Dr. Franz Tuczek, whose interesting descriptions of insanity following ergotism were in part reproduced in our Retrospect of October, 1883, p. 426, returns to the subject in the "Archiv" (xviii. Band, 2 Heft). Since the epidemic of ergotismus spasmodicus in Hesse seven years have now elapsed. Anxious to know the durable results of the intoxication following the mixture of ergot in the rye bread eaten by those affected, Dr. Tuczek has tried to keep his former patients in sight. With admirable definition, as well as brevity, he gives a sketch of 29 cases, ending with the following remarks: "Of the 29 patients treated for ergotism in this asylum (Marburg) nine are now dead. Of four of these the results of a post-mortem examination have been already published, though we shall now add a few observations. The others sank and died, sooner or later after their discharge, suffering from convulsions, and being much deranged in mind.

"Of the 20 survivors," goes on Dr. Tuczek, "I did not meet any in my visit to Frankenberg on the 16th of May, 1886. Four of them seemed to have remained free from all appearance of the disease; but the condition of one is doubtful. I was able to examine the other fifteen cases and note their condition. Relapses of convul-

sions were frequent. Two patients still suffer from epilepsy; most of them have still defects of the intelligence, are under the mental average of the normal population; only three are quite sane in mind, and these three are the only ones in which the knee clonus returned. In one case it came back in one knee, in the other two it returned in both; in all the other patients the knee clonus entirely failed. There were no remaining disorders of sensibility, reaction of the pupil, or ataxia. More than half the patients still suffer from headache; one has twitchings, giddiness, and weariness; another has giddiness, and a third tingling, girdle feeling, and twitching; a third twitching in the arms and legs. The author observes that although the symptoms of the working of the poison have thus persevered for seven years, they show no progressive character. Though the knee jerk has never returned there is no tabes, but the the patients are of diminished intelligence. In the four cases who died in the asylum lesions were found in the posterior column as previously indicated. Since then Dr. Tuczek has had time to study his prepared sections of the cord. In the grey matter he found the usual proportion of nerve fibres, save in one case where the symptoms were worse. In this spinal cord the nerve fibres were found deficient through the whole extent of Clarke's columns. The alteration in this tract was noticeable even to the naked eye, in the prepared sections, as bright points. The posterior intra medullary root handle which enters the posterior horn and radiates into Clarke's columns had also disappeared.

Dr. Tuczek observes that the symptoms of insanity from ergotism have a close resemblance to insanity from epilepsy. The character of the fits was the same, grand mal, petit mal, intervals of rest, pre- and post-epileptic delirium, benefit from bromides: all here as there. He cannot say how many were the sufferers in this epidemic; but whole families died out. Many persons still have epilepsy, and in every one of the infected villages there is a number of people who have a permanent loss of intelligence.

Pellagrous Insanity.

The parallel between the insanity following the use of diseased rye and that following the use of diseased maize naturally attracted Dr. Tuczek's attention. He found that though the Italian literature of pellagra was abundant there was a deficiency in pathological examinations. Wishing to judge for himself, he travelled to northern Italy in order to study pellagra. Some account of his observations is given in the "Centralblatt für Nervenheilkunde" (No. 19, 1887), and in the "Allgemeine Zeitschrift" (xlv. Band, 3 Heft, p. 127). Dr. Tuczek saw 350 pellagrous patients, and was present at eight dissections, four of which he conducted himself. The symptoms of pellagra are erythema of the hands or other uncovered parts, with a feeling of burning in

the skin, globus feeling, pains in the neck, girdle pains, and partial anæsthesia. There is muscular weakness and sometimes spasms or cramps. The insanity is specially characterized by melancholy, sometimes taking the form of melancholy with stupor, which finally passes into mental weakness somewhat like that accompanying dementia paralytica, but without a progressive character, and without any paralysis of the cranial nerves. Mania is seldom observed. Out of 300 cases examined by Tuczek the knee phenomenon was increased in two-thirds with other appearances of spastic spinal paralysis. In seven cases the knee phenomenon was wanting. In 23 cases the foot clonus was present.

In eight cases examined through the microscope he found degeneration of the spinal cord. In two cases this was confined to the posterior column. In the other cases there was combined disease of the posterior and postero-lateral columns which was symmetrical on both sides. The grey substance was found to be

normal.

The anatomical examinations thus showed the analogy between pellagra and ergotism; but in the former the posterior columns, in the latter the posterior and postero-lateral columns are affected. On the nature of the toxic substance Tuczek gives no opinion. He quotes the observation of Neusser that pellagra is owing to a toxic substance contained in spoiled maize, and which is matured in the intestinal canal.

In the discussion which followed upon the reading of Dr. Tuczek's paper Dr. Leppmann quoted the observations of Venture, who found in the blood of pellagrous patients a microbe like that stated to have been found in lepra.

Dr. Tuczek has undertaken the articles on Pellagra, Ergotismus, and Lathyrismus, in the Dictionary of Psychological Medicine, now in preparation, to be published by Messrs. Churchill.

Idiocy following the use of the Forceps.

Dr. P. D. Koch, of Copenhagen ("Neurologisches Centralblatt," No. 3, 1888), describes the following case:—The mother of F. K. was delivered with forceps owing to weakness in the pains which caused a wound in the head. The child lay three days in convulsions. From his eighth year he was seen by Professor Mendel. On the left parietal bone there was a cicatrix of three inches running from the middle of the coronal suture as far as the sagittal suture. At this cicatrix there was a deep depression. The right side of the face was thinner than the left; the right arm was paralyzed and bent upon the wrist and elbow. The right leg was paralyzed and there was weakness on the left leg. The patient could move about on crutches, and speak a little, but indistinctly. He could not add two and two together. His intelligence remained very low up to the time of his death, which took place when he was thirty-three years old. He died after an epileptic fit. During

the whole of his life he was visited by such fits at irregular intervals. The examination was confined to the nervous centres. They found a healed fracture of the left parietal lobe about two centimetres long. The dura mater was normal, but the pia mater was thickened and adherent to the underlying brain. It also showed numerous granulations, especially in the middle line. The brain weighed about 1105 grammes. The left hemisphere was smaller than the right. In both hemispheres, but especially in the left, there were numerous small nodes of considerable toughness about the size of a cherry stone. These were confined to the grey matter of the brain. These nodes were analogous to the patches of multiple sclerosis described by Bourneville and Brickner; but in Bourneville's case the sclerosed parts were as large as hazel nuts, and consisted of a tough mass of neuroglia in which the nervous elements were entirely wanting. The outer layer of the cortex was found to be four times thicker than usual. The nuclei were found more abundant than in normal brains. The ganglion cells were rare, but remains of what appeared to be shrunken cells could be noticed. The nerve fibres were observed to be in some places degenerated. The vessels seemed normal. The medulla oblongata and spinal cord were found in a normal condition.

Loss and Recovery of Memory.

Dr. A. Pick ("Archiv," xvii. Band, 1 Heft) describes a patient who had been admitted into the hospital at Vienna for peritonitis following on delivery. She was transferred into the asylum at Dobrzan. She had some hallucinations, but the most noteworthy symptom in her mental state was a loss of memory of the events in her life. She had forgotten that she had been recently delivered, though she remembered something about an illegitimate child whom she had borne. She had forgotten her subsequent marriage. She could not remember the visits of the physician the day before, forgot that she had eaten, forgot where her bed was. At the same time she could understand what was said to her, and answer questions. Her memory of past events slowly returned. She began to grasp one event in her past life after another, and after three months she left the asylum recovered.

Aprosexia.

An emperor of Rome offered a reward for the man who should devise a new pleasure. It is more easy devising a new disease. Dr. Guye, of Amsterdam, has introduced one under the name of Aprosexia from the Greek $\pi \rho os \epsilon \chi \epsilon \iota \nu$, the incapacity of paying attention to a subject. ("Allgemaine Zeitschrift," xlv. Band, 3 Heft). As the result of several observations he finds that obstruction of the nasal passages through disease may cause much weariness of body and inaptitude of mind. He thinks that the chronic inflammation in the nasal passages impedes the passage of lymph from the brain. Dr. Guye thinks this

a cause of dulness in children, and that the attention of teachers should be directed to the state of the nasal passages and the character of the respiration. I have sometimes been struck by the emphatic manner in which patients suffering from chronic coryza have complained of the dulling and depressing effect the exacerbations had upon the mental faculties.

On Defects of Vision Dependent upon Disease of the Occipital Lobes.

Dr. Moor, of Dusseldorf, has found in the course of his practice some cases of visual defect which he believes to be dependent upon disease of the cortical centres ("Neurologisches Centralblatt," No. 8, 1888). These with Munk he places in the occipital lobes. He observes that when we get hemiopia with diminished reaction of the pupil you may infer a lesion on the nearer side of the corpora quadrigemina; but homonymous hemiopia with integrity of reaction of the pupil indicates a lesion in the occiput. He indicates three layers lying under one another which have different functions, one the perception of colour, the second the sense of space (Raumsinn), and the third the sense of light (Gesichtsfeldausdehnung), and he thinks that these modes of perception may be affected in different degrees. He mentions some cases where there was neuritis optica in the stage of atrophy with contraction of the field of vision, which he treated with iodide of potassium and a seton in the neck. In another case there was weariness of vision without any alteration in the posterior chamber of the eye, accompanied by pain in the back of the head. In others there is great irritability to light without any alterations seen by the ophthalmoscope.

Disturbances of Vision of Cerebral Origin.

Dr. C. Reinhard has a long series of observations on the question of localization of the brain functions with special reference to disturbances of vision ("Archiv," xvii. Band, 3 Heft, and xviii. Band, 2 Heft). He has carefully studied sixteen cases—two of general paralysis, three of secondary dementia, four of senile dementia, and seven of partial dementia.

The following summary contains the principal conclusions to which his researches have led.

Disturbances of the motor functions were observed to follow the injuries to different parts of the cortex, but these followed with greater certainty the nearer they approached to the fissure of Rolando, while lesions of sensibility were especially manifested when the parietal lobes are affected.

Lesions of the occipital lobe cause direct disturbance partly by causing soul blindness and partly by causing cortical blindness.

Lesions of the parietal lobe may indirectly cause disturbances of vision.

The loss of knowledge of colours and the perception of space is to be

regarded as soul blindness; so also is the loss of or injury to optical memory.

When the perception of light is lost, one has to do with cortical blindness. Partial soul-blindness is defined as a condition in which the recognition of single colours and the impression of distance is maintained and only a small part of remembered visual images is lost, but if we have a double-sided and incomplete defect of sight, this should be called partial blindness.

Both are dependent upon a lesion of the convexity of the occipital lobe. In soul-blindness the lesion is superficial; in cortical blindness it goes through the whole of the grey matter and even implicates the white matter beneath.

The extension of the optic nerve on the cortex is so arranged that every point of it corresponds with two identical points of the homonymous halves of the retina. He cannot succeed in localizing the two fields of vision that exist in the retina in two separate parts of the occipital lobe. He thinks that the hypothesis of Wilbrand that the centres for the perception of light, colour, and space, are in three layers of the cortex, gives the best explanation of the cerebral disturbances of vision. The objections of Goltz against the existence of cerebral disturbances of vision do not hold good in human subjects. Reinhard found visual defects following disease of the occipital lobes, or of the parts surrounding them, to cause enduring disturbances of vision.

Change of Personality in the Insane.

Dr. Conrad Alt ("Zeitschrift für Psychiatrie," xlv. Band, 1 Heft) treats of this species of delirium. Not only do patients in asylums often believe themselves to be somebody else, but occasionally they assign imaginary characters to those round about them generally having a relation to their own delusion. One of Dr. Alt's patients had a new name and history for every one who came near her. She recognized the physician as a relation. On one occasion he brought ten students with him and asked her if she knew them. She immediately said she recognized them all, and gave their names, occupation, and residence. The names were written down. After ten minutes they came back, but she still gave each the name she had previously bestowed upon him.

We have not space to reproduce Dr. Alt's cases, but in every asylum there are lunatics who believe themselves to be some distinguished person; some even hold that their sex has been changed. Dr. Alt found that two-thirds of the new cases, and one-third of the old cases, in the Julius Hospital of Würzburg had thus lost the idea of their own personality. Dr. Snell found that more than half of the new patients and about a third of the older ones showed this symptom. Dr. Alt's explanation of this delusion is that as children seize upon a word, letter by letter, and syllable by syllable, and the one syllable suggests the other, so in certain insanities, the suggestions

which rise in the mind are not corrected by a sound judgment, but lead at once to false beliefs. Seeing a resemblance, guessing, and

receiving as true, quickly follow one another.

He observes that if the mind is to work correctly, the disposition or will should be subject to the understanding; but sometimes the will rules over the understanding instead of being guided by it. This is specially characteristic of insanity, and constitutes the foundation of the so-called primary derangements. The next result of such a predominance of the will is a weakening of the power of apprehension. The patient has so much to do with his own personality, is so sunk in himself, that he does not give the necessary attention to the outer world. Some things he notices and remembers with morbid quickness; others he passes by and forgets, hence his whole relation to the outer world becomes deranged.

If a maniac or melancholiac believes himself to be a different person, he has a wonderful change in his own thoughts and feelings to found upon. Sometimes the lunatic believes that he contains within him another person. He then looks upon his former ego as something different. Sometimes he talks of himself in the third person. He sees himself, as Goethe said he saw a figure of himself going beside him. Dr. Alt tells us that he has dreamt of himself as being divided into three persons. We wish he had given this singular observation more clearly; indeed, Dr. Alt might have made much more of his experience in dreams. Many cases of insanity no doubt resemble dreaming, and on recovery patients seem to be coming out or awakening from a long dream. Slowly with the increase of mental power the course of the thoughts becomes always more collected and indistinct, phantasies become clearer, and then the mind recognizes the visionary forms for what they really are. There is a short struggle, and then consciousness resumes its true place.

A peculiar symptom of the altered impressions in insanity is shown in the habit some patients have of collecting stones, bits of glass and other trash, as valuable jewels. In one case, mentioned by Dr. Alt, a woman carried about a jar of seltzer water, which she held to be her child. She brought all kinds of things which she picked up, and showed them to the fancied child, and seemed to enjoy the pleasure which the child took in seeing them.

On the Simulation of Insanity.

In an article upon this subject ("Archiv," xix. Band, 3 Heft), Professor Fürstner describes an imposition, in which the only motive appeared to be the desire to excite religious wonder.

In the year 1879, Sabina S—, a girl of seventeen years of age, living in a village near Heidelberg, gave out that she had become blind and paralyzed so that she could not rise from her bed. She did not require any food, as her guardian angel, who appeared to her, gave her nourishment. She received visitors in a lighted room hung round

with pictures of the saints; and not only the villagers, but priests and doctors became convinced of her miraculous agency. She had frequent tonic and clonic contractions of the face, especially the muscles of the eye and mouth. At other times the convulsions implicated the extremities, or she was seized with cramps so painful that she cried out for her guardian angel to help her. Bloody sweat appeared in her forehead, and on two occasions a nail was found run through her foot.

The priest was warned by a letter that she would be carried into the churchyard of the neighbouring village by her guardian angel. One night she was found there, her stockings and clothes quite dry and clean, although it was raining at the time. She was carried back to her bed. She knew many things that happened in the village, and even was able to inform the villagers, on the authority of the guardian angel, who of their deceased friends were in purgatory and who were in hell.

Dr. Fürstner, when called in to see her, soon made out that she was not blind, but thought that she had real hysterical fits. He proposed to take her to the hospital, to which she readily consented, only asking leave to take with her a paste-board trunk full of images of the saints. Here being closely watched a series of discoveries was made. A piece of black bread was found concealed about her person. She abstained from food for four days, and then offered money to the nurses if they would allow her to take food secretly. A false bottom was found in the trunk, which contained almonds and pieces of bread, and also a nail similar to the one which had run into her foot. In the end she confessed that the whole was a fraud, which she had been tempted to commit by reading the life of the prophetess, Catharina Emmerich.

In the village, not being closely watched, she used to get up and get food. She had walked to the churchyard carrying her clothes and stockings in a bundle above her head, and she put them on when she heard people coming, so that they were found to be dry. Dr. Fürstner observed that he would not have believed it possible that a girl of seventeen could have imitated so accurately the tonic and clonic convulsions which she had learned from witnessing them in a woman in the village. The whole deception showed an extraordinary amount of misdirected energy and determination.

On the Favourable Influence of Acute Diseases in Insanity.

Dr. George Lehmann ("Allgemeine Zeitschrift," xliii. Band, 3 Heft) has called attention to this curious subject. His citations of authors, who have given cases in which patients recovered from their insanity during the course of some intercurrent disease, fill above two pages. The specific diseases mentioned as having had an influence in this way are typhus, typhoid, intermittent fever, variola, morbilli,

scarlatina, relapsing fever, Asiatic cholera, acute rheumatism, pneumonia, and pleurisy.

Dr. Lehmann himself contributes two cases. A woman of thirty-five years old, after a miscarriage, fell ill of melancholia agitata, with delusions and illusions of the senses. After six months she seemed to have fallen into a secondary condition of mental weakness, which had lasted for a month, when she was seized with erysipelas of the face with fever, which lasted nine days, after which she became sane, and was dismissed in a month quite recovered.

Dr. Lehmann cites several other cases of recovery from various forms of insanity following upon erysipelas.

Unfortunately we do not know the conditions under which these unhoped-for recoveries take place. Though Dr. Lehmann has collected a large number of instances, we know that they form the exception, and, indeed, form a very small percentage of the cases in which general disorders of the body come and go without having any favourable influence upon the insanity. Nevertheless there may be cases in every large asylum in which, by exciting some transitory disease, we might cure the mental affection; and it is quite possible that, following out this consideration by a careful line of observation and experiment, a cure for some forms of insanity might be discovered.

The second case described by Dr. Lehmann was a woman of fifty, afflicted with melancholia and hallucinations, who recovered from her mental derangement during the course of profuse vomiting of blood from the stomach. He supports his case by quotations from several writers, who record recoveries from insanity after profuse loss of blood coming from menstruation or hæmorrhoids, and bleedings from the nose and other hæmorrhages.

History of Psychiatry.

Those interested in the history of the treatment of insanity will do well to consult two papers in the "Allgemeine Zeitschrift." The first (xliii. Band, 1 Heft) contains a learned paper on the "History of the Care of the Insane in Germany during the Middle Ages," by Dr. Kirchhoff, which is full of interesting matter.

The second (xliv. Band, 2 Heft), by Dr. H. Laehr, treats of the "History of Psychiatry" in the second half of the eighteenth century.

Dr. Laehr throws doubt on the dramatic story of Pinel's striking off the chains of forty-nine lunatics in the Bicêtre, on the 24th May, 1792. He observes that Pinel's influence has been exaggerated, and that the more humane treatment of the insane was due not so much to particular men as to the general improvement of the age in medicine and manners. The claims of Chiarugi in Italy, and of William Tuke in England, have also to be considered. Dr. Ritti, in the "Chronique des Annales Médico-Psychologiques," September,

1888, has criticized the remarks of his German colleague after an amusing fashion. He advises those who are in doubt about the claims of Pinel to read the work of Dr. Semelaigne, "Philippe Pinel et son Oeuvre," &c., Paris, 1888. Of this little book we can speak in favourable terms. We understand that Dr. Semelaigne's son, who recently visited England, is preparing an article on "Non-restraint."

3. Dutch Retrospect.

By J. PIETERSEN, M.D.

Bydrage tot de leer der Epilepsiebehandeling. Dr. J. H. A. NIERMEŸEB.

In the "Nederlandsche Tÿdschrift voor Geneeskunde" for February, 1888, there is to be found an article under the above heading ("A Contribution to the Study of the Treatment of Epilepsy") which is worthy of some consideration, for it discusses a subject which has received but scant notice at the hands of medical men, viz., the influence of electricity on the epileptic state. The success achieved by Dr. Niermeÿer in the treatment of the cases he cites would be a sufficient inducement for attempting by the method he advocates, if not the permanent cure, at least the amelioration of the condition of such patients in private and hospital practice, and before the consequent psychical change had introduced a new element in to the affection; but it would also be opening up a new field of study if a careful trial could be given, and the results published, of the effect of Niermeyer's process on a series of favourable epileptic cases resident in asylums, the affection in such being independent of organic brain lesion. The practical importance of the subject justifies a quotation of Niermeyer's contribution in extenso :-

In most of the text-books on electrotherapeutics, and in almost all the special works on pathology and therapeutics, we find little that is encouraging communicated to us as to the electric treatment of epilepsy. The remark is almost universally to be encountered that the application of electricity to epilepsy has hitherto furnished but unfavourable results, and it is only in some of the most recent productions on electrotherapeutics that cases have been brought forward in which great improvement or actual cure has supervened. This can cause us but a small degree of surprise when we take into consideration the fact that the ideas current at the present moment as to the cerebral locale in which the epileptic symptoms originate differ in great measure from those which were prevalent but a short while ago. Where the medulla oblongata and pons were formerly regarded as the cerebral districts which played the greatest part in the origin of epileptic phenomena, the conviction at present is slowly gaining ground that in these states there always exists a pathological disturbance of the cortex cerebri. Were it necessary for the full explanation of all the clinical symptoms of the disease to include in our pathological view the more deeply-located centres, experiment and clinical investigation have more clearly brought to light the fact that the functionally-disturbed cortex is of great influence in