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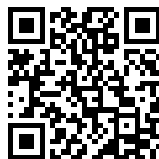
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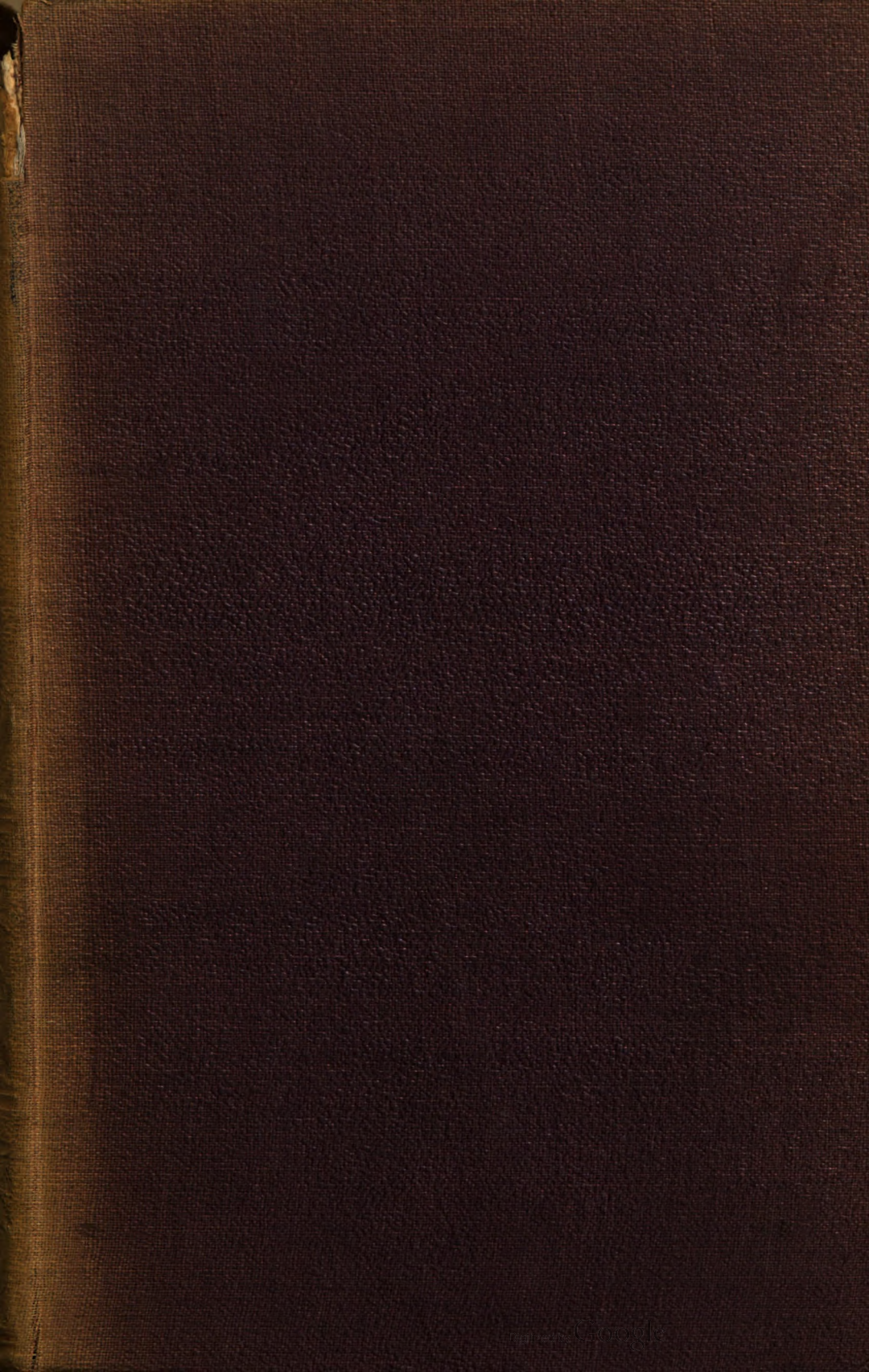
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THE JOURNAL OF
OF IOWA
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MENTAL SCIENCE

*(Published by Authority of the Medico-Psychological Association
of Great Britain and Ireland).*

EDITED BY

D. HACK TUKE, M.D.,
GEO. H. SAVAGE, M.D.

“ Nos vero intellectum longius a rebus non abstrahimus quam ut rerum imagines et
radii (ut in sensu fit) colore possint.”

FRANCIS BACON, *Proleg. Instaurat. Mag.*

VOL. XXXVIII.

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MDCCCXCII.

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AM TO

1881

"IN adopting our title of the *Journal of Mental Science*, published by authority of the *Medico-Psychological Association*, we profess that we cultivate in our pages mental science of a particular kind, namely, such mental science as appertains to medical men who are engaged in the treatment of the insane. But it has been objected that the term mental science is inapplicable, and that the terms, mental physiology, or mental pathology, or psychology, or psychiatry (a term much affected by our German brethren), would have been more correct and appropriate; and that, moreover, we do not deal in mental science, which is properly the sphere of the aspiring metaphysical intellect. If mental science is strictly synonymous with metaphysics, these objections are certainly valid, for although we do not eschew metaphysical discussion, the aim of this Journal is certainly bent upon more attainable objects than the pursuit of those recondite inquiries which have occupied the most ambitious intellects from the time of Plato to the present, with so much labour and so little result. But while we admit that metaphysics may be called one department of mental science, we maintain that mental physiology and mental pathology are also mental science under a different aspect. While metaphysics may be called speculative mental science, mental physiology and pathology, with their vast range of inquiry into insanity, education, crime, and all things which tend to preserve mental health, or to produce mental disease, are not less questions of mental science in its practical, that is, in its sociological point of view. If it were not unjust to high mathematics to compare it in any way with abstruse metaphysics, it would illustrate our meaning to say that our practical mental science would fairly bear the same relation to the mental science of the metaphysicians as applied mathematics bears to the pure science. In both instances the aim of the pure science is the attainment of abstract truth; its utility, however, frequently going no further than to serve as a gymnasium for the intellect. In both instances the mixed science aims at, and, to a certain extent, attains immediate practical results of the greatest utility to the welfare of mankind; we therefore maintain that our Journal is not inaptly called the *Journal of Mental Science*, although the science may only attempt to deal with sociological and medical inquiries, relating either to the preservation of the health of the mind or to the amelioration or cure of its diseases; and although not soaring to the height of abstruse metaphysics, we only aim at such metaphysical knowledge as may be available to our purposes, as the mechanic uses the formularies of mathematics. This is our view of the kind of mental science which physicians engaged in the grave responsibility of caring for the mental health of their fellow men, may, in all modesty, pretend to cultivate; and while we cannot doubt that all additions to our certain knowledge in the speculative department of the science will be great gain, the necessities of duty and of danger must ever compel us to pursue that knowledge which is to be obtained in the practical departments of science, with the earnestness of real workmen. The captain of a ship would be none the worse for being well acquainted with the higher branches of astronomical science, but it is the practical part of that science as it is applicable to navigation which he is compelled to study."—*J. C. Bucknill, M.D., F.R.S.*

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MEDICO-PSYCHOLOGICAL ASSOCIATION
OF GREAT BRITAIN AND IRELAND.

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With power to add to their number.

Alphabetical List of Members of the Association, with the year in which they joined. The Asterisk means Members who joined between 1841 and 1855.

1891. Adair, Thomas Stewart, M.B., C.M. Edin., Assistant Medical Officer and Pathologist, Wadsley Asylum, near Sheffield.
 1874. Adam, James, M.D. St. And., Private Asylum, West Malling, Kent.
 1868. Adams, Josiah O., M.D. Durh., F.R.C.S. Eng., Brooke House, Upper Clapton, London.

* *New Officers or Members of Council elected at the Annual Meeting, 1892.*

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Members of the Association.

1857. Adams, Richard, L.R.C.P. Edin., M.R.C.S. Eng., Medical Superintendent, County Asylum, Bodmin, Cornwall.
1892. Adkins, Percy Rutherford, M.B., B.S., Junior Assistant Medical Officer, Burntwood Asylum, Burntwood, near Lichfield.
1880. Agar, S. H., L.K.Q.C.P., Hurst House, Henley-in-Arden.
1886. Agar, S. Hollingsworth, jun., B.A. Cantab., M.R.C.S., Hurst House, Henley-in-Arden.
1861. Aitken, Thomas, M.D. Edin., Medical Superintendent, District Asylum, Inverness.
1890. Alexander, Robert Reid, M.D. Aber., Medical Superintendent, Male Department Hanwell Lunatic Asylum.
1869. Aldridge, Chas, M.D. Aberd., L.R.C.P., Plympton House, Plympton, Devon.
1882. Alliott, A. J., M.D., Rosendal, Sevenoaks.
1885. Amsden, G., M.B. Medical Supt., County Asylum, Brentwood, Essex.
1890. Anderson, Douglas Hamilton, M.B., C.M. Edin.
1888. Anderson, W. A., M.B., Bucks County Asylum, Stone, Aylesbury.
1887. Aplin, A., M.R.C.S.E. and L.R.C.P. Lond., Med. Supt. Co. Asylum, Snenton, Nottingham.
1875. Atkins, Ringrose, M.A., M.D. Queen's Univ. Ire., Med. Superintendent, District Asylum, Waterford.
1891. Aveline, Henry T. S., M.R.C.S., L.R.C.P., M.P.C., Assistant Medical Officer, Bristol City and County Asylum.
1878. Baker, Benjamin Russell, M.R.C.S. Eng., L.S.A., Elmstead, Andover, Hants.
1878. Baker, H. Morton, M.B. Edin., Assistant Medical Officer, Leicester Borough Asylum, Leicester.
1888. Baker, John, M.B., H.M. Convict Prison, Portsmouth.
1876. Baker, Robert, M.D. Edin., Visiting Physician, The Retreat, York. (PRESIDENT, 1892.)
1880. Ball, Professor, Paris, Professor of Mental Diseases to the Faculty of Medicine, 179, Boulevard St. Germain, Paris. (*Hon. Member.*)
1890. Barker, Walter H., M.R.C.S. Eng., L.R.C.P. Edin., B.A. Cantab., M.A. Melbourne, Deputy Medical Superintendent, Hospital for the Insane, Kew, Melbourne.
1878. Barton, Jas. Edwd., L.R.C.P. Edin., L.M., M.R.C.S., Medical Superintendent Surrey County Lunatic Asylum, Brookwood, Woking.
1889. Barton, James Robert, L.R.C.S.I., L.K.Q.C.P.I., and L.M., Senior Assistant Medical Officer, South Yorkshire Asylum, Wadsley, Sheffield.
1864. Bayley, J., M.R.C.S., Med. Supt., Lunatic Hospital, Northampton.
1892. Beadles, Cecil F., M.R.C.S., L.R.C.P., Assistant Medical Officer, Colney Hatch Asylum.
1874. Beach, Fletcher, M.B., F.R.C.P. Lond., Medical Superintendent, Darenth Asylum, Dartford. (*Gen. Secretary.*)
1881. Benedikt, Prof. M., Franciskaner Platz 5, Vienna. (*Hon. Member.*)
1872. Benham, H. A., M.D., Medical Superintendent, City and County Asylum, Stapleton, near Bristol.
1888. Bernard, Walter, F.K.Q.C.P., 14, Queen Street, Londonderry.
1865. Biffi, M., M.D., Editor of the Italian "Journal of Mental Science," 16, Borgo di San Celso, Milan. (*Hon. Member.*)
1864. Bigland, Thomas, M.R.C.S. Eng., L.S.A. Lond., Bigland Hall, Backbarrow, near Ulverston, Lancashire.
1883. Blair, Robert, M.D., Medical Superintendent, Woodilee Asylum, Lenzie, near Glasgow.
1892. Blair, Matthew Cameron, M.B., C.M. Glasgow, Second Assistant Medical Officer, Leavesden Asylum, near King's Langley, R.S.O., Herts.
1879. Blanchard, E. S., M.D., Medical Superintendent, Hospital for Insane, Charlotte Town, Prince Edward's Island.
1882. Blanche, Dr., 15, Rue des Fontis, Autenil, Paris. (*Hon. Member.*)
1857. Blandford, George Fielding, M.D. Oxon., F.R.C.P. Lond., 48, Wimpole Street, W. (PRESIDENT, 1877.)
1888. Blaxland, Herbert, M.R.C.S., Med. Supt., Callan Park Asylum, New South Wales.

1890. Blumer, G. Alder, M.D., Medical Superintendent of the State Hospital for the Insane, Utica, N.Y., U.S.A.
1877. Bower, David, M.B. Aberd., Springfield House, Bedford.
1877. Bowes, John Ireland, M.R.C.S. Eng., L.S.A., Medical Superintendent, County Asylum, Devizes, Wilts.
1883. Boys, A. H., L.R.C.P. Edin., Chequer Lawn, St. Albans.
1891. Braine-Hartnell, George, M.P., L.R.C.P.Lond., M.R.C.S.Eng., Sen. Assiat. Med. Officer, County and City Asylum, Powick, Worcester.
1887. Bramwell, Byrom, M.D., F.R.C.P. Ed., 23, Drumsheugh Gardens, Edinburgh.
1881. Brayn, R., L.R.C.P. Lond., Invalid Convict Prison, Knapp Hill, Woking.
1864. Brodie, David, M.D. St. And., L.R.C.S. Edin., 12, Patten Road, Wandsworth Common, S.W.
1881. Brosius, Dr. Bendorf-Sayn, near Coblenz, Germany. (*Hon. Member.*)
1876. Browne, Sir J. Crichton, M.D. Edin., F.R.S.E., Lord Chancellor's Visitor, New Law Courts, Strand, W.C. (*Hon. Member.*) (PRESIDENT, 1878.)
1881. Brown-Séguard, C., M.D., 19, Rue François 1^{er}, Paris. (*Hon. Member.*)
1891. Bruce, John, M.B., C.M. Ed., M.P.C., Assist. Med. Officer, Crichton Royal Institution, Dumfries.
- * Brushfield, Dr., Budleigh Salterton, Devon.
- * Bucknill, John Charles, M.D. Lond., F.R.C.P. Lond., F.R.S., J.P., late Lord Chancellor's Visitor; Bournemouth. (*Editor of Journal, 1852-62.*) (PRESIDENT, 1860.)
1890. Burke, John R., M.D., Deputy Inspector General of Hospitals and Fleets (retired); late Assistant Medical Officer, Central Criminal Asylum, Dundrum, Co. Dublin, Ireland.
1869. Burman, Wilkie J., M.D. Edin., Ramsbury, Hungerford, Berks.
1867. Byas, Edward, M.R.C.S. Eng., Grove Hall Asylum, Bow, London, E.
1871. Cadell, Francis, M.D. Edin., 22, Anislie Place, Edinburgh.
1891. Caldecott, Charles, M.B., B.S. Lond., M.R.C.S., The Grove, Jersey.
1889. Callcott, J. T., M.D., Medical Superintendent, Borough Asylum, Newcastle-on-Tyne.
1890. Campbell, Alfred W., M.B., C.M. Edin., 8, Keppel Street, Russell Square, London.
1879. Campbell, Colin M., M.B., C.M., Medical Supt., Perth District Asylum, Murthly.
1867. Campbell, John A., M.D. Glas., Medical Superintendent, Cumberland and Westmorland Asylum, Garlands, Carlisle.
1880. Campbell, P. E., M.B., C.M., Senior Assist. Medical Officer, District Asylum, Caterham.
- * Calmeil, M., M.D., Member of the Academy of Medicine, Paris, late Physician to the Asylum at Charenton, near Paris. (*Hon. Member.*)
1890. Cameron, James, M.B., C.M. Edin., Stonefield Terrace, Dewsbury, Yorks.
1874. Cameron, John, M.D. Edin., Medical Supt., Argyll and Bute Asylum, Lochgilphead.
1891. Carswell, John, L.R.C.P. Edin., L.F.P.S. Glas., Certifying Medical Officer, Barony Parish, 2, Lansdowne Crescent, Glasgow.
1881. Case, H., M.R.C.S. Med. Supt., Leavesden, Herts.
1874. Cassidy, D. M., M.D., C.M. McGill Coll., Montreal, D.Sc. (Pub. Health), Edin., F.R.C.S. Edin., Med. Superintendent, County Asylum, Lancaster.
1888. Chambers, James, M.D., M.P.C., The Priory, Roehampton.
1887. Chapin, John B., M.D., Pennsylvania Hospital for the Insane, Philadelphia, U.S.A. (*Hon. Member.*)
1865. Chapman, Thomas Algernon, M.D. Glas., L.R.C.S. Edin., Hereford Co. and City Asylum, Hereford.
1879. Charoot, J. M., M.D., Physician to Salpêtrière, 217, Boulevard St. Germain, Paris. (*Hon. Member.*)
1880. Christie, J. W. Stirling, M.D., Med. Supt., County Asylum, Stafford.
1878. Clapham, Wm. Crochley S., M.D., M.R.C.P., The Grange, Rotherham.
1868. Clapton, Edward, M.D. Lond., F.R.C.P. Lond., late Physician, St. Thomas's Hospital, late Visitor of Lunatics for Surrey; 22, St. Thomas's Street, Borough, S.E.
1879. Clark, Archibald C., M.D. Edin., Medical Superintendent, Glasgow District Asylum, Bothwell.

iv.

Members of the Association.

1879. Clarke, Henry, L.R.C.P. Lond., H.M. Prison, Wakefield.
 * } Cleaton, John D., M.R.C.S. Eng., Commissioner in Lunacy, 19, Whitehall
 1867. } Place, S.W. (*Hon. Member.*)
 1862. Clouston, T. S., M.D. Edin., F.R.C.P. Edin., F.R.S.E., Physician Superintendent, Royal Asylum, Morningside, Edinburgh. (*Editor of Journal, 1873-1881.*) (PRESIDENT 1888.)
1879. Cobbold, C. S. W., M.D., Bailbrook House, Bath.
 1892. Cole, Robert Henry, L.R.C.P. Lond., M.R.C.S. Eng., Assistant Medical Officer, Moorcroft House, Hillingdon.
1888. Cones, John A., M.R.C.S., Burgess Hill, Sussex.
 1882. Compton, T. J., M.B., C.M. Aberd., Heigham Hall, Norwich.
 1878. Cooke, Edwd. Marriott, M.B., M.R.C.S. Eng., Med. Supt., County Asylum, Worcester.
1887. Cope, George P., L.K.Q.C.P.I., M.P.C., 43, Harrington Street, Dublin.
 1891. Corner, Harry, M.B.Lond., M.R.C.S., L.R.C.P., M.P.C., Assistant Medical Officer, Bethlem Royal Hospital, S.E.
 1872. Courtenay, E. Maziere, A.B., M.B., C.M.T.C.D., M.D., Inspector of Lunatics in Ireland, Lunacy Office, Dublin Castle. (*Hon. Member 1891.*)
1891. Cowan, John J., M.B., C.M. Edin., Assistant Medical Officer, Roxburgh District Asylum, Melrose.
 1884. Cox, L. F., M.R.C.S., Med. Supt., County Asylum, Denbigh.
 1878. Craddock, F. H., B.A. Oxon, M.R.C.S. Eng., L.S.A., Med. Supt., County Asylum, Gloucester.
1884. Curwen, J., M.D., Warren, Pennsylvania State Hospital for the Insane, U.S.A. (*Hon. Member.*)
 1869. Daniel, W. C., M.D. Heidelb., M.R.C.S. Eng., Epsom, Surrey.
 1868. Davidson, John H., M.D. Edin., Med. Supt., County Asylum, Chester.
 1874. Davies, Francis P., M.D. Edin., M.R.C.S. Eng., Kent County Asylum, Barming Heath, near Maidstone.
1891. Davis, Arthur N., L.R.C.P., L.R.C.S. Edin., Medical Superintendent, Borough Asylum, Ivybridge, Devon.
 1869. Deas, Peter Maury, M.B. and M.S. Lond., Medical Superintendent, Wonford House, Exeter.
1863. Delasiauve, M., M.D., Member of the Academy of Medicine, Physician to the Bicêtre, Paris, 35, Rue des Mathurins-Saint-Jacques, Paris. (*Hon. Member.*)
1876. Denholm, James, M.D., Flodden Lodge, Cornhill-on-Tweed.
 1872. Déspine, Prosper, M.D., Rue du Loizir, Marseilles. (*Hon. Member.*)
 1876. Dickson, F. K., F.R.C.P. Edin., Wye House Lunatic Asylum, Buxton, Derbyshire.
1879. Dodds, Wm. J., M.D., D.Sc. Edin., Colonial Secretary's Office, Cape Town, Cape of Good Hope, South Africa.
1886. Donaldson, B. Lockhart, A.B., M.B., B.Ch. Univ. Dub., M.B., M.P.C., Assistant Medical Officer, District Asylum, Monaghan.
 1889. Donaldson, William Ireland, B.A., M.B., B.Ch., Univ. Dublin, Assistant Medical Officer, London County Asylum, Canehill, Purley, Surrey.
1892. Dillei, Dr. Theo., 434, Penn Ave, Pittsburgh, Pa., U.S.A.
 1891. Douglas, Archibald Robertson, L.R.C.S., L.R.C.P. Edin., Assistant Medical Officer, East Riding Asylum, Beverley.
1890. Douglas, William, M.D. Queen's University, Irel., M.R.C.S. Eng., Medical Officer, Provident Dispensary, Leamington Spa, Dalkeith House, 7, Clarendon Place, Leamington Spa.
- * Down, J. Langdon Haydon, M.D. Lond., F.R.C.P. Lond., late Resident Physician, Earlswood Asylum; 81, Harley St., Cavendish Sq., W., and Normansfield, Hampton Wick.
1884. Drapes, Thomas, M.B., Med. Supt., District Asylum, Enniscorthy, Ireland.
 1880. Dunlop, James, M.B., C.M., 298, Bath Street, Glasgow.
 1874. Eager, Reginald, M.D. Lond., M.R.C.S. Eng., Northwoods, near Bristol.
 1873. Eager, Wilson, L.R.C.P. Lond., M.R.C.S. Eng., Med. Superintendent, County Asylum, Melton, Suffolk.
1888. Earle, Leslie, M.D. Edin., 21, Gloucester Place, Hyde Park, W.
 1891. Earls, James Henry, M.D., M.Ch., etc., Ticehurst, Sussex.
 1886. East, Edward, M.R.C.S. and L.S.A., 16, Upper Berkeley Street, W.

1862. Eastwood, J. William, M.D. Edin., M.R.C.P. Lond., Dinsdale Park, Darlington.
1879. Echeverria, M. G., M.D., care of Dr. Haak Tuke, Lyndon Lodge, Hanwell. (*Hon. Member.*)
1869. Elkins, Frank A., M.B., C.M. Edin., M.P.C., Morningside Asylum, Edinburgh.
1873. Elliot, G. Stanley, M.R.C.P. Ed., L.R.C.S. Ed., Medical Superintendent, Caterham, Surrey.
1890. Ellis, William Gilmore, M.D. Brux., Superintendent, Government Asylum, Singapore.
1892. Eustace, J. N., M.D., Hampstead, Glasnevin, co. Dublin.
1861. Eustace, J., M.D. Trin. Coll. Dub., L.R.C.S.I.; Highfield, Drumcondra, Dublin.
1891. Ewan, John Alfred, M.A., M.B., C.M. Edin., M.P.C., Assistant Medical Officer, Dorset County Asylum, Dorchester.
1884. Ewart, C. Theodore, M.B. Aberd., C.M., Assistant Medical Officer, Colney Hatch Asylum, Middlesex.
1888. Ezard, E. H., M.B., C.M. Edin., M.P.C., 168, Lewisham High Road, S.E.
1865. Falret, Jules, M.D., 114, Rue du Bac, Paris. (*Hon. Member.*)
1892. Farquharson, Alexander Charles, M.D., M.C., D.P.H. Camb., Senior Assistant Med. Officer, Burntwood Asylum, Burntwood, near Lichfield.
1867. Finch, W. Corbin, M.R.C.S. Eng., Fisherton House, Salisbury.
1873. Finch, John E. M., M.D., Medical Superintendent, Borough Asylum, Leicester.
1889. Finch, Richard T., B.A., M.B. Cantab., Resident Medical Officer, Fisherton House Asylum, Salisbury.
1890. Findlay, George, M.B., C.M. Aber., Brailes, Shipstone-on-Stour.
1882. Finegan, A. D. O'Connell, L.K. and Q.C.P.I., Med. Supt., District Asylum, Mullingar.
1889. Finlay, Dr., County Asylum, Bridgend, Glamorgan.
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 1888. Manson, Magnus O., B.A., L.R.C.P., etc., County Asylum, Haywards
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 1886. Macpherson, John, M.B., M.P.C., Medical Superintendent, Stirling Asylum,
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 1891. Mercier, Charles A., M.B. Lond., F.R.C.S. Eng., Lecturer on Insanity, West-
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 1885. Moore, E. E., M.B. Dub., M.P.C., Medical Superintendent, District Asylum,
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1859. Needham, Frederick, M.D. St. And., M.R.C.P. Edin., M.R.C.S. Eng.,
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1886. Rutherford, R. L., M.D., Medical Superintendent, City Asylum, Digby's, near Exeter.

1866. Rutherford, James, M.D. Edin., F.R.C.P. Edin., F.F.P.S. Glasgow, Physician Superintendent, Crichton Royal Institution, Dumfries. (*Hon. Secretary for Scotland, 1876-86.*)
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List of those who have passed the Examination for the Certificate of Efficiency in Psychological Medicine, entitling them to append M.P.C. (Med. Psych. Certif.) to their names.

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 Alexander, Edward H.
 Anderson, John.
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- * To whom the Gaskell Prize (1887) was awarded.
 † To whom the Gaskell Prize (1889) was awarded.
 ‡ To whom the Gaskell Prize (1890) was awarded.
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PART 1.—ORIGINAL ARTICLES.

*The Cerebro-Spinal Axis as a Thermal Centre and Water Power.** By B. W. RICHARDSON, M.D., F.R.S.

MR. PRESIDENT AND GENTLEMEN,—Whilst I feel very much honoured by the presence here to-day of the members of the Medico-Psychological Association of Great Britain and Ireland to listen to a paper from me on the “Cerebro-Spinal Axis as a Thermal Centre and Water Power,” I am, I confess, not a little anxious respecting the result of my labour. I know I stand before a body of listeners who, from their daily avocation as well as from their accomplished training in mental and physical science, form naturally the most critical audience I could address on the subject to be discussed, and this alone is a cause of grave concern. But there is something more before me. I am about to bring forward an entirely new line of research and observation in so elementary a stage that the simplicity of the thesis itself may, at first sight, seem to imperil its acceptance. I must, therefore, with special emphasis, claim, at the onset, your kindest indulgence.

Profound researches have been made into the anatomy of the cerebro-spinal system, into its microscopical structure, into its chemistry. Endless experiments have been performed in order to discover the functions of its different parts; but I am aware of nothing that has been done towards the study of it as a working mechanism, as a fixed central physical instrument playing its part methodically, according to the physical conditions in which it is placed, apart from the more refined details of function which its delicate and

* Lecture delivered to the members of the Medico-Psychological Association at a meeting of the Association held at 25, Manchester Square, on Thursday, November 19th, 1891, the President, E. B. Whitcombe, Esq., in the chair.

minute structures adapt it to perform in many and marvellous ways.

Preliminary Note.—Before I come to the new work on which I wish particularly to speak to-day, it is necessary to refer to the lines of thought and experiment that have led up to the present labour. Experiment-making is a very slow and suggestive process. One new observation often unexpectedly opens up another. Constantly the route towards a certain end which, at first, looks clear enough, is found to terminate in a *cul de sac*. Very often it is necessary to go back altogether. Occasionally a new and promising path is disclosed, and all ends well. I hope, almost against hope, it is so now.

Electrical Researches.—Early in my physiological career I sedulously inquired, by experiment, whether the nervous centres could be charged with electric energy. I tried to construct out of the animal structures a Leyden jar, and to discharge it in regulated directions by conductors. Some curious experiments were arrived at in this inquiry, by which I learned after a certain fashion to charge and discharge from the dead brain. But here came the practical difficulty that to do this some foreign structure had to be introduced into the experiment. I could not find in any structure or tissue of the body an efficient insulating medium.

Theory of a Nervous Ether.—In the end, I came to the conclusion that some other more definite principle must be sought after than what is now called electrical energy in the nervous centres, and it then entered into my mind that there might exist in the nervous matter a refined ethereal body, to which I gave the hypothetical name of *nervous ether*. I devoted many months to the study of this subject, and published the description of my views in the "Medical Times and Gazette" for May 6th, 1871. I supposed that the hypothetical gaseous or vaporous ether was a chemical product of low boiling point, diffused through the water of the nervous matter; that at the temperature of the blood it was at considerable tension; that it was easily condensable by cold; that it was soluble in water; that in its gaseous or vaporous state it was a medium by which all vibrations were received and conveyed by the organs of sense from without to the brain; and that the collapse of death was due to the cessation of its production, its condensation and inertia. The field of inquiry in the study of this

hypothesis was one of the most laborious I ever trod, and was only relieved of its weariness by the fascination of the pursuit. I tried the absorbing power of the brain for every light chemical body that was likely to answer the probable requirements of a nervous ether. As a result I obtained some curious and useful facts, but I failed to satisfy myself of the existence in the brain of an ethereal substance that would serve the purposes named.

Researches with Extreme Cold Generally Applied.—The next line of research was of a different stamp, more practical, and yet broadly suggestive. I made a practical study, as you know, of the common ethers for the production of local anæsthesia by extreme cold. At first this study was applied to the effects of cold on the outer surfaces of the body, and to the sensitive terminations or peripheries of nerves. Here it succeeded well, and I began to extend the study to central nervous matter with remarkable and unexpected results. By subjecting the cerebral mass to such a degree of cold that it underwent congelation, all the voluntary functions of the body were suspended. Precisely as in hibernation, an animal whose cerebral centres were subjected to cold lay in deep sleep, the respiration, the circulation, proceeding as before, and sustaining the life. If the process of chilling the cerebral substance were rapidly produced the spinal cord was rendered irritable, and unconscious muscular movements were for a time produced; but if the process were conducted while the rest of the body was exposed, at the same time, to moderate cold, so that the break of function between the brain, medulla, and cord was not too abrupt, the torpor was unattended by extra movement of muscles. In the torpor all communications between the external world and the animal were cut off. In plain terms the cerebrum ceased, for the time, to be an absorbing centre. The great centre of the volition, cold and consolidated, would not receive light, would not receive sound, would not respond to pungent vapours. It was in the same dead condition as my own skin frozen at a limited point; it would not receive the impression made through a nerve; it was dead to common sensibility, not to mention pain; it ceased to be able to accept or reflect any vibration whatsoever. The water in its substance was waveless, and for the moment dead.

It was remarkable to observe that, although the resistance to absorption of vibrations was so complete that actual death

could not have intensified it, there was, if the process were skilfully carried out, no death. The vital acts of circulation and respiration were still in progress, and if the nervous structure were allowed to return gradually to the natural consistency the recovery from the dead state was a sure and harmless as well as a painless restoration. In the case of warm-blooded animals, like birds, the artificial hibernation could be maintained for many hours with complete recovery if the temperature were allowed slowly to return to the natural state. In the case of cold-blooded animals, frogs, toads, and fish, the brain and spinal cord could be brought to inertia, and held in that condition for much longer periods. In my Croonian lecture to the Royal Society on "Muscular Irritability after Systemic Death," I showed batrachians enclosed in ice, and exhibited their recovery to perfect life from that extreme condition. In another lecture* I exhibited some carp that had been accidentally frozen in the Zoological Gardens during a hard frost. They were frozen so completely through that they were practically dead, but I was able to thaw them so gradually and uniformly, that as they relaxed from their rigidity they recommenced to live, and showed, after a short time, no evidence of injury from the temporary death in which they had been held. In these animals the whole of the nervous centres, excepting, perhaps, those immediately connected with the heart, had been brought into inertia by the cold.

Researches with Cold Locally Applied.—The above was the effect of extreme cold extended to the whole of the vital nervous matter; but another and equally singular fact was discovered, namely, that the same effect on nervous structure could be localized, so that parts only of the cerebral or spinal centres could be suspended in function, whilst other parts were unaffected. Thus when in birds the corpora striata were made to sleep by cold, the cerebellum being left unaffected, excited volition pushed the body forward, while, if the cerebellum were rendered insensitive, the body was carried backwards usually with a series of somersaults. These events had their analogies in injuries and diseased conditions of brain in man himself, as in the temporary paralysis of the anterior centres of the brain on looking over a precipice; as in a case where a patient suffering from disease of the corpora striata was impelled to rush forward, care-

* One of a course of lectures on Experimental and Practical Medicine.

less as to any obstacle or danger that might stand in his way ; and as in some conditions of somnambulism, where the impulse to move forward, regardless of consequences, is the dominant impulse ; but I dwell now only on the fact that a portion of the brain structure could, it was found, be artificially brought into hibernation by temporary subjection of the affected part to cold, and that recovery would take place by restoration of the natural tension of fluidity. It was not a little astonishing to find how sharp was the line of demarcation between an affected and an unaffected portion of the cerebral matter. In warm-blooded animals the cerebrum, the cerebellum, and part of the medulla, and parts of the cord could be rendered hibernate, and be kept so without danger to life, if the respiratory centre of the medulla were left free. In cold bloods the whole could be affected without actual destruction of vitality.

Cold under Freezing Point.—It was ascertained by further experimental inquiry that, in order to produce very decisive effects, it was not necessary to carry the cold to the extent of actual freezing of the nervous matter. When cold was applied to a vascular part like the skin there were brought to view three stages of action :—(a) a stage of exaltation of action in which the part was injected with blood ; (b) a stage of inertia and insensibility in which the structure was left bloodless, firm, and insensible ; (c) a stage during recovery, the cold being withdrawn, in which there was a return of vascularity with that temporary exaltation called usually reaction. In a modified way the same thing occurred when the cerebrum was subjected to cold. The pia mater was at first injected, but its surface is so delicate, it was soon emptied of its blood, and the cerebral substance underneath it was rendered inactive without any extreme reactive condition. For this reason it was found comparatively easy to induce temporary somnolency and sleep by a process of moderate abstraction of heat. In one experiment I determined that drowsiness ending in sleep began when the temperature of the cerebrum was merely reduced six degrees Fahr., and it was this observation that led me to suggest the original theory that ordinary sleep might be accounted for as due to nothing more than a molecular change of structure in the nervous organization owing to the dissipation of energy from the brain and its subordinate parts during long periods of labour.

Physical Modification of Parts under Cold.—In another series of researches on nervous matter conducted in 1867, I found that under cold the passage of electrical currents through it was varied, and that by changing the molecular condition of nervous structure by cold the same interruption to the course of vibration occurs as when the nervous structure is either firmly compressed or actually divided, but with this essential difference, that the cold produced no more than a temporary suspension of function, or sleep, easily recovered from; whilst the mechanical effects of compression or division were apt to terminate in permanent disability.

In these inquiries I was led to see the value of electrical vibration as a test of the working condition of nervous matter. In 1879 I was so fortunate as to become possessed of my friend Professor Hughes' beautiful electric balance as a means of research. Before this I had been much embarrassed by the direct local decomposition which followed the application of the continuous current; but now I had an instrument which measured for me from the secondary coil, and removed this difficulty. I could measure through a scale of two hundred degrees of sound, and establish comparisons from minute variation of conditions of the nervous matter under investigation. I put dead nervous matter, brain or cord, after it had been warmed to its natural temperature in a specially constructed chamber, into the circuit, and noted on the scale the degree of conducting power that was exhibited. I raised the temperature to fever heat, I cooled down to freezing point, testing all the way along at stages of different degrees the conducting power. In the end I obtained results which indicated that the conduction became modified according to variations of temperature, increasing with rise of temperature and decreasing with fall in steady and distinctive degree.

I also brought the structures back from the extreme of cold to natural heat and to fever heat with reverse results, from which I inferred, I think justly, that no molecular injury was done to them, and that they had passed through the same physical change as the nervous matter of frozen animals in whom there is returnable vitality from what appears to be the absolute inertia of death.

Inferences leading to New Observation.—From the study of

these phenomena, I was naturally led to think of the cause of them. What parts in the affected nervous structure were modified in character under cold and heat? Here I began to inquire anew.

Giving up, for the time, the theory of the nervous ether, I looked at the construction of the nervous substance from a simple mechanical-physical point of view. In the crude form of it there were the three distinct kinds of matter—water, uncoagulated colloidal albumen, and fat. These parts have their own specific attributes under the influence of heat and cold. The water would not go into solidification under cold until the freezing point was reached, and then suddenly with expansion.* The fat, however, would pass evenly and by degrees from the fluid into the solid state under cold, and back again by degrees into the fluid state under the influence of heat. The albumen in which the vital endowments would be centred would remain at the normal temperature of the animal body, always fluid, and as free from coagulation as it is in the serum of the blood; it would be diffused through the water of the nervous substance as it is diffused through the serum; and of itself it would not be likely to be affected either by the cold or the heat at blood temperature. At the same time it would play an intermediate part as between the water and the fatty substance; it would cause, as in an emulsion, the fat and the water to unite to form a homogeneous compound. If cold were applied to this compound the inference would be that the whole would undergo gradual cooling, and that the effect of the cooling would be to increase solidification step by step without subjecting the water to congelation. The thought threw new light on construction for function. It suggested to me an explanation of the local action of cold. An expanse or surface of water alone would not show physical change of structure until freezing point was reached, and then a considerable surface would solidify from one point. But what would happen if a surface of a compound fluid of fat, albumen, and water were exposed to cold? The experiment was made, and a comparison was struck. A compound as named was exposed to cold, and was found to solidify long before freezing point was approached. Then brain substance, triturated into solution and freed of mem-

* To this sudden expansion is due the sharp pricking pain that comes on under ether spray at the moment of freezing a surface of the body.

branous substance, was tested in the same manner. It responded in a similar way. When cooling of the surface of the compound was localized, the solidification was local, a fact which corresponded with what had already been observed in the brain in its vital state.

To sum up. The position to which I was led ran as follows. The nervous substance is physically constructed of three parts: *water, soluble albumen, and fat.* The water, which in a certain manner is solidified, is susceptible of more complete solidification by cold, with the capability of restoration by warmth. The albumen, soluble in the water, and capable, like all similar colloids, of hydration to any degree, moves with the water in respect to solubility. The fat, rendered soluble with the water and albumen, solidifies under cold more readily than water, and becomes fluid by heat more readily, by which means the nervous substance under limited ranges of temperature may vary in tension.

Theory of Water Power and Tension.—And now I come to the later development of reasoning from and on research, to which I desire particularly to draw attention. One day it struck me that the action of the refined nervous ether, about which I had worried myself so much, might all be effected by water changing in tension, expanding into vapour under elevation of temperature, by oxidation, and condensing under reduction of temperature. If this were so, then much indeed would be explained. Then we might be led to look upon the brain with its subordinate parts as an independent thermal centre and a water power, acting, however complicate its minute anatomy, as water influenced by the mode of motion called heat.

When the thought was opened there was an immense deal to be said in favour of it. A large part of the nervous matter is water. The degree of physical condensation of water in the closed cavity of the skull is most remarkable. Itself resistant to mechanical compression, it is here, in the simplest way, compressed—compressed into a certain solidity without being frozen, and connected with tubular nerves along which it ought to be able to maintain an extending column of nervous fluid into the remotest parts under the mere impulse of central vibration. If this were so, impulses would be steadily flowing from the brain into the body during times of cerebral and spinal activity, while

vibrations from the external universe would vibrate back, and unless overwhelming in intensity, would sustain vigorous or subdued action according to temperature, as water in a steam engine in varied tension fashions the motion of the engine.

It was very encouraging to read by the light of this theory so much possible natural fact in support of it. It was as if one ignorant of the action of the watch had suddenly found the mainspring, and had felt oneself able from that instant to understand the movement of the hands and the regulation of their courses. Looking now at the central nervous system as a water power enclosed in resistant bounds, so as to be able to exert action under oxidation and the resultant heat, it lay before me as the mainspring of the animal body to which the blood and circulation play an important but really subordinate part.

I said to myself first, If water vapour be the motor under expansion, it must, after it has served its purpose, be condensed, and this led me to recall an observation which I originally made on the mode of exit of the cerebro-spinal fluid. I had found, as detailed in the first number of the "Asclepiad" in 1884, that the escape of that fluid was at the lower extremity of the spinal cavity into the blood by the inferior vena cava. From this a fact of much importance was discerned. It showed the precaution taken by nature to keep every part of the brain and spinal cord in a water condenser, and the interior of the brain in communion by it with the exterior. The cerebro-spinal fluid is the condensed fluid, and is the regulator of the pressure under the varying moods of oxidation incident to variation of vibration. When the brain and cord are unusually active; when they are receiving vibrations on every side; when, that is to say, the water tension of the centres is at its height, then the amount of condensed cerebro-spinal fluid poured into the veins must be enormous, and may easily and reasonably account for that free action of the kidneys which in hysteria and other kinds of mental excitement is so constantly observed. When, on the other hand, the central tension is reduced, the accumulation of the water in the ventricles and in the arachnoid sac will fill up the void, and by the even pressure it exerts favour quietude and sleep. The part played by the fluid must be, in fact, in the most refined degree regulatory, one of the most beautiful and important

parts of the cerebro-spinal mechanism. It is the dialysed efferent fluid of the nervous centres; it is the condensed fluid of the nervous centres; but, in ebb and flow, according to the tension of those centres, it maintains equality of balance, governing sleep and wakefulness.

This seemed very natural, and made the theory still more clear as a working theory; but I felt that certain other evidences were wanted, if the theory were correct. Two views occurred to me in this direction:—

(1.) I reasoned that if water plays the part supposed, then removal of it from nervous tissue ought to have the same effects in regard to vibration as subjecting it to cold. That is to say, removal of water ought to reduce conduction, while the removal of fat would increase it.

(2.) If the theory be true there must be in the cerebro-spinal axis a steady combustion or oxidation, that stands alone; that is, in a sense, independent; a sovereignty that works the central power by its own mere motion. It also must be a modified as well as a steady combustion, and the products of it must be soluble and dialysable. We ought, therefore, to be able to excite such a combustion in nervous matter, even when it is dead.

In order to test the first of these propositions, I followed the same series of inquiries, in regard to electrical vibration after the mere removal of water, as I did when the nervous matter was condensed by cold. Brain, spinal cord, and sections of nerves were subjected to observation under various degrees of hydration. A portion of the substance to be tested was placed in the electric balance, and its conducting power noted while charged with its water. It was placed at 100° Fahr. in the drying chamber before us to be dried down to complete dryness, and as the process went on the conduction was tested day by day. The conduction was found to decline in proportion as the water disappeared, until, on complete desiccation, conduction ceased altogether. But, by exposure to water vapour, which it readily reabsorbed, it could be made to resume its full conducting power. The fact explains why in some animals exposed to slow evaporation the nervous system may be brought to such inertia that death itself seems absolute; and yet, on immersing the animals in water, they revive and relive. This is the equivalent to hibernation from effects of cold.

I made an inquiry relating to removal of fatty matter. It was seen that, under cold, the presence of fat in nervous

matter modified the action of cold, so that condensation progressed sufficiently to interrupt function before freezing occurred. The fact led me to ask what would be the effect of removing the fat and letting the water remain. The experiment was tested. Portions of nervous matter, brain and cord, grey and white, were taken in the fresh state from the sheep just killed, and conduction was tested. The section was then placed in carbon bisulphide or ether, and left in it until the fatty matter in it was removed. Then, the specimen being removed, the test was re-applied, with the finding that the conducting power had increased, by removal of the fat, 10 degrees.

Hitherto I had made electric vibration the test of activity. I moved to the vibration of sound, and here again the telephone and balance came to my assistance. By putting nervous material between the vibratory drum of the telephone and the ear I was enabled to detect variations under many varying conditions of the nervous material. The results were most important. There is not time to refer to them here in detail, and they are too delicate to be made matter of illustration so that all present could verify them at once; but, briefly, they showed that absorption of sound by the nervous matter was most perfect when the water was in full, but not extreme, tension, that removal of tension lessened absorption, and high tension increased it.

Turning to the second proposition for inquiry—namely, the combustion that is present in the nervous centres—I was helped considerably by an observation I had made in my earlier experiments on heat and cold. I had found several times that, whatever was the nature of the combustion going on in the nervous centres, it was attended, in all animals, even in birds—in whose bodies what would be the highest fever heat in men is the natural condition—with a much lower development of temperature than in other active organs of the body. A difference of 4° Fahr. was observed between the brain and the liver, and 2° between the brain and the arterial blood. Moreover, I had learned in the most singular manner that there is going on in the living brain an actual phosphorescent combustion from oxidation, a combustion that would yield a steady low temperature with soluble products that would easily dialyse and make their way out of the nervous substance both by the blood and by the cerebro-spinal fluid. Whether combustion of carbon takes place in the substance of the brain

or cord, with liberation of the gaseous product carbonic anhydride, remains to be determined; but the oxidation of phosphorus there, with production of dialysable products, cannot be doubted. It was necessary, therefore, to take this moderate oxidation into account, with the surmise that the lower temperature of the brain in its natural state, compared with that of other vascular organs, is from this cause.

I carried out an inquiry on this point by taking the dead brain of the sheep divested of membranes, and rubbing it into a pulp or emulsion. The emulsion was phosphorized by the simple process of mixing with it phosphorus dissolved in carbon bisulphide; the bisulphide was rapidly removed by the air-pump, leaving the phosphorus in the finest state of distribution in the emulsion.* The phosphorized brain mass was now experimented on in divers ways. A mould of albuminized tissue involuted into convolutions was charged with the brain substance, and floated on richly oxidized blood—derived from the same slaughtered animal—rendered alkaline with soda, at the temperature natural to the blood. The oxidation was sustained for several hours, the blood being often removed and changed for new blood freshly oxidized. Under the warmth the brain stuff was oxidized until a slow combustion was established through the whole structure. The specimen left to condense yielded a fluid analogous to the cerebro-spinal, and on the outer surface of the mass where the blood dipped into the folds of the albuminized tissue the colour of the brain, as shown in specimens submitted, was greyish dark with the central part white.

In these experiments I introduced another line of research. I mixed with the oxidized blood different substances to see if they were changed by exposure to the combustion. Some, like alcohol, were rapidly changed; others, like strychnine, slowly.

I would like to dwell on these experiments and on others similar, but my time is nearly exhausted, and I have yet to glance at the bearings of the theory advanced on some of those diseases with which you are most familiar. As preparatory to such application let me, in a brief summary, place the argument under a few distinct heads.

The Argument.—(1) The cerebro-spinal axis is a static thermal centre and a water power—the mainspring of all vital

* An experiment was shown at this point in which phosphorus distributed finely on paper oxidized, and went, spontaneously, into combustion.

actions. The cerebro-spinal nerves are tubular continuations of the white matter of the centres, producing a fluid responsive to the centres themselves, practically static, and liquid during life, but susceptible, while normal, of receiving and conveying pressures; susceptible also of rapid condensation on change of condition from the natural state.

(2) In those parts of the centres called grey, where the surface comes in contact with blood charged with oxygen, there is in progress a slow combustion in which phosphorus plays a leading part, maintaining an equably reduced combustion, with the formation of dialysable saline products. The grey matter, the seat of the combustion, takes its colour from the blood, extending to the depth of the blood membrane dipping into it from its surface, and separated by the convoluted blood membrane into centres, each centre possessing its own surface of oxidation and acting as an independent organ. The white matter, on its part, is the great receptive centre, supplying combustion material, to the grey centres of combustion, as the stem of the candle supplies the wick, but acting also as the receptive medium of vibration to and from the vibrating nerves. In the combustion of the great centres sufficient heat is developed to bring the whole volume of the centres into proper tension. In the nervous cords the same process is going on, so that under the combustion sustained by the centres the nervous cords, cerebral and spinal, are brought also into natural tension for conveying vibrations from the centres to the peripheries, and from the peripheries back to the centres. The nervous fluid in the nerves is practically static and easily condensed under exposure or injury; but it is most probable that at its peripheral terminations it gives up fluid during central pressure, which fluid stimulates muscles into contraction and glands into excretion.

(3) The theory accounts for the grand nervous phenomena of life in activity and repose. Wakefulness and sleep depend on variations of tension. When the brain is at full, but not too extreme, tension; when the cerebral fire is at full, but not excessive work, all parts that respond to it are active and wakeful. When the tension is reduced—in other words, when the oxidation wanes—the process of central condensation comes on, with production of cerebro-spinal fluid and phenomena of weariness and sleep, which last until the cerebral fire attains its restoration, tension is restored, and the organic functions, subservient

to the nervous, including the muscular functions, are brought back to what is called life. The cerebro-spinal system is in fact a true water engine, so true that an artificial engine acting on the same principles could be constructed upon it for the production of motion.

(4) The theory explains the well-known effects of varying external pressures and temperatures on the central nervous organism. Atmospheric pressure tells on it through the nervous expanse, only in a more refined degree, as it does on the mercury or spirit of the barometer. Reduced pressure in moderate degree would give a freer expansion to the centres. High temperature without transpiration would produce enfeebled tension; low temperature, in moderate degree, would favour high tension; but an extremely low tension, sufficient to produce actual solidification of nervous surface, central or circumferential, would produce complete cessation of action, a fact that admits of the most demonstrable proof, local and general, by the action of cold.

(5) The theory attributes to the cerebro-spinal fluid the most important functions. It declares this fluid to be the condensed fluid of the combustion of the cerebro-spinal axis, the regulator of pressure, and the medium by which many poisonous substances are removed from the blood. Charged and recharged with various foreign substances, like alcohol, glucose, urea, chloral, strychnine, it eliminates some directly; others less easily decomposable, by repetitions of eliminations marked with paroxysmal seizures.

(6) The cerebro-spinal axis is not merely an absorbing centre for the reception of external vibrations, but a true chemical and dialysing centre, and the centre of the static combustion, by which under the fluid pressure, regulated by the spinal fluid, the nervous tension is sustained for vibration in all parts of the body that have nervous communications with it. It is a true physical autonomy.

(7) Under this theory ganglia are supplementary centres supplied from the main sources. Thus they, ganglia, lie as intermediates between the great centres and the involuntary muscles, feeding the involuntary muscles with nervous stimulus in steady and continuous supply so long as they are steadily supplied themselves, but exciting the muscles when over-supplied to over-action. Plexuses are inter-communicating points of meeting in order to enable vibrations to be carried on should one or more nerves belonging to the plexus fail in function from disease or injury. Decussating

fibres are explained as the means by which centres are prevented becoming independent of each other, and losing compensatory balance.

(8) If the theory be correct, two distinct combustions exist in the animal body—one, the central or nervous combustion, a combustion leading to low tension and pressure, the static combustion; the other, the higher combustion of the muscles and other organs, yielding the animal heat we recognize as the sensible heat of the body, independent and apparently more active, and yet possibly dependent for its continuous existence on the slow and central combustion which keeps it alight and regulates its activity by regulating its supply of blood, and, therewith, its oxygen and its sustaining substance.

Practical Applications of the Theory to some Forms of Cerebro-Spinal Disease.—Under the theory propounded an immense number of explanations of phenomena hitherto unexplained come, I hope, into view with perspicuity. Whatever should quicken or exalt the nervous combustion at the centre should quicken the current of impulse along the nervous tracts and excite muscular motion from action to overaction. Whatever should reduce the central oxidation should reduce the nervous currents, and produce sleep, or in extreme degree collapse and inertia or death. Let there be removed, rapidly, from the central organs the supply of oxygen carried by the blood, let the brain fire, that is to say, be suddenly put out, as in acute hæmorrhage, and so rapid will be the condensation that for a brief interval, under the pressure, the nervous influx into the muscles will throw them into convulsion and tetany. Let the brain temperature be raised as in fever, and straightway there must be an excessive nervous excitement, an overflow of nervous current, with quickened action of the involuntary muscular pulsations and direct radiation of the increased heat from the cutaneous surface of the body, the mucous surface of the viscera, and the serous expanses. What is called a chill from exposure of the body to cold or wet is explainable on this theory. The peripheral nervous surface, arrested in radiation, receives a check primarily, followed by a necessary excess of temperature and that fever which always succeeds sudden arrest of peripheral function.

The phenomena of inflammation, local and general, are also explainable on the theory without any complication or difficulty; but what I would now notice more particularly

is the exposition it offers in relation to some forms of cerebral disease.

Reflex Action.—The phenomenon of reflex nervous action is rendered by it explicable. The impression on the peripheral surface, which gives rise to the reflex movement after vibrating along the aqueous line up to the centre, radiates out at the centre, and exciting quicker oxidation there, causes an impulse which produces local central injury with return vibrations, by the nerves, to be dissipated in the muscle or muscles which the conducting nerves supply. But for this time is required, and, therefore, the time of the reflex. If the impression be too severe and too universal there may be no reflex, but an actual injury to the nervous centre, a stun, a stroke, or an apoplexy, fatal possibly, or, if not, followed by a reactive flash of vibrations from the centre to great groups of muscles, causing general convulsion.

Epilepsy.—Epileptic seizures on this argument may be peripheral in origin, due to an intense vibration to the grand centres, temporary increase of vibration there, and radiation back into the muscles until, by exhaustion of the excitement in the muscles, equilibrium is restored. In other words, if there were no epilepsy there would be apoplexy and death, so that the very phenomena of the seizure are indications of the mode by which its occurrence and frequent repetition are compatible with continuance of life.

Mania.—By this same theory acute mania is logically explainable as a fever; from an over-action of the great nervous centres, either springing up originally either in them, or from quickened oxidation developed in some part of the nervous expanse, in periphery, as in acute pneumonia or pleurisy.

Mania may also be accounted for from changes in the cerebro-spinal fluid. If the cerebro-spinal fluid were rapidly drawn off, the inevitable result must be convulsive movement and spasmodic movement with intense excitement up to tetanus. If it were drawn off slowly with other fluid from the blood, the result would be collapse with spasms, as in cholera. If it should accumulate in quantity, the result would be coma from pressure with some convulsive movements. If it collect into itself toxic substances, the result will vary according to the nature of the substance.

Structural Changes.—The theory applies to the explanation of structural changes in the nervous masses themselves.

Excess of fatty matter in them must reduce the oxidation. Increase of water in the substance must also lessen oxidation, induce pressure, lead to general absence of tension, and cause paralysis. Alcohol in the centres must lead to quick and temporary expansion and excitement, probably from combustion of it there, followed by extreme condensation, stupor, and exhaustion. Many times repeated, the action of alcohol in producing general palsy is a necessity in those who are unable to eliminate the substance with rapidity.

By this theory the phenomenon of alcoholic craving is naturally accounted for. If alcohol is burned in the brain fire, and feeds it, the "crave" for alcohol may well be as insatiable as we know it to be in the alcoholic stricken.

One more word. I found in experiments on cerebral oxidation that the process was very much impeded by the presence of some foreign substance. If, for instance, the carbon bisulphide were not removed, the oxidation was checked. It has been observed that workers exposed long to the vapours of carbon bisulphide become affected with a special paralysis and cerebral failure, and now we see that this phenomenon is, under the circumstances, inevitable. I name the fact because similar interruptions to cerebral oxidation may be induced by other disturbing substances, and melancholia and hypochondriasis may be traceable, ultimately, to some persistent disturbance of this nature.

When, Mr. President, I first undertook to read a lecture or paper before this society I thought only of presenting, in its bare outline, a theory the result of many years of study, and of long and arduous labour. On second thoughts I felt it best to invite you to witness the method of research thus far; firstly, in the hope of attracting your sympathy and attention towards future labours, in which what has now been rendered will be revised and extended as time and better observation may command; and secondly, with the desire of placing some details of this inquiry and the theory to which it has led me, on your archives as a natural resting place and one of reference for those who shall succeed us in the after time.

Asymmetrical Conditions met with in the Faces of the Insane ; with some Remarks on the Dissolution of Expression. By JOHN TURNER, M.B.Aberd., Senior Assistant Medical Officer, Essex Lunatic Asylum. (Illustrated).

Dr. Hughlings Jackson remarks that in every case of insanity there are negative lesions of the highest centres, which cause some paralysis, sensory or motor, or both ("Journal Mental Science," October, 1888). Evidence that this is so has been brought forward by him, principally, however, in relation to the insanity of epilepsy and post-epileptic states.

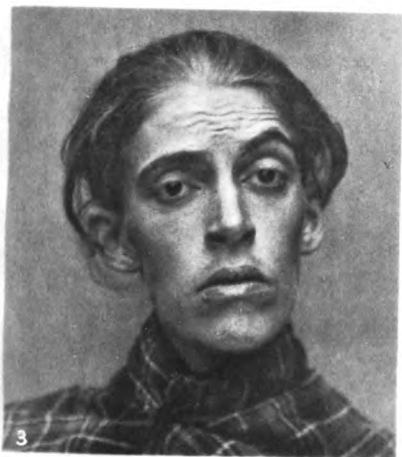
In the following pages I have considered certain asymmetrical appearances, chiefly noticed in the face, by which we can actually demonstrate the existence of paralysis in a large proportion of all cases of insanity.

The entire nervous system is generally looked upon as a purely sensori-motor apparatus. It is a highly-developed reflex mechanism, and consequently any cause which lowers its nutrition, or materially injures any part, must be followed by paralysis.

Should the higher levels of the nervous system be damaged, then, besides paralysis of some movements, we get over-action of others on the same side.

With the heaping up of centres in the evolution of the nervous system, the higher centres seem to have a controlling or inhibitory action over the lower, but perhaps they, more correctly speaking, protect, to a certain extent, the lower ones from discharging in response to every sensory stimulus. And when by disease, or any other means, the higher levels are destroyed, the lower exhibit a tendency to discharge with less powerful stimuli, or, as Dr. Hughlings Jackson says, they are "let go." Whilst fully recognizing that there are other and more active influences by which discharges from one part may interfere with or inhibit discharges from others, we may suppose this protecting influence to be somewhat as follows:

The lines of inter-communication between cells or centres become vastly more complex and numerous the higher we ascend in the nervous hierarchy; of this there can be no doubt. Given a definite stimulus, and accepting the doctrine (see Mercier, "Nervous System and Mind") that a discharge in any cell tends to spread in all directions, conveyed by pre-



ference along definite channels (nerve fibres), the amount or force of the discharge being in proportion to the diameter of the channel along which it flows, then, unless the stimulus was able to provoke a discharge of sufficient intensity to overcome the inertia of the innumerable molecules encountered in its diverse passages towards the periphery—it is quite conceivable that it should not pass eventually to the muscles to give objective evidence of its existence in the shape of movement—the force would be spent somewhere between centre and periphery (incomplete reflex act of Hughlings Jackson). But by the destruction of higher centres we can plainly see that in proportion to this destruction, the number of channels along which the force is supposed to spread itself being reduced with the same stimulus, the discharge evoked is more hemmed in, less dissipated, and is, therefore, more liable to reach the periphery.

The inhibitory nature of the action, therefore, of highest level centres consists in the fact that impressions impinging on the cells of these centres cause discharges in them, which are so dispersed through the innumerable channels of the highest level, as well as through channels conducting to lower levels, which are themselves so many fresh junctions where further dissipation of the force takes place, that even though some augmentation of force should occur *en route*, still, unless the original discharge has been of a sufficiently powerful nature to overcome all these obstacles, it does not reach the periphery to eventuate in muscular movements. But if the impression is strong enough then the discharge it evokes will be of sufficient intensity, in spite of dispersion, for some of it to reach the lowest centres, and so react on the periphery, a condition of affairs, be it observed, diametrically opposite to that which would occur if the inhibitory action of the highest centres was of a direct nature. In this latter case the infallible result of the evolution of the nervous system would be to destroy the individual, by rendering his existence impracticable.

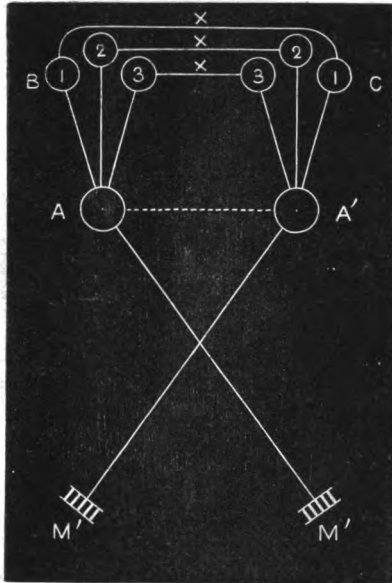
In the following pages there are collected the results of some observations on asymmetry in the action of the bilaterally associated muscles, principally of the face, this being the great focus for those movements which accompany the most intellectual and emotional of our mental states. The reason why bilaterally associated movements have been chosen is obvious—in the normal state a person may vary enormously in the strength of the unassociated move-

ments of one side or the other, according as this or that limb is exercised, and therefore a comparison of the two sides to show slight paralysis is out of the question. But with bilaterally associated movements it is different; they are, as a rule, of equal strength on each side, and thus the normal individual has equal pupils, protrudes his tongue straightly, and the lines produced on his face by the action of the muscles of expression are symmetrical. Warner states ("Physical Expression," p. 200-201), "I know of only two forms of facial expression that are not symmetrical—snarling and winking, and certainly these asymmetrical expressions are not the most intellectual."

We are, I think, apt to forget that the lines produced on our faces under the influence of emotion, etc., are nothing but the expression of muscle contraction due to the discharge of nervous energy, and if in viewing a face we meet with a number of asymmetrical lines, *e.g.*, on the forehead, with contraction of the occipito-frontalis, it can only mean one thing, *viz.*, that there is an unequal discharge of nervous energy from the two correlated centres, which enervate the two halves of the muscle. The absence of contraction in the muscles of expression on one side of the face with certain emotional states is just as much an evidence of paralysis as the obliteration of the lines produced on one side of the face when one facial nerve, or its nucleus of origin, is destroyed; but in the latter case, the lesion being in the fundamental centre, or between it and the periphery, there can be no more movement possible for the muscle or muscles enervated therefrom, whereas in the former case, although some movements are paralyzed, others are possible.

Any cause which interferes with the nutrition of the cells more on one side than the other, or in any way causes a lessened discharge in response to equal stimuli, will tend to produce asymmetry. The disturbance may be only what is termed functional, and therefore not necessarily fixed; thus at one time certain centres may suffer, at another time others, or again the cause may be removed entirely, and the condition will then disappear. Consequently, the asymmetry will not in all cases be fixed to one side, nor shall we expect to meet with it in every case of insanity, if, for example, both hemispheres equally share in the process of dissolution, in which case, although there may be much more paralysis of a greater number of movements, yet it will not display itself in the form of asymmetry. I believe, however, that it is

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For explanation, see p. 21.

DESCRIPTION OF PLATE.

- FIG. 1.—Asymmetry of expression in the lower part of the face in the case of an imbecile.
- FIG. 2.—A case of acute melancholia with visceral delusions.
- FIG. 3.—Asymmetry in the forehead, assumed with certain emotional states, in a young phthisical woman.
- FIG. 4.—Another instance of asymmetry in the forehead, in a case of melancholia.
- FIG. 5.—A case of acute melancholia.
- FIG. 6.—Asymmetry of the forehead, in a case of chronic insanity.

comparatively rare for both hemispheres to be equally affected by disease; usually one or the other, or certain parts of one or the other, are more implicated; at any rate this appears to be so in those forms of insanity which have a definite pathological anatomy.

Neither must we expect asymmetry of expression to be peculiar to insanity; inequality in the size of the pupils occurs comparatively frequently in others than the inmates of asylums, and I have met with many and marked instances of asymmetry in the lines produced by the contraction of the muscles of expression; but although I have no tabulated results as to these cases, I am certain that they are more frequently to be met with in nervous, excitable people, in whom an unstable condition of the higher nervous centres exists. I have seen good instances in those who come to visit their insane relatives here; in hysterical girls, religious fanatics, and rarely, if ever, in robust, healthy individuals.

Some persons can voluntarily produce a most marked asymmetrical condition in the contraction of the muscles of expression. I have lately met with one who could contract the corrugator supercillii and outer half of the occipitofrontalis on the left side, but he was quite unable to contract the similar muscles on the right side only. In his case there was a strong tendency for the asymmetrical condition to become symmetrical; he had to direct his whole attention on the contracting muscles, and if he was made to smile, or in any other way his attention was diverted from the act, then the contraction became equally marked on both sides. There was evidently here some regulation of the nerve force required to produce the muscular contraction on one side only, and the fact that when one centre was discharging there was such a marked tendency for the similar centre on the other side to discharge, seems to indicate the existence of channels of communication between similar centres of both sides.

Bilaterally associated movements are probably the result in most cases of simultaneous stimulation of similar motor centres in each hemisphere, these centres being probably connected with one another by callosal fibres.

The annexed diagram will serve to illustrate in a rough way the condition of affairs that may be supposed to exist for the production of symmetrical contraction:—

A A¹ are the fundamental nerve centres for the muscles M M¹. B¹ B² B³ C¹ C² C³ are a few of the higher centres

representing more special movements connected with one another probably by the callosal fibres. In the normal state of affairs the higher centres on one side are simultaneously and equally stimulated under certain conditions, and being themselves similar, they respond by discharging and producing contractions in the muscles of the two sides M and M^1 of equal intensity. But supposing one of the higher centres is destroyed on one side; then with similar sensory impressions impinging on the two sides, as before, we should only get contraction in the muscle or muscles of the side on which the lesion is supposed to exist. Of course it is only with the movements associated with certain emotional states, or definite sensory impressions, that the asymmetry would be produced; stimulation of the other higher centres, or of the fundamental centres lower down, would still be capable of producing symmetrical action.

As has been shown before (see p. 19) when higher centres are destroyed the lower centres are more liable to discharge with feeble stimulation, sufficiently powerfully to produce their effects on the periphery as muscular contraction, and hence it is important to bear in mind that in some conditions of deranged nervous system where the dissolution is partial and more confined to one side (the morbid process itself possibly acting as stimulus), that we get contraction of the muscles on the side *opposite* to that in which the lesion is situated. These contractions are, however, more continual than are the one-sided contractions called up by transient stimulation of the higher motor centres whose discharge accompanies certain emotional or intellectual states, and which as before remarked appear on the *same* side as that in which the lesion exists, be it functional or organic.

With these preliminary remarks, I shall now proceed to a more detailed examination of the asymmetrical symptoms met with in the face, taking first the inequality in the size of the pupils, then lateral deviation of the tongue, and lastly the muscles of expression themselves.

The Pupils.—The inequality in the size of the pupils referred to here is unaccompanied by anomalies of light-reflex, or accommodation for near objects, etc., and this variety must be kept distinct from those cases in which these anomalies also are met with, as in general paralysis, where frequently gross lesions (fine granulations) may be detected in the neighbourhood (*iter*) of the nuclei of light-reflex,

accommodation, etc. Of course all peripheral lesions, opacities of cornea, etc., have also been excluded.

It has long been noted that the pupils are of unequal size in many cases of insanity apart from general paralysis. Griesinger refers to it (p. 105, etc., "N. S. S. Trans.") as follows: "Inequality of the pupils is seen most frequently in paralytic dementia, more seldom in simple cases of mania or melancholia, and here also it is most common in chronic, slowly progressing, and hopeless cases. In certain cases the inequality appears for the first time during convalescence."

In operations on the brain (human and animal), and in disease or injury to the cerebrum, inequality in the size of the pupils is frequently noted. In the following cases it is seen that injury or disturbance of the cells over a very wide area of the cerebrum influences the size of the pupils.

(1). Excitation of the whole of the angular gyrus produced amongst other symptoms "contraction of the pupils." (Ferrier, "See Brain," Vol. xi., p. 2.)

Schäfer (in the same article) finds that the changes in the pupils, which are sometimes observed accompanying the movements of the eyes, are not constant. He says this in reference to electrical stimulation of the occipital lobes as well as of the angular gyri. He goes on to say, "I have occasionally obtained from stimulation, on or near the quadrate lobe, marked contraction of the pupils, such as is produced when a strong light is thrown directly into the eye; more usually, however, the movements, whatever the part stimulated, are accompanied by dilatation of the pupils."

In a monkey, which had both occipital lobes destroyed by the cautery, the pupils were dilated; in another, in which both occipital lobes were scooped out, the pupils were smallish. (Ferrier, "Brain," Vol. xi., p. 25.)

(2). Electrical irritation of the upper two-thirds of the superior temporal convolution produced dilatation of the pupils. (Ferrier.)

(3). In the motor region, results of stimulation, etc., are less contradictory, and it is with this region that we are most directly concerned, for the evidence of morbid anatomy goes to show that the brunt of disease in insanity falls on the præfrontal and frontal lobes* (including probably the tips of the temporal lobes).

* In the "Journal of Mental Science," January, 1890, Dr. F. St. John Bullen states that atrophy of the brain was present in 67.5 per cent. of the cases. More or less of the entirety of the brain was affected in 36.7 per cent.; but in

Ferrier and Schäfer and other observers all find that stimulation of the posterior parts of the first and second frontals produces dilatation of the pupils. As regards extirpation of these parts, Ferrier, in his Croonian Lectures (see "B. M. J.," July 12th, 1890), states: "I have recently extirpated practically the whole of the left frontal region," and he finds that amongst other symptoms the right pupil was distinctly smaller than the left.

Thus, as regards the frontal and præfrontal lobes, it seems to be agreed that stimulation (of certain parts at least) produces dilatation of the pupils; and destruction on one side, contraction of the opposite pupil.

As regards disease, tumours of the temporal lobes have produced dilatation of the opposite pupil ("Brain," Vol. xii., p. 395). Contusion and bruising of right temporal tip and third frontal has been recorded, when the left pupil was strongly contracted and the right widely dilated. (Isaac Ott, "Brain," Vol. xi., p. 434.) In a case recorded by Watson Cheyne ("British Medical Journal," February 1st, 1890)—abscess of left temporal lobe—the pupils were equal, but when the patient was fully under chloroform the right became contracted, and the left remained in a state of medium dilatation; after recovery from chloroform the pupils became equal again.

Dr. Batty Tuke ("British Medical Journal," January 4th, 1891) records the case of a general paralytic with unequal pupils, the left being the larger as a rule, who was trephined on the right side just in front of the parietal eminence, leaving an aperture into which the dura mater bulged, indicating probably compression; the dura mater was *not* punctured. After recovery from the chloroform no change in the inequality of the pupils was noted, but on the following morning they were almost equal, and remained so some time. From this case it would appear as though the general compression on the right half of the cerebrum produced contraction in the opposite pupil, and that when the compression was lessened the contraction of the opposite pupil became less.

the cases where there were partial areas affected 46.0 per cent. show atrophy of the fronto-parietal lobes, or nearly one-half. The frontal lobes *alone* were affected in one-ninth, temporo-sphenoidal lobes in only two per cent., and the occipitals in 1.5 per cent. In 322 post-mortem examinations I found general atrophy in 53 per cent. of the cases, and in the cases where there was partial atrophy the fronto-parietal lobes were affected in 15 per cent. Temporal was not quite one per cent., and occipital not at all. The frontal lobes alone were affected in 8 per cent.

I might quote many more cases of disease of the cortex and cerebrum in which the size of the pupils has been affected, but they are of so conflicting a nature that I refrain from doing so. The only thing that seems tolerably certain is the fact that stimulating lesions of parts of the præfrontal and frontal lobes produce dilatation of the pupils, and destructive lesions contraction.

For reasons stated previously (p. 22) I shall, when necessary, consider the dilated pupil, or larger pupil, as on the side opposite to the affected hemisphere. In small pupils that the contraction is not caused by paralysis of the dilator is shown when the pupils dilate somewhat when shaded.

As regards the conditions by which the equality in the size of the pupils is normally maintained, even if there be an adjusting mechanism between the nuclei of the third nerves, yet the inequality produced by lesions limited to the cortex and frequently seen in hysteria and early insanity are facts which indicate that this lower adjusting mechanism is not sufficient of itself to overcome any marked difference in the supply of nerve force from the hemispheres.

In 411 insane females, the great majority of whom were recent cases, that is under one year's duration (excluding general paralytics), inequality of pupils was noted in 105 instances, or 25 per cent. The right pupil was the larger in 58 cases and the left in 52. The reason why the totals of the right and left together are rather more (5) than the first total is because in a few cases the pupils were sometimes unequal, first on one side and then on the other, and these have been added to both left and right.

I have also collected another series of cases, which to a small extent include some of the before mentioned 411, but which are mostly composed of chronic cases; in these also the general paralytics are excluded. In these 396 females there was found to be inequality of the pupils in 140, or 35 per cent.; the right was the larger in 82, the left in 64 cases.

In both cases it will be noticed that the right pupil is more frequently the larger, the difference being very slight in the recent cases, more marked in the chronic. In 62 male general paralytics, some years ago, I noticed inequality of the pupils in 24 cases, or 38 per cent.; in these the right was the larger in 12, and the left in the same number.

In 39 female general paralytics whom I have had under very constant observation I found inequality of the pupils at one time or another during the disease in 23 instances, or

59 per cent. In 15 cases the right was the larger, and in 11 the left.

Bevan Lewis (see "Text Book," p. 269) found in 44 cases of general paralysis inequality of pupils in 27, or 61 per cent. The right pupil was the larger in 16 cases, the left in 11.

I am inclined to think that if my male cases had been more closely observed the percentage of 38 would have been raised, but I have not been able to determine this.

Amongst the general paralytics therefore the right is most frequently the larger, but the difference is very slight.

In this disease it is not uncommon for the pupils to first appear unequal at the latter end of the disease, or on the other hand, for cases in which the pupils have formerly been unequal to now become equal. During the seizures so characteristic of general paralysis, the most opposite conditions of pupils may result. They may remain equal, or the dilatation may occur on the same side as the presumed irritative lesion of the cortex, or the reverse.

It is also not unusual to find the pupils first become unequal (general paralysis excluded) shortly before death, especially in cases of rapid progress, and where this occurs it may sometimes be a valuable aid in the diagnosis as to which hemisphere is most implicated. Thus taking the following case of a female, aged 24, whose pupils were noted to be equal and enormously dilated. Five days before death the right pupil was noted to be distinctly the larger, both still dilated. Her death was undoubtedly due to degenerative brain changes, and at the post-mortem there was marked atrophy of the convolutions of the cerebrum, the lateral ventricles were dilated and full of fluid, the meninges adherent over some little patches on the left parietal lobe, but over a much greater extent on the right, in the situation of the parietal lobe, including the angular gyrus. It seems likely that in this case the pressure produced by fluid in the ventricles was the immediate cause of the inequality of the pupils, acting of course equally on both sides of the cerebrum, the centres on one side of which being destroyed, or rendered less excitable than those on the other, in the parts affected by the disease.

To sum up, we see that inequality of the pupils is present in one-fourth of the cases of insanity on admission, and that in chronic cases it becomes more common, and that it is most common in general paralysis. At

present, beyond the fact that the inequality indicates paralysis (it may be only temporary) of some part or parts, probably of the cerebrum, we can say nothing very definite as to which side is implicated in the production of the inequality, and much less what precise locality in one hemisphere is at fault, that is from a consideration of the pupils alone, but when with their information we combine that from other sources, such as deviation from the straight line of the tongue when protruded, and asymmetry in the action of the muscles of expression, then it seems probable that in some cases at least we are able to indicate which side of the cerebrum is the more disordered.

The Tongue.—It is very evident, when the tongue is protruded to one side or the other, on which side the paralysis is; there is not the same uncertainty as when the pupils are unequal to determine which side is the weaker. In all my cases, except one doubtful one, where the tongue has been deflected from the median line on protrusion, it has remained constantly deflected to the same side. It is not deflected sometimes to one side and sometimes to the other in the same case, although it may occasionally or ultimately be again protruded straightly.

In 306 female cases, recent admissions, the tongue, when protruded, was deflected from the middle line in 80 instances, or 24 per cent. Thus we see that there is evidence of paralysis in the muscles which protrude the tongue in about the same proportion as in the muscles which control the size of the pupils.

In these cases the tongue was deflected to the right in 38, and to the left in 43 instances. One sees in some cases marked deviation of the tongue from the straight line, which passes away as convalescence is established, but this is not invariably the case.

Now in these cases where the tongue deviates from the middle line on protrusion, whilst this condition lasts, it is, I believe, significant of a dissolution of some parts of the nervous system of much greater depth than is required to produce asymmetry in the action of the muscles of expression, for although the muscles of the tongue in their connections with speech are represented high up in the nervous system and are liable to be frequently implicated in the movements associated with intellectual acts (hence thickness and other disorders of speech occasioned by paralysis of some of these

movements), yet, though identically the same muscles may be concerned in protruding the organ, under these circumstances they will display no weakness.

Therefore, when we get the tongue deflected we must suppose that there is some disorder or weakness on one side or the other of the more fundamental muscle centres of this organ.

The Muscles of Expression.—The muscles with which I am principally concerned are, in the upper zone of the face, the occipito-frontalis and corrugator supercili, and in the lower, the levator labii superioris and the zygomatics.

It is a significant fact that in studying asymmetrical action in the faces of fresh admissions, and which include a very small proportion of congenital cases, we find that the upper zone displays this condition very much more frequently than the lower zone (in the proportion of 3·7 to 1.) Among idiots, however, and indeed in all cases of congenital weak-mindedness, it is the lower zone which most frequently is affected. It is patent to even the most casual observer that this portion of the face is most frequently called into play in the expression of the emotions in these cases. The grin with undue retraction and elevation of the upper lip displaying the teeth and gums is almost a pathognomonic sign of imbecility. Dr. Warner, in his work on "Physical Expression" (p. 199), states: "The expression of mental anxiety may be contrasted with that of bodily suffering. Mental anxiety is expressed mainly in the upper zone of the face. Contraction of the corrugators makes vertical furrows between the eyebrows. In the expression of pain originating in the body or limbs we see the signs mainly in the lower zone, the angles of the mouth are drawn down. In the more animal-like causes of pain of mind—as the loss of a child, wounding the maternal instinct—it is the angles of the mouth that are depressed. Some years after the loss of a child a reference to it causes corrugation. The memory of the child has become idealized, the suffering is now more mental, less animal-like." Anyone who has studied physiognomy at all, must, I think, accede to the truth of these statements. And I have been impressed whilst observing the faces of the female insane by the frequency with which the muscles of expression of the lower parts of the face are called into play under emotional states, which would in the sane result in expression more confined to the muscles of the upper part, or, to paraphrase Warner's

remarks, their expressions are more animal-like, less mental. The woman depicted in Fig. 5 had a delusion that her child was dead, and whenever any reference was made to this subject her face assumed the expression seen in the photograph. At times she complained of great pain on pressure of her abdomen, and her left leg was swollen, œdematous, and painful; if her abdomen was pressed or her leg touched, her face assumed exactly the same expression as was called forth by allusion to her child. It began by elevation and retraction of the left nostril and left-half of upper lip, causing a deep naso-labial fold to appear on this side; it then gradually spread to the other muscles. Fig. 2 shows the face of a woman who had delusions respecting her viscera. She thought her tongue was wasting, and that she had no "guts" and was full of maggots. She was acutely depressed, and spent all her time bemoaning her miserable condition. I repeatedly asked her whether her disordered interior was causing her any bodily pain, and she always denied that it did.

The expressions assumed by both these women was more marked in the lower parts of the face. They both accompanied states of great mental anguish, and partook far more of the character of expressions accompanying bodily pain, or peevishness, as expressed ordinarily by children.

They may be taken as examples of the dissolution of expression as seen in recent cases of insanity. It is, however, in cases of rapid dementia, as in general paralysis, that one meets with the most striking instances of these dissolutions of expression. Gradually, but surely, the facial muscles in these patients lose their power of expressing emotions in their accustomed manner. As with their limbs, so it is with their faces—in the former they have lost the power of their most highly educated actions, and in the latter it is the finer and more delicate shades of expression which first suffer. Their facial muscles still have the power of contracting, and do so frequently and forcibly, but their actions do not harmonize—there is discordant action.

(To be continued.)

The Diathesis of General Paralysis. By G. R. WILSON, M.B., C.M., Assistant Physician, Royal Edinburgh Asylum, Morningside, Edinburgh.

Ten years ago Mr. Jonathan Hutchinson said that the description of a fresh diathesis was almost as easy as the discovery of a new nerve centre or the revelation of a new bacterium. Yet no new diathesis, so far as I know, has since then become generally recognized in our special branch of medicine. To-day the neurotic diathesis stands as god-mother to a large family of diseases, and little has been done to differentiate their ætiology, or to trace their genealogy. On the contrary there seems to be a tendency to exaggerate the importance of environment in the ætiology of many of the diseases of the nervous system, and to ignore the hereditary factor. Especially is this the case with general paralysis. Excepting the writings of a few, a course of reading on the ætiology of general paralysis would incline one to believe that there is no evil under the sun—from syphilis to the cessation of lactation—that may not sufficiently account for the onset of that disease. It seems almost as if the observers had first tried to find an acknowledged *raison d'être*, and, failing in that, had adduced as “cause” anything in the recent history of the patient at all out of the common, or which had ranked as important in the estimation of his friends.

This paper is not meant to originate anything on its subject, but rather to put in a more definite form an induction hinted at by many authorities, and to assign to the two sets of ætiological factors what seems to be their proper importance. To say that syphilis is a cause of general paralysis seems to me as untrue as to say that exposure to cold causes acute rheumatism, or that a blow on the hip sufficiently accounts for morbus coxarius. My object is to emphasize the importance of the inherited tendencies of the individual, and to put forward some arguments in favour of the hypothesis that “general paralytics are born, not made.” Perhaps we may advance to the recognition of a general paralytic diathesis—a structural proclivity to the disease, the inherited tendency of certain types of cerebral constitution. A glance at one or two of the most commonly assigned causes of general paralysis raises important questions seeming to demand some such solution.

Sexual excess is believed by many authorities to be a common cause of general paralysis. If that be so, what is it

that determines that sexual excess should be followed in some cases by neurasthenia only, in others by melancholia, and in comparatively few by general paralysis? And, again, why do confirmed masturbators almost never become general paralytics? In inveterate masturbation there is all the exhaustion of extreme sexual excess, and, in addition, the worry of a bad conscience and of a habit to be concealed. And the fact that masturbators become melancholic, maniacal, or delusional, but very rarely general paralytics, signifies surely that sexual excess and worry will not produce the disease unless the individual be of a peculiar diathesis. As a matter of fact it will be found that general paralytics, as a rule, have had too much self-respect and common-sense to become the victims of a sexual perversion, though not sufficient respect for society to be self-controlled.

With *alcoholic excess* the same question arises. Why should abuse of alcohol produce alcoholic insanity in one case and general paralysis in another? And, in both, is not the constitutional proclivity the important factor? One might learn something by inquiring from what manner of craving the two patients came to be alcoholic, the form of drinking preferred, and the action of the drug. It is very remarkable how many general paralytics have had alcoholic parents—as large a percentage, I believe, as of patients suffering from alcoholic insanity. Unfortunately the habits of half a century ago, in Scotland at all events, make one prepared for almost anything in the way of alcoholic parentage in the middle-aged patients of to-day in all kinds of insanity. But there are large differences in the relation of these two classes of patients to alcoholic excess. On inquiry we find that one class—those suffering from alcoholic insanity—have in many cases, like dipsomaniacs, become alcoholic in obedience to a congenital predisposition. They have had a cerebral mechanism with an “organic desire” for alcoholic stimulation which they have not had self-control enough to withstand. And there is also a peculiar liability to the immediate and remote cerebral effects of the stimulant. General paralytics, on the other hand, have, as a rule, no such congenital alcoholic predisposition. What craving they have is generally a craving acquired from previous excess—an excess which is often the outcome of more sane characteristics, such as strong social instincts and the love of good-fellowship. And the immediate effect of alcohol on their cerebral mechanism is also different, being very much the effect that it has on healthy brains, and not an unusual effect as in the case of

neurotic patients. These distinctions are not invariable. There are many mixed cases. For example, there are cases such as those reported by Magnam, in whom general paralysis followed chronic alcoholism after several attacks of alcoholic insanity, pointing to diathetic proclivities in two directions. But such cases are exceptional, and, on the whole, the contrast between the two classes of patients is strong enough to indicate a distinct difference in inherited liabilities.

Similarly we might criticise the ætiological importance of syphilis, sunstroke, worry, excitement, prolonged fatigue, and all the other "causes" of general paralysis. Their name is legion, and with each of them one may well ask if it is at all adequate to explain the disease.

Such a line of argument may be taken as a plea for a diathesis for almost any form of disease. The facts that make the case exceptional for general paralysis are the enormous number and variety of assigned causes and the absence of any assignable cause in some cases; the trifling nature of many of these causes compared with the fatally progressive nature of the disease, so that one wonders if such conditions can possibly be held to account for the overthrow of a human brain were it of anything like a normal constitution; and, lastly, the extreme rarity of the disease compared with the frequency with which we are all exposed to one or several of the acknowledged causes. In many cases one is bound to suspect that the assigned causes have had very little importance in the production of the disease—are accidents, not essentials. At all events, I think it will be admitted that we now know enough of the exciting causes of general paralysis to guard against them in any individual case if only we knew the kind of constitution likely to be attacked and the stock from which it springs. And it is in view of the possible prevention of the disease—the only hopeful treatment, as it seems at present—that it appears important to turn our attention from the immediate ætiology to learn something of the pedigree of the disease.

Another argument for the importance of the hereditary factor in general paralysis is the occurrence of the disease in very young subjects in whom the usual conditions for its development have not been fulfilled. Many cases of precocious general paralysis have been recorded, several of them about, or even before, the age of puberty. Within the last year two such cases, both of them girls, have been treated at Morning-side, and have been recorded by Dr. Clouston as illustrating one of the "Neuroses of Development" in his *Morisonian*

lectures of last year (see "Edin. Med. Journal," also published separately). We commonly associate general paralysis with the age of mature intelligence, and with the complex mechanism of an adult cerebrum correspondent to a busy and responsible life, and reacting to heavy stresses. The interest of these young cases lies in the absence of these conditions. In most of them also there has been a marked deviation from what one usually regards as a typical symptomatic progress—a deviation to be expected as a manifestation of the disease in brains arrested in development. Nor do the accounts of the previous histories of these children contain, as a rule, any remarkable experience which might be held to account for the onset of the malady. Blows on the head, the worry incidental to parental discipline, the strain of reproductive development are stresses of universal experience; and we turn, therefore, to a study of the inherited tendencies in such cases to find the explanation of their occurrence.

But the most conclusive argument for a general paralytic diathesis comes from a fairly large class of cases in which the disease is manifestly a family affair. We have had several cases of the kind at Morningside.

Within recent years two brothers have been treated at Morningside, both of them, undoubtedly, suffering from general paralysis. Their father was alcoholic and died from cerebral apoplexy; their mother, a highly educated woman of violent temper, was also alcoholic, and had to be placed in a home for inebriates. In one of them the disease was attributed to sunstroke. They were men of good physique, keen, ambitious, and passionate, both of them alcoholic and one at least excessively sexual. They followed the same occupation—a very trying and exciting kind of life—and were conspicuously successful. And both of them broke down under general paralysis between the ages of 40 and 45.

The case of A. B., who recently died here, is another case in point. He came of a stock in which there have been numerous breakdowns from neuroses of the higher levels. His father was a shrewd, steady, successful business man, his mother an energetic, pious housewife. He had a full cousin by both sides, who, I believe, died in the Crichton Institution, Dumfries. The fathers were not strikingly alike, but the resemblance between the mothers was a matter of general remark. Almost exactly at the same age a busy, immoral life culminated in both of these men in the onset of general paralysis.

And, lastly, there is the remarkable case recorded by Dr.

Savage and Dr. Clouston of general paralysis occurring in twin brothers. In his text-book of mental diseases Dr. Clouston gives the following account of their case:—"Lately I had a general paralytic, and Dr. Savage has his twin brother, there being a strong family history of insanity, both men of the same temperament and disposition, viz., sanguine and keen, both being of very active habits, both indulging to great excess in wine and women, both following a similar occupation—an exciting one—and both being affected by the disease within a year of one another. Such a clinical history has never been put on record before, and it shows conclusively that heredity may predispose to the disease." (See also "Journal of Mental Science," April, 1888.)

These facts seem to me to be conclusively in favour of a general paralytic diathesis. Of the nature and mode of development of that morbid proclivity we cannot at present speak definitely. The hereditary factors which determine it probably cannot be recognized until more complete records of family diseases are habitually made by the general public. But it is obviously unscientific to minimize the importance of heredity on account of the extreme rarity of general paralysis in successive generations of the same family. Doubtless the disease has allies which would be found commonly enough if only we knew what to recognize as such. It may be that in some cases there is a far-reaching pedigree. The vicious strain, which culminates in this morbid proclivity, may have run through many generations, each of them having peculiarities in cerebral organization marking the stages in the evolution of the disease. More often, it may be, the record of its descent would be short. The evil tendency might evolve rapidly as the outcome of a pernicious environment or a modification by perverted function. In any case the general paralytic individual commonly exhibits a preference for mating with a certain female type which seems calculated to modify considerably his children's morbid tendencies, and this may in part explain its non-transmission as such. Further, the type of constitution and the mode of life characteristic of general paralytics are apt to mark the beginning of a degeneration for the race as well as for the individual, and their children are little likely to be of a type favourable for the development of a disease which commonly needs a strongly developed organism for its occurrence.

Whatever the structural basis of the general paralytic diathesis may be, its recognition would put the disease on a

satisfactory basis, at least so far as ætiology is concerned. In this, as in all hereditarily determined diseases, the relative importance of the two factors—the predisposing diathesis and the exciting cause—will be found to be far different for different individuals. In some cases no adequate exciting cause can be adduced, and in them we must fall back on a particularly strong diathetic element. Notably, I think, the very young general paralytics form such a class, and now and then one meets with adult cases of men who have lived uneventful, unexciting lives, and whose environment has been very much what it is with all of us. On the other hand, there are many cases—a much larger number—in whose history there are incidents enough to furnish adequate exciting causes for a whole generation of general paralytics. The life record of some of these men reads like a novel by Charles Lever—brimful of incident, stress, and struggle. Such cases, I think, too commonly furnish our idea of the typical history and symptomatology of the disease.

With a view to ascertain something definite as an indication of the morbid proclivity, I have gone more or less minutely into the life-histories of a large number of undoubted general paralytics. The inquiry has satisfied me that there is a fairly constant general paralytic character. And, again, the frequency of this character in our cases here seems to me another proof that they were of a common diathesis. My observations were largely made on the poorer classes of general paralytics—chiefly the artisan class—and exclusively in the male department. I suppose it may be regarded as in part characteristic of what used to be called the “sanguine temperament,” of old regarded as predisposing to the disease. It may be said that this general paralytic character is such as is commonly met with in patients of the general paralytic diathesis, but in whom the proclivity is not so strong as to dispense with exciting causes; and of course the diathesis is something apart from the character. All that one can say of the latter is that it frequently accompanies the morbid proclivity in the tissues, and may be regarded as a manifestation of it, just as the hepatic diathesis is often manifested in cynicism. In other words, persons who inherit a proclivity to this progressive degeneration often inherit also the physical basis of this keen character. In the words of Mr. Jonathan Hutchinson, the character may be regarded as a “revealing symptom.”

The following is a sketch of the important characteristics commonly associated in general paralytics; and while, as in all

else, a perfectly typical specimen is rare, yet, if we lay aside mannerisms and other superficialities, a large number of patients will, I think, be found to conform to the type in its more fundamental characteristics.

The General Paralytic Character.

Of the childhood and early life-history of general paralytics I have not full information to record; my authority has so often been the patient's wife. But it is interesting to find that many of them have been members of considerable or large families, as was the fashion of previous generations. And another fact which may throw light on their character is that, not infrequently, I have been told that one or both parents lived rather too freely.

At school the patients, whose history I have got, have been active and fairly intelligent, but not remarkable either in the class-room or the field; though at home they may have been regarded as the smart ones of the family. Sometimes the scantiness of his education has made the youth start life badly handicapped, and in adolescence he has overworked in order to come up with his neighbours; more often I have been told that he left school rather early, choosing an occupation for himself, and entering on it with some determination and ambition.

Nothing, as a rule, can be learned from the occupation of the patient. It is the man's manner of living and not his sphere of life that is of importance. He will live like a general paralytic whether he be a mason's labourer or a barrister. As often as not I have been told that, his first choice disappointing him, he has changed it for some other which better suited his tastes and ambition.

This impatient restlessness which often characterizes general paralytics seems to me to throw some light on the distribution of the disease. It appears that, even in well-advanced races, there are large numbers who have not attained that degree of civilization at which the disease occurs, and that the complex environment of city life is almost essential for its development. In considering these facts it is well to bear in mind that, in the rush from country to town, which is characteristic of our money-making age, general paralytics are not the kind of men to sit and watch the stream go by. And, while it is true that Irishmen, for example, seem to need the stress of town-life in order to the development of the disease, it is also true to say that individuals constitutionally prone to it are generally men of a

restless spirit that will not brook the narrow sphere which a hum-drum country life affords.

As to physique, the records I have seem to contradict the idea that there is anything like a constant physical type among the victims of general paralysis. On the contrary, they vary much in appearance—in height, weight, build, pigmentation, etc.—in accordance, I suppose, with their racial descent. Short of a typical physique, however, there are certain physical characteristics almost universal among general paralytics. As a rule they are well nourished, and not of a neurotic, phthisical, or otherwise delicate appearance. On the contrary, they are spoken of as men of “strong constitutions,” full-blooded and vigorous, well-favoured men. In short, they are good animals. Their neuro-muscular constitution is such as makes them capable men in situations requiring good nerve, a quick reaction time, and great powers of endurance under heavy strains. After many specific inquiries I have found it an almost invariable rule that the general paralytic is not of a conspicuously athletic constitution. On the contrary, many of them have almost entirely eschewed sports of all kinds. Certainly none of our cases here have been of the kind who *must* play, none of them dominated by the joys of asserting athletic superiority or by the delights of elaborate motor accomplishments. In considering such a statement, it must be borne in mind that my observations were made chiefly, though not entirely, on patients of the artisan class.

An inquiry into the life-purpose of these men brings out an important and almost constant characteristic. Their view of life is rarely, if ever, that of men commonly called “good.” It is essentially a selfish, non-moral view. That is to say, they are not men of persistently altruistic purpose. They are described as men who “would do nobody a bad turn,” “kind-hearted,” “generous,” “hard-working,” sometimes even “conscientious.” But none of the men whose history I have got have been men with any religious interests or of any great moral ambition. The characteristic general paralytic is a man with a large belief in himself, restless, ambitious, and with a relentless desire for the good things of this life. He is at bottom an egotist, with a great capacity for amusement, and incapable of any constant sacrifice even for those nearest him.

Alongside of the restlessness, the energy, and the capacity for enjoyment I should place an unusually strong sexual nisis as one of the fundamental characteristics of these patients. Given a general paralytic, and the making and marring of

more than one or two of his lady friends may be taken for granted. Much more even than with most men is it true that a woman is at the bottom of the interesting things in his life. He was "secretly married to a prostitute in Paris," "he made a foolish marriage with a pretty girl much below him in station," or "he was an awful man for women"—such are the tales one hears when the informant is not the patient's wife. Whether he has had syphilis or not to add to the exciting causes of his disease seems to be largely a matter of accident; if not, it may, as a rule, be taken for granted that it was only "because he was lucky," and not that he never risked it. In some cases, of course, one gets the history of married excess instead of promiscuous indiscretions. So invariable is this sexual factor, and so constant the sexual choice, that one cannot infrequently pick out the "G.P. wife" in the visitors' room. Dr. Savage says he has been "struck with the frequency of the occurrence of general paralysis in the husbands of some women of voluptuous physique," and they possess other qualities besides the "voluptuous physique" that are consonant with the husband's tastes. Their sense of the moral obligations of life is usually not too exacting, and their tastes and feelings not too refined to suit the husband, while they bring him an acceptable love of social pleasures, a capacity for making things "go," and a sufficient amount of ambition to match his own. It is often remarkable how well these wives bear up under the distressing realization that the patient is fatally diseased. It is almost unnecessary to add that there are many exceptions to such a type. As a further manifestation of the strong reproductive instinct in these men one may mention that they incline to adornment of the person such as is favourable in sexual selection with the women of their class. The patient A. B., whose case I have already quoted, was a man of the middle-class of society, and was described to me by a colleague as the "best-dressed gentleman he had seen admitted to Morningside," and this characteristic has often been observed by the patient's wife or friends.

In close relation to the strongly-developed reproductive instinct the general social instincts are, as a rule, well marked in the typical general paralytic. The desire to be considered a "good fellow" is on a par with his desire for social advancement. Of one patient an Irish acquaintance informed me that "the praise of the populace was the apple of his eye." And many of the patients' wives have told me somewhat bitterly that the husband's good qualities were conspicuous in society

and not at home ; but they have this compensatory advantage, that the husband takes pains to make his wife cut a good figure in society. Impulsively generous, good-natured, and generally companionable, the general paralytic, as a rule, has many admiring acquaintances, and I have been struck with the frequency with which I have been told that singing, and still oftener reciting, has been one of the patient's accomplishments—an interesting fact in view of the consideration how early the vocal and articulatory mechanism gives way in the course of the disease. I have already remarked that in many cases the social habits of the patient account for his alcoholic excess rather than any congenital alcoholic predisposition ; and it seems in place to repeat that his reaction to the stimulant is not an eccentric one, but very much what it is in the case of healthy brains.

Dr. Clouston sometimes says that "general paralysis is, as a rule, a certificate of general intelligence." And it is undoubtedly the case that in this respect the general paralytic is usually above the average, with a mind for practical affairs rather than of a philosophic or speculative bent. His view of debatable questions is generally the conventional one, and he is commonly impatient of unpractical eccentricities.

In temper he is described as "having it soon over," though sometimes passionate. His "spirits" are generally good, and he inclines to a hopeful view of things, born of a firm belief in his own capabilities. He is not notably emotional in the sense of defective control ; his fits of depression are soon over, but he is not always gay, nor of a sense of humour above the average.

Such, in the rough, are the fundamental characteristics frequently, though by no means invariably, associated in the victims of general paralysis. Regarded as a whole, the type is characteristic as much in what it lacks as in what it possesses. General intelligence and common sense, ambition and energy, sociability and a large capacity for enjoyment, a firm belief in oneself and a preference for handsome women are all eminently sane characteristics according to our present standard. On the other hand, some admirable qualities are notably wanting—qualities which make for a higher control to temper the tendency to excess, the selfishness, and the restlessness. I cannot refrain from mentioning Mr. R. L. Stevenson's beautifully drawn character of "Will of the Mill" as a typical contrast to these restless general paralytics, exhibiting some of their best qualities and many more besides, which they conspicuously lack.

Finally, I quote a case whose ætiology is complicated and interesting, and seems to exemplify well the conclusions in point.

C. D. was admitted into Morningside Asylum, at the age of 35, with unmistakable symptoms of general paralysis. He was one of a family of eight, of hard-working, steady parents. His education was poor, and he left school early in life, of his own accord, choosing the trade of a plumber, entering on his work and persevering in it with great energy and industry. As a young man he was prepossessing in appearance, ruddy in complexion, with fair hair and blue eyes, of stature below the average, but well-nourished and strong. He was always a favourite with the ladies and fond of their society. In his youth he was fast-living—given to excess with wine and women. After his marriage, at the age of 26, he was less alcoholic, but continued his sexual excess. His wife did not correspond to the type of physique alluded to above, but in character she was keen and social. He was always a busy man and unrestful, never happy in idleness. He was a very capable workman, and “often preferred by his employers to finish a difficult job.” About three months before his marriage he worked for a week, night and day, without once being in his bed, at a piece of plumber’s work on a cylinder in such extreme heat that he had to work naked. He dated his illness from that time, and his sweetheart thought this strain had a permanent effect on his constitution. Again, eighteen months after his marriage, he worked for a week late and early at a piece of work in an air-tight cylinder. He was feeling ill all the time, and at the end of the week he came home “blue in the face” and “fainted.” Soon after that he was in hospital suffering from well-marked paretic symptoms of lead-poisoning. For four years he did nothing, and at the end of that time he started a shop on some little capital from a plumbers’ society. In a short time, with much worry and chagrin, all his means were gone. Then he began as a cabman, and was a good driver, until one day a wheel came off his cab and he was thrown heavily to the ground, sustaining a fracture of the right leg and a severe blow on the head. Towards the end of his treatment in hospital he became manifestly insane. Now, which of these many causes accounts for his disease? Was it his early alcoholic and sexual dissipation, the latter persevered in through married life, or was it the strain of prolonged work at a high temperature, or the sustained effort with insufficient air, the lead-poisoning, the business worry, or the

blow on the head? For my part I should say, judging from his character and history, that the man was a general paralytic from his mother's womb, with a diathesis prone to the disease. Perhaps under strong external control his manner of life might have been so modified as to save him from one or all of the exciting causes of his disease, but his character had that in it that led him into all manner of excesses and subjected him to varied stresses such as are commonly followed by general paralysis in predisposed cases.

Lunacy in Norway, 1891. By WILLIAM HABGOOD, Senior Assistant Medical Officer, Kent County Asylum, Maidstone.

The population of Norway in 1875 consisted of 891,000 males and 930,000 females. (The details of the last census, 1890, showing a population of two millions, have not yet been published). Of these were insane 2,186 males and 2,382 females, giving a ratio of 23 insane (20·4 males, 25·6 females) to every 10,000 of the population. The total number of admissions into asylums for the year 1889 was 756, a ratio of 4·15 per 10,000. These figures compare favourably with those given in the report of the Commissioners in Lunacy for England for the same year, viz, 29·2 insane (27·2 males, 31·2 females) to every 10,000 population, and a ratio of 5·18 per 10,000 on the admissions. Although Norway is a poor country, such extreme poverty and distress as is found in our large cities does not exist there, and this, probably, accounts for the considerably smaller ratio of insane to population. Of the 756 total admissions 32 per cent. were suffering from melancholia, 27 per cent. from mania, 24 per cent. from dementia, and from general paralysis and epilepsy, equally, 1·9 per cent. The marked preponderance of melancholia over mania is interesting, the opposite conditions obtaining in this country, where mania shows an excess of 24 per cent. The distribution of a small population over a large tract of country, the mountainous character of that country, the monotony of life, the lack of amusement, the phlegmatic character of the race, in contrast to the crowded condition of the people, the high tension of living, and the excitement of city life which prevails in this country probably explain the difference. The small number (1·9 per cent. of the admissions,—being 6·4 per cent. less than in

England) of those suffering from general paralysis might be explained in the same manner.

With a total insane population of only 4,568, there are necessarily few asylums, and these—owing to the plan of boarding out all the chronic insane suitable among the peasantry—are of small size, the largest containing only 330 beds. Altogether there are 11 asylums—three government, six municipal, and two private. They are under the superior control of the Medical Department of the Ministry of Justice, but the King has the giving of the appointment of Superintendent to the government asylums. All the asylums are governed by a medical superintendent, whose management is controlled by a committee of three members, one of whom must be a physician, appointed and paid by the government. The law concerning the admission of an insane person into an asylum is somewhat more simple than it is with us. All that is required is a certificate of insanity from one medical man, he being, if possible, the one who attended the patient in his last illness. The superintendent of the asylum has then to examine the alleged lunatic, to see if his state is such as to make his admission advisable for himself, or necessary for the maintenance of public order and safety. If anyone be discontented with the decision of the superintendent he has a right to demand the arbitration of the committee of the asylum on the matter. The superintendent's clerical duties are less arduous than in the English asylums. The only report he has to make, besides that to his own committee, is one containing the exact state of every patient to the authority or private person who caused the patient's admission to the asylum.

Criminals suspected of being insane are sent to a government asylum for observation, and remain there until a decided opinion on the matter has been formed.

The government regulations provide that autopsies be made in every case should the superintendent so desire.

I had the opportunity last summer, of seeing over two of the largest asylums, the government asylum at Rotvold, near Trondjhem, and the municipal asylum at Bergen.

I must here express my indebtedness to Dr. Holmboe, the assistant physician at Rotvold, for his great kindness in showing and explaining everything of interest at that asylum, and giving me information on the subject of lunacy in Norway in general; and also to Dr. Bechholm, the assistant physician at the Neevengaarden Asylum at Bergen.

The Rotvold Asylum, beautifully situated on the side of a

hill overlooking the sea, is an old building, containing 240 beds. The wards in most cases communicate directly with one another, and the staircases are of wood. Except in the part where the private patients reside, the rooms were not so well furnished and decorated as in most of our county asylums. There is a staff of three resident physicians, which seems a large one in comparison with our county asylums, but the asylum population, although small, is—owing to the extensive practice of the boarding-out system—a rapidly changing one, the yearly admissions averaging two hundred. Preference is given to married men for all medical appointments, not only at this, but at all asylums. The majority of the patients are of the pauper class, but private patients are taken at higher fees, and are separated from the others, their wards being better furnished and their diet more elaborate.

The treatment of the patients is very similar to that in use in this country. They have suitable employment and amusements, such as walks in the neighbourhood, dances, and entertainments; some are allowed in the summer to bathe in the sea. Baths are much used as a method of treatment, and among drugs Dr. Holmboe has great faith in the use of opium in melancholia. The only mechanical restraint in use is that effected by the wearing of jackets with long sleeves, the ends of which are tied together. Seclusion in cases of patients suffering from acute mania, with violent and destructive propensities, is freely practised, such cases being locked in single-rooms and only occasionally observed. There is a good staff of attendants, the proportion being one attendant to every nine patients. They are drawn chiefly from the same class as in this country. There is no regular staff of night attendants, each one taking his turn at this duty. All attendants sleep in the asylum, the male attendants who are married being allowed, in addition to the day off duty which is given weekly to all attendants, the night. All attendants have annual leave of eight consecutive days.

The municipal asylum at Bergen is a new building, containing 150 beds. There is nothing particularly striking about it except the arrangement of the single rooms. Nearly all these are on the ground floor, each having a lantern-light in the roof, which affords excellent light and ventilation. There is no provision for darkening the rooms. The rooms are very spacious, and are well heated by hot air. Those used for the seclusion of cases of mania with violent and destructive propensities contain nothing but a heap of straw, the patient

himself being naked. Observation is carried on through the lantern-lights by an attendant who walks up and down on a place provided on the roof of the building.

I was somewhat surprised to see this method in use in this, the most recently-constructed of the Norwegian asylums. The medical officers, however, defend the method by arguing that it is useless to give clothes and bedding to those who will not only not use them, but destroy them as fast as they are supplied.

Patients that neglect themselves sleep on loose straw, covered with a sheet. This method is found in this asylum less likely to produce bed-sores than that practised in our county asylums, in which the mackintosh placed under the patient serves to retain the urine in contact with his skin till the bedding be changed. The system of earth-closets has been adopted throughout the asylum, and answers well. There is no detached hospital for the isolation of cases suffering from infectious diseases, such cases being treated in a separate part of the same building.

Perhaps a fitting conclusion to this paper will be a consideration of the proportion of recoveries that take place in the Norwegian asylums. According to the statistics issued by the Government for all the asylums the number of admissions for the year 1889 was 756. The same year 203 were discharged recovered, giving a percentage of recoveries to admissions of 26·8. The percentage of recoveries to admissions given in the Commissioners in Lunacy Report for England for the same year was 39·7, being 12·9 per cent. higher than in Norway, notwithstanding the fact that the proportion of those admissions so unfavourable for recovery as general paralytics and epileptics is 6·4 per cent. greater in England.

One naturally turns to the deaths to explain this small proportion of recoveries; but the deaths, whether reckoned according to the daily average number resident—7·6 per cent.—or according to the total number under treatment—4·8 per cent.—are less than among the insane in England, where the numbers are 9·4 for the former and 7·4 for the latter. The most satisfactory explanation of this great difference in the two recovery rates to my mind is that the Norwegian alienists use the word “recovery” in a much stricter sense than it is used in the statistics of English asylums, as the discharged relieved—29 per cent.—exceed the discharged recovered by 3 per cent. I cannot compare these figures with those for all

the English asylums, as the Commissioners do not in their report give a list of those discharged relieved, but I have taken the figures of one of the London County Asylums containing over 2,000 patients, and, taking an average of the last ten years, find the proportion of those discharged recovered to those discharged relieved is 44 per cent. to 9 per cent., the sum of which figures nearly equals the sum of the percentages of those discharged recovered and relieved given in the Norwegian statistics. Another explanation might be that patients are for some reason discharged from Norwegian asylums before they have fully recovered, but this seems hardly probable. Whether, on an average, in Norway a longer time is allowed to elapse than in England from the beginning of an attack of insanity to the time when asylum treatment commences, I am, unfortunately, unable to say, not having the statistics relating to this matter, but if this is so it would help to explain the small recovery rate.

The Local Government Act of 1888: Its Probable Action on the Treatment of Insanity in England. By J. A. CAMPBELL, M.D., F.R.S.Edin., Medical Superintendent Counties Asylum, Carlisle.

In the remarks which I am about to make I wish it clearly to be understood that, as I personally am not an accounting officer under the Act, I have no personal grievance to ventilate. In this asylum, not only I, but the other officials whose duty it is to make returns of an official nature, have always done so honestly, readily, and fully; and speaking not only for myself, but for others, we have formerly made, and hope in the future to make, all such returns in such a way as to comply with legal requirements, not only in the letter but the spirit of the law. And in such remarks as I make on our audit here, I wish to express myself plainly, but, at the same time, without the slightest suspicion of personal feeling to the auditor, who, I believe, acted conscientiously, and according to what he considered was the meaning of the law on the subject. At the same time, I doubt whether an auditor (in whom no legal or other qualifications are a necessity) is the fittest person to have the decision as to what is legal, expedient, and proper in the expenditure of a large county asylum. At present auditors certainly seem to think that their reading of the Lunacy Act should be accepted, no matter what the opinion of the com-

mittee and their legal advisers may be; and by surcharging items, they have it in their power to put committees and officials to such trouble that even if expenditure were proper, right, and in the interests both of the sane and insane inhabitants of asylums, yet one would hesitate about it with the knowledge of the correspondence, trouble, and annoyance which it might entail.

I intend first to give the experience of this asylum as the result of two audits; second, to make a statement of the gratuities given by the committees of other asylums, mentioning those in which surcharges were made; and, thirdly, to offer certain remarks and make certain suggestions.

Now for our experience. . The Local Government Act came into force in March, 1889. No official information as to book-keeping, lines of audit requirements, nor, in fact, any communication on financial subjects came to us, and we waited patiently, hoping for an audit; delayed the publication of our report, and, owing to keeping it in type, incurred considerable extra expense, which had to be defrayed by the ratepayers. On the 14th of March, 1891, the auditor came, interviewed all the chief officials, myself, the treasurer, and clerk and steward. He condemned the book-keeping as a system, while praising the actual mode in which the accounts were kept, and the beautiful and accurate manner in which all the monetary matters were accounted for by Mr. Todd, the clerk and steward, and he insisted that certain new books to suit his audit should be got, and that the clerk and steward should work backwards, make up these books from the passing of the Act, and keep them on these lines for the future. He surcharged only one item, a gratuity of £10 to an attendant. This, on being referred to the Local Government Board, was at once passed, stamped, and returned to us. I do not care to enter on the subjects of conversation that were touched on with myself, but I clearly indicated my opinion as to the necessity for a code of regulations being promulgated.

The second audit took place on the 12th of August. I was away for my holidays, devoting myself, as all should who can, to the worship of St. Grouse. The books were kept and made up as the auditor wished, but he surcharged three gratuities, which I give in detail, *i.e.*, a gratuity for bringing back an escaped patient 8s., and a sum of £823 6s. for attendants' pay, because their names and rates of payment had not been fully entered on the minutes, although a book fully describing them—their terms of engagement, their pay,

and all particulars—had been laid at each meeting before the committee, signed by one of them, and the whole matter, with their characters, brought specially before the committee meeting. Also a sum of £51 given in three gratuities—one to a dying attendant, who died shortly after, the other two to deserving attendants who had resigned for special reasons.

A lengthened correspondence has been entered into in regard to these surcharges. The gratuity for the escaped patient is surcharged on the clerk and steward, though I really paid it; the Chairman of Committee had to be troubled with the other two amounts.

Remarks.—According to the last report of the Commissioners in Lunacy, 54,451 of the total registered insane, who number altogether 86,795, are under treatment in English county and borough asylums. Excluding the 4,959 who are in borough asylums, which are not subject to an official audit, this shows that considerably more than half the total registered insane in England are under treatment in county asylums.

Now whatever deals with the treatment of the patients in English county asylums deals practically with the treatment of the insane in England.

I got a return from the 54 English county asylums, and I find that it has been the practice to give gratuities in 29. In 18 gratuities have been given since the passing of the Act. At one asylum the auditor threatened to surcharge a gratuity, but this is the only asylum where the auditor has surcharged such payments.

This shows a great difference in the action of the different auditors in regard to the question of gratuities, and Mr. Dolby, the auditor of this asylum, seems to take the most severe view of the subject. It cannot be the wish of the Local Government Board that asylum authorities should be subject to caprice on the part of auditors. If the giving of a gratuity is illegal, it should be so for all; and Mr. Dolby himself in this asylum passed one gratuity given yearly to the Carlisle Fire Brigade while refusing to pass the others.

There are frequently circumstances occurring in asylums in which, in the interest both of the institution and its inmates, sane and insane, it is almost a necessity to give a gratuity or extra pay for special actions. For instance, a patient may take a dangerous and infectious fever, and the attendants are engaged to look after insane people and not to act as fever nurses. A gratuity for special service is the common sense way of rewarding such service. Other special services of

danger occur, such as fires and injuries. I have known a female attendant get her teeth knocked out and have to expend money on a false set. I have also myself had two front teeth smashed by a patient.

Attendants with short service break down in health, and although the Committee of Visitors have under the Lunacy Act power to grant a pension to a person broken down in health who has only served a year I believe, yet cases arise in which illness is short, and if the steps to grant a pension were gone through the person might be dead before they were completed. In such cases a gratuity relieves the urgent wants of the person. The Northampton County Council have adopted a gratuity scheme as well as a fixed scale of pension.

If patients escape something more than expenses must be given to the person who captures and brings them back. In some asylums a fixed sum is always given, but as circumstances vary it should be left to the superintendent to determine what is fair and proper. If a gratuity be not given in such a case, few people will bother to assist in getting escaped patients back.

The Local Government Board, no doubt, have the power to authorize such necessary grants as above, even although no special provision may be found for them in the law, or they can indicate the legal and proper mode of making such payments.

It seems strange to me that the accounts of borough asylums should have been exempt from the same official audit as the law has directed for county asylums. And it seems more than strange that in the Scotch district asylums, which, under another name, are really county asylums, no official audit is provided for in their new Local Government Act.

To me it seems absolutely absurd that a Local Government Act should be passed which purports to give a form of local government to a ratepayer-elected community, and that at the same time the powers of the committee of the County Councils should be so curtailed that they are unable to do almost anything, that they cannot give a deserving servant a gratuity, pay a shilling or two to a humanely-minded countryman for saving an escaped patient from drowning or going in front of a train, and that, in fact, their powers are cut down from what their predecessors possessed, though they were only the nominees of the Lord Lieutenant, and in former times were probably only elected on political grounds. It would be

interesting to know who the authority at the Local Government office is who settles questions of surcharges. We never know the inside working of public boards, but it would be, to say the least, a very extraordinary thing if the well-considered acts of an asylum committee, counselled by a paid solicitor of standing and a medical superintendent of, say, 10, 20, or even 30 years' experience, were finally decided by a junior clerk.

I think that in our case we were hardly used; that had I been clerk and steward I should certainly have demanded a public authority for having to make up my books backwards for a period of two years, to the detriment of the asylum ordinary work, not to speak of the vexation, worry, and extra night-work which were entailed. Auditors may be our masters, but we expect fairness and a good reason to be given for all surcharges, and the fault-finding about the minutes of committee, the account-keeping, and the general mode of expenditure in the asylum management which we experienced seemed to me unnecessary, considering that no indications of a line of audit had been made known to us.

I am led to a belief that a purpose of curtailing the amount spent in amusements in asylums, a uniformity in asylum diets, a mode of restricting the power of medical officers in granting extra diets to sick patients is being considered by the auditors. Now, under the magistrates we have had a free hand, and while exercising due economy, we have been allowed to do our medical work freely, and utilize medical means, amusements, etc., for the good of our patients. The dietary scales of most asylums are, though ample, extremely monotonous, and I shortly hope in our Journal to submit a set of optional, occasional, and supplementary dinner scales, with the cost of each, which may be substituted at will for the scales in force. I have always thought it must be one of the most intense hardships of an enforced asylum residence to know a whole week's set of dinners beforehand, and have nothing new to look forward to—even an inferior dinner, which is a change, would be considered a luxury.

The Commissioners in Lunacy have, ever since the Lunacy Act became law, carried out ably and honestly the intentions of the statute. One and all have been imbued with the spirit of their noble Chairman, who really framed, passed, and presided over the working of this Act for about half-a-century, and to him, his actions, his enthusiasm, and his deep personal interest in all connected with the treatment of the insane, is it mainly due that England has for years occupied a proud position as

foremost in the care and treatment of those bereft of reason, who from even the time of the Romans were considered to be the especial care of the State.

I hold distinctly that a Committee of Visitors should have power to grant a gratuity to an attendant, should be able to pay such sum as their superintendent thinks fit and proper for bringing back an escaped patient, and should pay such reasonable sums as they think fit for amusements, and that the matter of sick and other diets should be entirely in their hands, acting under the advice of their medical superintendent.

I may mention that where private patients are taken, and the excess from their keep is handed in to the building and repair fund, it is quite clear that before handing the surplus in the committee can allocate any of it or all of it as they like (53 Vic., c. v., sec. 271), "and the surplus, if any, if after carrying to the building and repair fund such sums, and providing for such outgoings and expenses as the Visiting Committee consider proper, shall be paid to the treasurer of the local authority to which the asylum belongs."

Now, are auditors to have the power to surcharge in the face of such a clause?

As a Scotchman, I feel proud that Mr. Ritchie, a fellow-countryman, known for his ability, his tact, his comprehensive views of all he deals with, his business qualities generally, and his intimate knowledge of local requirements, should have drawn up, introduced, and passed the Local Government Acts for England and Scotland.

It is impossible that Mr. Ritchie, a man of business capacity, of popular instincts, and of philanthropic intentions, should wish that old officials should be harassed, almost improved out of existence, that Committees of Visitors should have their powers so curtailed that they will shortly become nonentities, and that under the name of *Local Government* all authority should become centred in a London Board, that the treatment of the insane in England should suffer, and that powers never intended should be conferred on Local Government auditors.

Protection of Medical Men by the English Lunacy Law. By A. WOOD RENTON.

(Continued from Vol. xxxvii., p. 547.)

In the preceding part of this paper we considered what may be called the *substantive* provisions of section 330 of the Lunacy Act, 1890. We now pass on to the *adjective* part of the section. Suppose that a medical man, against whom an action for damages for the alleged false imprisonment of an alleged lunatic has been raised, *is* in a position to satisfy the Court or a Judge that "there is no reasonable ground" for imputing to him "want of good faith or reasonable care," when and how shall he avail himself of his statutory privilege? Upon these important points section 330 displays the vagueness that is almost a characteristic of modern legislation. The only information that it gives us is that an application to stay proceedings may be made "summarily" (a term of which no definition is offered or even suggested) to "the High Court," and that "the Court or a Judge" may grant or refuse the application "upon such terms as to costs or otherwise" as the said Court or Judge may think fit. Now, in the absence both of any clear light from the section itself and of any authoritative judicial interpretation of it, the maxim *Omnis definitio in jure periculosa est* applies with peculiar force, and consequently the following observations are offered with some hesitation.

The first point that deserves notice is that the effect of a successful application to the High Court, under section 330, sub-section 2, is not to stay proceedings temporarily, but to stop them altogether. Now the Superior Courts in England have from very early, if not from the earliest, times possessed an *inherent jurisdiction* to protect their process from abuse by dismissing actions which were manifestly frivolous and vexatious. A few instances of the exercise of this power in comparatively recent years, may be of interest to our readers:—
(1) In 1875, A., an officer in the Coldstream Guards, brought actions against B., C., and D. severally, alleging that the defendants had conspired to make, and had in fact made, false statements regarding him to the Commander-in-Chief, who had in consequence of such statements placed him on half-pay. It appeared that B., C., and D. were members of a Military Court of Inquiry appointed to inquire into

A.'s conduct, and that the statements complained of were made by them in the discharge of the judicial and official duties imposed upon them as members of such Court. According to a decision in the House of Lords in 1875 (*Dawkins v. Lord Rokeby*, L. R. 7, H. L. 744) no action was maintainable under such circumstances, and even if A. had been allowed to proceed he would have been non-suited at the trial. The Queen's Bench Division, on the motion of the defendants, dismissed each of A.'s actions as frivolous and vexatious. "I am clearly of opinion," said Mr. Justice Mellor, "that if this action were not stopped A. would never get to the jury. It is manifest upon the face of the declarations and the affidavits that it would come to a non-suit. I think we should be allowing the time of the public and the Court to be wasted if we did not interpose" (*Dawkins v. Prince Edward of Saxe-Weimar*, 1876, 1 Q. B. D., 499). (2) It was the duty of M., as Clerk of the Petty Bag Office, not to seal a writ of error* in cases of misdemeanour until the Attorney-General had issued his fiat. C. brought an action against M., claiming damages for such a refusal as aforesaid. The Court of Exchequer stayed the action. "This action," said Baron Bramwell, "is . . . pretenceless, and has been properly stopped. . . . It is absolutely groundless, and the Court, in the exercise of its discretion, ought to stop the proceedings as being an abuse of the process of the Court" (*Castro v. Murray*, 1875, L. R. 10, Ex. 211). *Dawkins v. Prince Edward of Saxe-Weimar* and *Castro v. Murray* are fairly typical instances of the cases in which the Court was used to exercise its inherent general jurisdiction to order a stay of proceedings, and the points which should be noted are (a) that an action was not generally dismissed unless the Court was satisfied that it was absolutely groundless; (b) that the application to stay proceedings was therefore most properly made after the plaintiff's claim had been delivered; and (c) that the defendant had to "satisfy the conscience of the Court by affidavits," to which the plaintiff was entitled to reply that the . . . action was unfounded.†

The *Rules of the Supreme Court*, 1883, added a statutory jurisdiction to the inherent general jurisdiction which we have been considering. Under these Rules (Order 25, Rule 4) "the

* Error was an old form of appeal.

† This appears from the reports of the cases under consideration; and see *Metropolitan Bank v. Pooley*, 1885, 10 Appeal Cases, per Lord Blackburn, at p. 221.

Court or a Judge may order any pleading to be struck out on the ground that it discloses no reasonable cause of action or answer, and in any such case, or in case of the action or defence being shown by the pleading to be frivolous or vexatious, the Court or a Judge may order the action to be stayed or dismissed, or judgment to be entered accordingly as may be just." Now the scope of this rule and its relation to the old inherent jurisdiction of the Superior Courts have been well settled by a variety of decisions with which it is unnecessary to deal exhaustively. Prior to 1883 an action was dismissed only when it appeared, or was shown to be, absolutely groundless, or frivolous and vexatious. If the plaintiff's claim raised any *substantial* legal question the Court would not dismiss the action on any summary application, but the question of law had to be brought forward for argument by a special and separate plea termed a "demurrer." The Rules of 1883 have put the law in the following position:—1. Where the plaintiff's claim discloses *no cause of action at all*, or where the action is shown by the pleadings to be *frivolous and vexatious*, the Court may, either under its inherent jurisdiction or under the order above quoted, dismiss the action altogether. 2. If the claim raises any substantial point of law the Court will neither strike it out nor dismiss the action. In such case the defendant must take objection to the sufficiency of the claim in his defence, and the point of law will be solemnly argued and decided at or after the trial. So far the new rules have made no substantial alteration in the old practice. 3. If, however, a claim, while not absolutely groundless in the opinion of the Court or a Judge, discloses no *reasonable* cause of action, the Court or Judge may either strike it out or dismiss the action.

Now, the provisions that we have been examining were in force long before Section 330 of the Lunacy Act, 1890, had been passed or had come into operation, and it is obvious that they applied to actions against medical men as well as against other members of the community. Take a few hypothetical cases—(1) Suppose that A., an alleged lunatic, brings an action for false imprisonment against B., one of the Medical Commissioners in Lunacy, and it appears that the act complained of was done by B. in his official capacity. Upon these facts being properly brought under the notice of the Court or a Judge the action would be dismissed. It could not succeed at the trial, and to allow it to go on would be to waste the public time and abuse the process of the Court. *Dawkins v. Prince*

Edward of Saxe-Weimar (abi supra) is an authority on this point, and it is clear that the dismissal of A.'s action would fall within either the *inherent* jurisdiction of the Court or its *statutory* jurisdiction under Order 25, Rule 4. (2) Suppose, however, that B. has no official position whatever, but is simply an "unattached" medical practitioner. A. delivers his statement of claim, B. pleads (*inter alia*) by way of defence an admission by A. under seal that he has no cause of action against B. A. replies that the execution of this deed was obtained from him by the fraud or undue influence of B. These pleadings obviously raise a difficult question, partly of fact and partly of law, and here the Court will not interpose to stay proceedings. The matters in issue between A. and B. must be fought out at the trial. (3) Suppose now, as a final case, that B.'s defence sets up (a) an admission by A. that he has no ground of complaint against B., and (b) an allegation that the Commissioners in Lunacy had formerly agreed with B.'s opinion as to A.'s mental state. A. delivers no reply or delivers a reply in which he does not traverse either of those pleas. A. has clearly a *cause* of action against B., but the Court or a Judge might well hold that it is not *reasonable* and act accordingly.

What, then, has Section 330, Sub-section 2, done for the medical profession? In the first place it has extended the purview of the previous practice—it applies not only to actions but apparently to proceedings of any kind, civil or criminal. Suppose that an alleged lunatic should attempt to treat a medical certificate as a criminal libel, and should prosecute the medical man that signed it, the proceedings might be stayed. In the second place, the new Sub-section has defined more precisely the kind of evidence that the defendant must bring forward. We have dealt with this point fully in the preceding paper. It does not seem to have done anything more. It has certainly not deprived a medical man of his rights under the old practice. We are now in a position to formulate a few general rules with reference to the practice under this sub-section.

1. The *application* is closely akin in character to, and will be governed by, substantially the same rules as applications to the Court to exercise its inherent general jurisdiction, or its statutory jurisdiction under Order 25, Rule 4.

2. The application will, therefore, generally be made by *motion*, supported by affidavits setting forth all the points that the defendant thinks likely to influence the Court in his favour.

It may be made whenever proceedings have been taken, and should be made whenever the defendant is in possession of the necessary evidence.

3. The Court or a Judge may either *dismiss* the action, or *order* any of the plaintiff's pleadings to be struck out.

4. If the Court or a Judge refuse the defendant's application the action will simply *proceed to trial* as if no such application had been made.

5. The costs are in the *discretion* of the Court or Judge, and may be granted, refused, or (in case the application is unsuccessful) reserved to the trial. No general rules can be laid down as to the manner in which their discretion will be exercised; each case stands upon, and will be decided according to, its own merits.

Some Notes on the Use of Sulphonal as a Sedative and Hypnotic. By Dr. J. CARLYLE JOHNSTONE.

The first fifty cases in which the writer made use of sulphonal have been selected for analysis. The drug has since been freely used by him in many other cases, which are here excluded from consideration; the results in these cases, it may, however, be stated, have been very similar to those afforded by the earlier ones.

In prescribing sulphonal, the object, in the first instance, was to procure sleep. It was soon discovered that, in addition to its hypnotic property, the drug had a strong sedative action, and as a sedative it was accordingly given a large trial. No particular class of cases was selected for treatment. The sleepless, the excited, and the miserable, all such as required rest or sleep, and could not attain it, but by drugs—to these, as they came, sulphonal was administered. What sleep and rest they got, and what other changes they experienced are here told.

It was found that among the most characteristic properties of sulphonal are the slowness of its action, the prolonged duration of its effects, and the tendency of the phenomena accompanying its use to become increasingly more pronounced and more prolonged under the continued administration of the drug. It has, accordingly, been thought advisable to arrange the results in three divisions, namely—(1) The effects produced by single doses, or doses separated by long intervals; (2) those

produced by doses repeated at intervals of 48 hours; and (3) those produced by doses repeated at intervals of 24 hours or more frequently. For the sake of convenience, these doses will be referred to in the statement as (1) Single Doses, (2) Interrupted Doses, and (3) Continuous Doses.

A. Effects Produced by Single Doses.—Fifty cases were treated—13 males and 37 females.

The ages of the males ranged from 24 to 67, and of the females from 22 to 74.

The *general health* of the patients was considered to be good or average in 21 cases (4 males and 17 females); poor in 23 (5 males and 18 females); and distinctly bad in 6 (4 males and 2 females). The following bodily diseases or other complications were present, namely: Phthisis pulmonalis in 3 cases (1 male and 2 females); heart disease in 5 (4 males and 1 female); diarrhœa with fever in 4 (1 male and 3 females); epilepsy in 2 (1 male and 1 female); acute alcoholism in 2 (1 male and 1 female); chronic alcoholism in 1 (female); blindness in 1 (female); chorea in 1 (female); hemiplegia in 1 (male); goitre in 1 (female); internal hæmorrhoids in 1 (female); inguinal hernia in 1 (female); amenorrhœa in 1; pregnancy in 2; uterine displacement in 1; fracture in 3 (femur 1 male, clavicle 1 female, and humérus 1 female); incised wounds of neck and arms in 1 (female), and sloughing ulcer in 1 (male).

The *mental condition* of the patients was as follows: Seven suffered from acute or recent mania (1 male and 6 females); 14 from acute or recent melancholia (4 males and 10 females); 13 from chronic mania (3 males and 10 females); 4 from recurrent mania (2 males and 2 females); 4 from chronic melancholia (1 male and 3 females); 3 from idiocy or imbecility (all females); 2 from secondary dementia (both females); 1 from organic dementia (male); and 2 from general paralysis (1 male and 1 female).

Dose and Mode of Administration.—Sulphonal was given in doses of 10, 15, 20, 25, 30, and 40 grains. It was administered in fine powder or dissolved in water, tea, milk, soup, etc., or mixed with porridge, bread and butter, or other articles of food, or suspended in mucilage. As it is almost devoid of taste, and has no smell, there was no difficulty in getting the patient to take it in his food without his being aware of its presence. The method of administration did not influence the results or the rapidity of their action to any appreciable extent. It was,

as a rule, given at the evening meal, about two hours before the usual bedtime; but, in order that the rapidity of action might be fairly tested, the patient was put to bed immediately after administration.

I. Hypnotic Effect and Effect on Mental Condition.—

(a.) *General Results.*—Very considerable difference in the individual reaction to the drug was experienced, 10 or 15 grains acting as an efficient hypnotic in some cases, and 30 or 40 grains being required in others. Between 30 and 40 grains was found to be the most suitable average dose. In no case did sulphonal fail to produce sleep, and, the right dose for each case having been ascertained, the action of the drug was fairly constant. The hypnotic effect was highly satisfactory in 40 cases (80 per cent.), and moderately satisfactory in 10 (20 per cent.). Women appeared to require much the same doses as men; but strong, robust cases generally required larger doses than feeble, debilitated cases.

In stating the results of single doses the average is given where the patient had more than one dose.

(b.) *Rapidity of Action.*—The duration of the interval between the administration of the drug and the occurrence of sleep varied from half-an-hour to seven hours and three-quarters, the average being a little under three hours and a half. This average represents very fairly the length of the interval in the great majority of the cases. [With reference to the statement of results in this paper, it should be carefully borne in mind that the cases dealt with were, for the most part, of a much more intractable class than those which are met with in ordinary general practice; and, moreover, that comparatively few of the patients were capable of making intelligent or trustworthy statements in regard to their symptoms.]

(c.) *Presomnial Condition.*—No excitement or other disagreeable symptoms occurred in any case during the interval before sleep. What usually happened was that excitement and distress slowly and gradually subsided until the patient was found to have fallen quietly asleep.

(d.) *Duration of Sleep.*—The sleep which followed lasted from two hours to eleven hours, the average being nearly seven hours.

(e.) *Nature of Sleep.*—In the great majority of cases the sleep was tranquil and natural, and light rather than sound; it was rarely profound; it was often easily broken by any

noise or other disturbance; it was never (as far as the evidence went) accompanied by disagreeable dreams.

(f.) *The Awakening and the Day Following.*—As a rule, the patient awoke feeling refreshed and free from any uncomfortable sensations, but in about a fourth of the cases slight drowsiness or somnolence occurred during the course of the succeeding day, the patient, if undisturbed, being found nodding or slumbering lightly. Occasionally, but rarely, a feeling of confusion was complained of. In several instances indolence or disinclination for exertion was noticed. In one case (chronic melancholia) isolated doses were occasionally followed by some slight exacerbation of the mental disorder, in the shape of increased bewilderment, wretchedness, and irritability. Otherwise no unpleasant cerebral symptoms were ever noticed. Almost invariably there was an appreciable improvement, slight in some instances and marked in others, in the mental phenomena, the drug appearing to exercise a soothing and composing effect on the irritable brain and nervous system. This improvement occasionally persisted for two or three days.

(g.) *The Second Night and Succeeding Nights.*—In 80 per cent. of the cases the hypnotic influence of the drug appeared to be continued on the second night after its administration, the patient sleeping or resting better on this night than he was used to do. In 20 per cent. the effects appeared to have passed off before the second night. Occasionally the patient slept better on the second night than on the first. On four occasions a distinct deferred action was noticed, little or no effect being produced on the first night, and more or less prolonged sleep occurring on the second; but the cases in which this occurred reacted in the ordinary manner on other occasions. In a few cases the patient slept better for several nights after a single dose.

II. *Other Cerebral and Nervous Effects.*—In one case (female, age 28; acute mania, hallucinations of hearing, mild chorea, advanced pregnancy) the patient fell asleep in about two hours after receiving 30 grains; she slept straight on for 10 hours, and slumbered nearly the whole of the following day; the next night she slept 8 hours; and the next day she slumbered, with short intervals, till the evening; when awakened she complained of having lost her hearing; the deafness passed away rapidly; the choreic spasms were slightly modified while she was under the influence of the drug. In two cases of fractured

bonés doses of 30 grains assisted in procuring rest, and possibly exercised a mild analgesic effect or controlled to a certain extent the muscle-spasms.

With the above exceptions, sulphonal in single doses had no distinct effect on the motor or sensory functions, on reflex action, or on co-ordination, beyond the condition of indolence or mild fatigue already referred to.

III. Circulation.—Beyond a slight slowing and softening of the pulse, such as would accompany natural sleep, the circulatory system was affected in no way by single doses.

IV. Respiration.—The results were entirely negative.

V. Digestion.—In one or two cases, in which there was marked drowsiness during the day following the use of the drug, the patient, as might have been expected, did not take his meals as heartily as usual. Otherwise, no impairment of appetite occurred in any case, and there was never any disturbance of digestion or other disorder of the gastro-intestinal tract.

VI. The Skin.—No change in the condition or function of the skin occurred.

VII. The Kidneys.—The urine was not examined in a systematic way. It can only be said that no urinary troubles followed the use of single doses, and that, in the cases in which an examination of the urine was made, the ordinary tests revealed no appreciable change in its quantity or constituents.

VIII. Sexual Organs and Functions.—The results were entirely negative. In two cases of advanced pregnancy doses of 30 and 20 grains produced no uterine disturbance.

IX. Temperature.—Single doses did not appear to influence the temperature in any way.

B. Effects of doses repeated at intervals of 48 hours. (Interrupted Doses.)—The great majority of the 50 cases which have been referred to under the previous head of single doses were treated at one time or another, and at longer or shorter intervals, with repeated doses of sulphonal. It was usual, in the first instance, in each case, to allow an interval of at least 48 hours to elapse between each two doses. It was found that, as a rule, the full benefit of the hypnotic and sedative action of the drug could be obtained and kept up by giving it on alternate days. Repeated in this way it was prescribed for periods ranging from a few days up to six or seven weeks. The maximum and minimum individual doses were 40 grains and 10 grains respectively, and the mode of administration was

the same as described on p. 56. The following may be cited as examples of the quantity and number of doses given on alternate days :—

Name.	Sex.	Age.	Mental Disorder.	Amount of Dose.	No. of Doses.	Frequency of Administration.
J. M. B....	F.	74	Acute Melancholia.	15 grs.	5	Alternate Evenings.
A. D. ...	F.	54	Acute Mania.	20 ..	4	.. ..
J. M. W.	F.	30	Imbecility.	30 ..	4	.. ..
M. F. ...	F.	39	Acute Melancholia.	30 ..	4	.. ..
H. G. S....	F.	31	.. ..	30 ..	4	.. ..
M. J. F....	F.	39	.. ..	30 ..	12	.. ..
H. T. S....	F.	64	Chronic Mania.	30 ..	13	.. ..
H. M. P.	F.	35	.. ..	30 ..	13	.. ..
R. E. ...	M.	24	.. ..	30 ..	14	.. ..
J. K. D....	F.	49	Chronic Melancholia.	30 ..	26	.. ..
" ...	"	"	.. ..	40 ..	13	.. ..
J. S. ...	F.	54	Acute Mania.	40 ..	7	.. ..
M. B. H.	F.	53	Chronic Mania.	40 ..	15	.. ..

I. Effect on Sleep Function, Mental Condition, and Nervous System.—The first few repeated doses were followed by the same results as regards the rapidity and duration of the hypnotic action and other after-effects as those produced by single doses. After a few days' treatment, the period varying considerably according to the dose, the peculiarities of the case and individual idiosyncrasy, the action of the drug almost invariably tended to become more prolonged, so that the effects of one dose had barely passed off when the next dose was given (48 hours after). At the same time the hypnotic action became gradually more pronounced, and went on slowly increasing as long as the drug was continued, the improvement in sleep being shown not only on the nights when sulphonal was given, but also on the nights when it was withheld. When the patient was brought well under the influence of the drug the difference in the amount of sleep between the sulphonal-nights and the non-sulphonal-nights was generally slight. It was never necessary to increase the dose owing to habituation; on the other hand, after a few days' treatment, sleep could occasionally be secured by gradually diminished doses. On stopping the drug the improvement in sleep almost invariably

continued for periods varying from a few days to a few weeks, according, as a rule, to the quantity and number of doses administered. In several instances a few doses were sufficient to induce and establish the sleep function, and in other instances, where sleeplessness again returned, a few more doses would again secure sleep for a considerable period.

After several doses had been given drowsiness during the day became increasingly more frequent, and it was always present to a greater or less extent after prolonged treatment. Along with this symptom a sort of dreamy confusion became noticeable, and, following it, an indolent condition which passed with further treatment into slight weariness and fatigue, followed in extreme cases by slight enfeeblement and shakiness of locomotion. These phenomena were distinct in some cases and very slight in others, the individual reaction to sulphonal showing great variation; but the symptoms were never (with interrupted doses) such as were considered alarming, and they speedily passed off when the drug was stopped, seldom, even after several weeks' treatment, persisting more than a few days.

With the exception of the phenomena referred to, sulphonal, in the doses and at the intervals stated, gave rise to no disagreeable cerebral symptoms or appreciable disturbance of the motor, sensory, or reflex functions.

With repeated interrupted doses a gradual, generally prolonged, and frequently permanent improvement in the mental condition occurred, characterized by a marked diminution in the excitement, the irritability, the motor restlessness, and the wretchedness. In no case did sulphonal fail to effect at one time or another some beneficial influence on the mental state. This benefit was not accompanied by any serious drawbacks; the improvement, moreover, occurred in the feelings as well as in the conduct, the patients frequently exhibiting in their demeanour an expression of increased comfort and ease, and in only one case (the case already referred to under single doses) was there an occasional exacerbation of the mental disorder which appeared to be due to the use of the drug.

II. Circulation.—After interrupted doses the pulse generally assumed a softer character than before. Otherwise the effect on the circulation was negative. No cyanosis, fainting, flushing, or pallor ever occurred, and in five cases of cardiac disease (valvular and degenerative) the circulation was not disturbed in any way.

III. Respiration.—Interrupted doses gave quite negative

results. In three cases of phthisis pulmonalis no unpleasant symptoms were caused.

IV. Digestion.—What has been said of single doses applies also to interrupted doses. Frequently the appetite seemed to improve under the use of the drug, and patients who had previously required to be fed would sometimes take their meals voluntarily after a few doses. There was no evidence of any vomiting, diarrhœa, constipation, abdominal pain or tenderness, thirst, or other gastro-intestinal trouble which could fairly be attributed to the use of sulphonal. It must here be stated, however, that in the cases of three patients, who were having 30 grains on alternate nights, diarrhœa *did* occur after a few days' treatment; but there was no reason to suppose that this was due to the sulphonal. The Institution was at the time suffering from an epidemic of diarrhœa with fever, due to insanitary causes, and among the victims of the epidemic there were three patients who happened to be receiving sulphonal. Four other patients, it may be added, who were suffering from the same disorder, were, with the view of obtaining rest and sleep, treated with sulphonal with good effect, the intestinal symptoms being in no way aggravated, but rather being somewhat ameliorated (probably owing to the quietude which was obtained).

V. The Skin.—No change in the condition or function of the skin occurred. There were no eruptions, and no unusual dryness or moisture.

VI. The Kidneys.—What has been said under the head of single doses applies equally to the results of interrupted doses.

VII. The Sexual Organs and Functions.—The results were entirely negative. Sulphonal was given in two cases of advanced pregnancy without the slightest evil result. One woman received two doses, one of 30 grains and one of 20 grains, separated by an interval of several days. The other received three doses of 20 grains on consecutive days, followed on alternate nights by four doses of 30 grains.

VIII. Temperature.—Owing to the various physical and mental disorders present in the different cases treated, the temperature charts rarely gave a normal reading; but a careful consideration of all the factors of each case pointed to the conclusion that sulphonal in interrupted doses, even after several weeks' use, exercised little or no influence on the temperature, the only modification which could ever be shown to result consisting in a very slight fall in the scale.

C. Effects of doses repeated at intervals of 24 hours or more frequently. (Continuous Doses.)—In twenty cases (six men, 14 women) sulphonal was given in doses repeated on consecutive days or two or three times a day. The individual doses were 10, 15, 20, and 30 grains, the largest quantity given in one day being 60 grains, and the smallest 10 grains. The total quantity given in this way ranged from 40 grains spread over two days to several ounces extending over a period of two or three months. The table on page 64 shows the larger quantities and longer periods of administration.

The daily or more frequent repetition of the drug had, as a rule, the effect of "sulphonalizing" the patient much more rapidly and more profoundly than was the case when the doses were separated by intervals of forty-eight hours. But here, again, great difference in the individual reaction was met with. Generally speaking the phenomena which followed the use of continuous doses were the same in kind, but more pronounced in degree than those which have been described under the head of interrupted doses.

I. Effect on Sleep Function, Mental Condition, and Nervous System.—After a few days' continuous treatment the patient invariably began to sleep better. Sleep came on sooner, and lasted longer and tended to become heavier in character. The awakening began to be accompanied by a feeling of mild confusion, and drowsiness during the day-time set in, and became more pronounced. It was not unusual for a bad case of insomnia when well under the influence of the drug to sleep for ten hours regularly every night for several weeks. On pushing the drug further the condition became one of almost continual somnolence, the whole night being spent in unbroken sleep and the day in fitful slumber. (The patients, it should be stated, were not confined to bed during the day-time, but were encouraged to occupy themselves in the usual ways). The potency of the hypnotic action, as has been said, varied greatly in different cases, and it was found impossible to tell beforehand how much sulphonal should be given or how long it should be continued to produce the desired effect. In no case did the prolonged use of the drug appear to diminish its potency. The rule was for the hypnotic action to become gradually more pronounced as long as the drug was continued, and the effect could generally be kept up by smaller doses than were at first required. The action almost invariably persisted after the discontinuance of the drug for several days, weeks, or months, according to the dose, duration of treatment, and

Name.	Sex.	Age.	Mental Disorder.	Amount and Frequency of Dose.	Total Quantity Given.	Period Covered by Administration.
J. H. ...	M.	63	General Paralysis.	20 grs. every p.m. x 8, followed by 15 grs. every p.m. x 7...	265 grs.	15 days.
A. L. ...	M.	40	Recurrent Mania.	15 grs. every p.m. x 19 ...	265 grs.	19 days.
A. G. ...	F.	40	Acute Melancholia.	30 grs. every p.m. x 6, 20 grs. every p.m. x 3, 15 grs. every p.m. x 4 (consecutive) ...	300 grs.	13 days.
M. R. ...	F.	40	Imbecility.	30 grs. every a.m. and p.m. x 4, followed by 30 grs. every p.m. x 4	360 grs.	8 days.
A. V. ...	F.	38	Secondary Dementia.	30 grs. every p.m. x 14 ...	420 grs.	14 days.
M. Y. ...	F.	45	Chronic Mania.	30 grs. every a.m. and p.m. x 10 ...	600 grs.	10 days.
J. S. ...	M.	32	Acute Melancholia.	30 grs. every a.m. and p.m. x 3 (one day's interval), 30 grs. every a.m. and p.m. x 8 ...	660 grs.	13 days.
J. K. D. ...	F.	49	Chronic Melancholia.	10 grs. every a.m. and p.m. x 12, followed by 15 grs. every a.m. and p.m. x 18 ...	780 grs.	30 days.
A. W. L. ...	F.	43	Chronic Mania.	30 grains every a.m. and p.m. x 14 ...	840 grs.	14 days.
H. M. P. ...	F.	35	Chronic Mania.	15 grs. ter die x 8, 5, 3, 1, 5, and 3, with intervals of 4, 4, 4, 8, and 9 days...	1125 grs.	54 days.
R. R. ...	M.	24	Chronic Mania.	30 grs. every a.m. and p.m. x 22 ...	1320 grs.	22 days.
S. McC. ...	F.	39	Recurrent Mania.	30 grs. every a.m. and p.m. x 26, 30 grs. every a.m. x 41, 15 grs. ter die x 7, 4, and 2, with two intervals of one day each ...	2655 grs.	84 days.
A. T. ...	M.	64	Recurrent Mania.	30 grs. every p.m. x 3, followed by 30 grs. every a.m. and p.m. x 43 ...	2670 grs.	46 days.

idiosyncrasy, etc. With doses given in the day-time the hypnotic effect at night was less pronounced than when similar doses were given in the evening, while the day drowsiness was, naturally, more marked.

Continuous doses almost invariably produced a distinct sedative and soothing action. Sooner or later, but generally within a few days, and often after two or three doses, the patient was noticed to be much quieter than before. Restlessness was replaced by indolence, excitement gave way to tranquillity, and melancholy became assuaged. With further doses the indolence became exaggerated into sloth, which was shown not only by the disinclination for exertion, but also by the hebetude and sluggishness of the mental operations, along with which there was always more or less bewilderment or dreamy confusion; the quietude assumed the character of torpidity; all interest in outward concerns seemed to be lost, and the patient's only desire was to be allowed to succumb to the sleep which was overwhelming his whole being, and from which it ultimately became somewhat difficult to arouse him. No disagreeable dreams or other unpleasant feelings were complained of, except an occasional "swimming in the head." The rule was for the mental phenomena to become gradually more pronounced during the continuance of the drug and to persist for some time after its withdrawal, the sedative effects continuing for a satisfactorily long period, and the hebetude and confusion passing off within a few days. Occasionally the stupifying action supervened with unexpected suddenness during the course of treatment, and it was accordingly found necessary to watch very carefully the cases under continuous doses.

In every case where continuous doses were given for periods of more than a few days' duration certain motor symptoms became apparent. These ranged from mild feelings of languor and fatigue up to a condition of complete muscular collapse, in which the patient could neither walk, nor stand erect, nor help himself in any way. Great variation in the individual reaction was experienced, and in this particular, women appeared to be more susceptible to the influence of the drug than men. Thus one man after having 30 grains twice daily for twenty-two days merely suffered from slight lassitude and fatigue, while another man after nineteen days' treatment with 15 grains once a day displayed distinct unsteadiness of gait, and a woman after a few days' treatment with 15 grains

three times a day suffered from great muscular debility, with staggering gait and greatly impaired powers of locomotion. The first symptom noticed was the indolence and disinclination for exertion already referred to. This became more pronounced, and passed into distinct weariness and fatigue, followed by unsteadiness of gait, which developed into distinct staggering, accompanied by enfeeblement and uncertainty of the movements generally, the lower extremities being always the most affected, the patient lurching about insecurely on his feet like a "bad sailor" at sea. On pushing the drug further the patient became reduced to an utterly helpless condition; he could neither walk, nor stand erect, nor sit up; his arm and hand movements were feeble and drowsy; his articulation resembled that of alcoholic intoxication, and his whole appearance was that of a very drunken man. With this "drunkenness of the muscles" there was not associated any of the excitement, or hilarity, or other characteristic signs of alcoholic intoxication, the mental state, as has been said, being one of comparatively mild stupor, and the patient when aroused being able to converse with very considerable clearness and sobriety. The symptoms were occasionally accompanied by a feeling of giddiness, but the essence of the condition appeared to be extreme motor fatigue with impairment of muscular control and co-ordination. The progress of the symptoms was, as a rule, slow and gradual; but occasionally there was a sudden increase in their intensity during the course of treatment. They disappeared for the most part within a few days after stopping the drug, but the feeling of languor often persisted for a considerable time.

In no case was there any appreciable modification of general sensation, or of the special senses of sight, hearing, taste, smell, or pain. In extreme cases the "muscular sense" appeared to be much impaired, and the finer touch sense was probably considerably modified, the hand and finger movements being very clumsy and fumbling, and the gait being strongly suggestive of peculiar feelings in the feet and legs. The skin and tendon reflexes were not affected to any extent.

II. Circulation.—Beyond the fact that the pulse was, as a rule, soft in character, continuous doses gave quite negative results as far as the circulation was concerned.

III. Respiration.—The only case in which any modification of the respiration occurred was that of a male general paralytic, aged 63, who received 20 grains every evening for eight days; followed by 15 grains every evening for seven days. In this

case there was a distinct slowing of the rate towards the end of the period.

IV. Digestion.—In four cases (one man and three women) the appetite occasionally failed after large doses or prolonged treatment. Two of the women suffered from vomiting, one very slightly after a month's continuous treatment, the other more severely on several occasions after a few doses. (This woman was in other respects very susceptible to the action of the drug.) Otherwise no gastro-intestinal trouble occurred, and, as in the case of interrupted doses, it was not unusual to witness an improvement in the appetite and general health during the continuance of the drug. When the patient was thoroughly under its influence he, as a rule, showed no inclination for food or anything else, but even at this stage he swallowed food readily when it was presented to him; the digestive function was apparently not injuriously affected in any way, and no constipation, diarrhoea, thirst, or abdominal pain or tenderness was ever complained of.

V. The Skin, Kidneys, and Sexual Organs and Functions.—Continuous doses gave the same negative results as single and interrupted doses.

VI. Temperature.—After a careful consideration of the records, allowing for all sources of interference with the heat state, the conclusion come to was that even after several weeks' continuous doses, sulphonal produced very little, if any, appreciable effect upon the temperature. In a few cases a very slight fall occurred, and this was followed in one or two cases after prolonged treatment by a very slight rise in the scale.

Continuous doses were employed for the most part in those cases in which the acuteness of the symptoms was such as would not yield to less frequent doses. In cases of ordinary severity the full hypnotic action could nearly always be obtained with interrupted doses, and a sufficient sedative effect could at the same time be secured which was free from any unpleasant or alarming symptoms. In more intractable cases, however, although some sleep might be procured, but little abatement of excitement occurred until the drug was given in daily doses, and in extreme cases violent and protracted excitement was only modified by doses repeated twice or three times daily. Such doses were always followed, sooner or later, by quietude, but the more rapidly the drug was repeated the more likely was the quietude to be accompanied by the somewhat grave cerebral and motor symptoms, which sooner or later invariably supervened. The results of the experiments pointed to the

conclusion that when these unpleasant symptoms were at all pronounced it was very doubtful whether any real benefit had been conferred on the patient; for, although no distinct permanent injury could ever be clearly shown to result, it was evident in several cases that no permanent good had been effected and the writer was inclined to think that in some instances a certain blunting of the mental faculties, and possibly a certain loss of physical vigour, *might* with some plausibility be attributed to the prolonged use of sulphonal in continuous doses. In those cases, however, in which it was possible to procure a maximum of the beneficial influence of the drug with a minimum of its injurious effects, the improvement in the mental condition was not only gratifying at the time, but was generally lasting, several patients owing their recovery (in the writer's opinion) in part, at least, to the judicious continuous use of sulphonal.

The impression made on the writer's mind by the results of the experiments recorded in this paper may be gathered from his present practice in prescribing sulphonal, which is always to begin with single doses administered in the evening, and when it is necessary to repeat these to do so at intervals of 48 hours. If this is found insufficient to produce sleep and quiet, the interval is next reduced to 24 hours. In this way a satisfactory hypnotic effect has always been obtained; but when the excitement is intractable, and the drug is employed primarily for its sedative action, it is not infrequently found necessary to further reduce the interval by giving it twice a day, namely, in the morning and evening. No distinct advantage has ever been gained by prescribing sulphonal more frequently than twice a day.

D. General Effect of Sulphonal upon the Different Forms of Mental Disorder.

Acute or Recent Mania.—Seven cases were treated (one male and six females). In all the results were highly satisfactory. Given in sufficient quantity and for a sufficient length of time the drug invariably acted as an efficient sedative and hypnotic, the general condition of the patients, both mental and physical, improved steadily under its use, and no evil effects of any importance or permanence followed. Four of the patients have recovered, and in the remaining three recovery is anticipated.

Acute or Recent Melancholia.—Fourteen cases were treated (four males and ten females). In three cases sulphonal produced little beneficial effect on the mental condition, and the

hypnotic action was not pronounced. The drug, however, was not given a sufficiently long trial, and one of the patients was in a dying condition when it was prescribed. In the remaining eleven cases the results were distinctly satisfactory, both the hypnotic action and the soothing effect upon the mental distress or excitement being very gratifying. Two of the patients were suffering from acute alcoholism, and in their cases single doses of 30 grains were given with distinct benefit. Eight of the patients have recovered, and recovery will in all probability occur in a majority of the remainder. None have suffered in any way from the use of the drug.

Chronic Mania.—Thirteen cases were treated (three males and ten females). In seven cases only a few doses were given. Six cases were under more or less prolonged treatment. In every case the hypnotic and sedative effects were distinctly satisfactory. With repeated doses given for prolonged periods there was always an abatement of the excitement; restlessness, noisiness, and intractability gradually diminished, and the patient became quiet, docile, and inoffensive. There was thus effected in each case a marked temporary improvement, which always persisted for some time after stopping the drug. This beneficial effect was, however, apt to be attended by disagreeable conditions of drowsiness, stupor, and fatigue, which, on pushing the treatment further, assumed the somewhat grave characters already described. None of the chronic cases could be said to have been permanently benefited by the use of sulphonal; but they were all previously looked upon as hopelessly incurable, and none suffered any appreciable damage. While under the influence of the drug the patient was for the time kept in a quiet and not uncomfortable state, and was saved from the risks and the wear and tear of system to which his excitement would otherwise have exposed him, while, as regards his neighbours, he ceased to annoy.

Recurrent Mania.—Four cases were treated (two males and two females). One female had only a few doses (with good sedative and hypnotic effect). Three cases were under continuous treatment for prolonged periods and on different occasions. The results were not constant, but, on the whole, they were gratifying. All were subject to periodical attacks of noisy, dangerous, and destructive excitement, and one suffered from occasional epileptic seizures. The duration of the attack was sometimes shortened by sulphonal and sometimes not; its intensity was always modified to a greater or less extent. Repeated doses gave the patients sleep and reduced them to a

quiet, inoffensive, and moderately rational condition. The drug was pushed in each case, and the cerebral and motor phenomena were marked, but no permanent evil effects resulted. All the cases were of old-standing and quite incurable. Since being treated with sulphonal, it is right to add, one of the patients has died, partly from the results of an accident and partly from old heart disease, and the two others are dying of phthisis pulmonalis. No connection between the cause of the disease and the treatment can be traced.

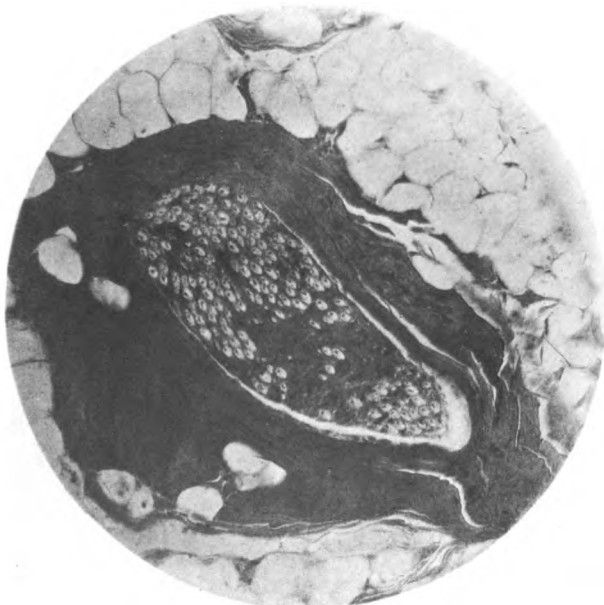
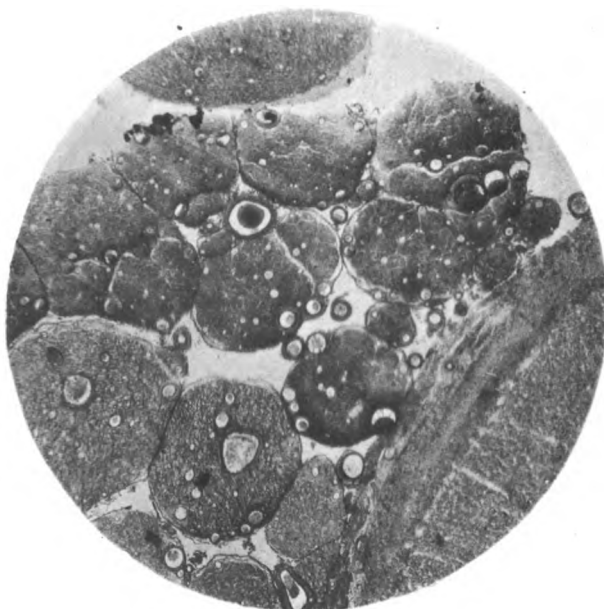
Chronic Melancholia.—Four cases were treated (one male and three females). In three cases only a few doses were given (with good sedative and hypnotic effect). The fourth patient was on several occasions kept under the prolonged influence of sulphonal. The results in her case were not, on the whole, satisfactory. She suffered from sleeplessness, and both by day and night she was restless, loquacious, excited, and miserable. In sufficient doses sulphonal seldom failed to give her sleep, but it was sometimes followed on the next day by disagreeable drowsiness, confusion, and increased irritable excitement, and though, when pushed, it ultimately quelled her excitement, it produced at the same time a stupifying or bewildering effect, accompanied by a feeling of great fatigue, and no permanent improvement followed its use.

Idiocy and Imbecility, and Secondary Dementia.—Three cases of idiocy or imbecility and two of secondary dementia (all females) were treated for sleeplessness or attacks of excitement. In all the hypnotic and sedative effect was satisfactory.

Organic Dementia.—One man was treated. He suffered from heart disease, with softening of the brain, hemiplegia, and occasional epileptic attacks. In his case 30 grains acted as a powerful and harmless hypnotic.

General Paralysis.—One man and one woman were treated. In the case of the woman the results were mild and somewhat negative, but the drug was not given a sufficient trial. In the man's case, one of obstinate sleeplessness and continual restlessness, the hypnotic and sedative effect was most pronounced, quietude and sound sleep of prolonged duration being produced by single and repeated doses.

General Conclusions.—Basing one's conclusions on the foregoing statement of results, the advantages and disadvantages of sulphonal may be briefly summed up as follows:—*In properly regulated doses* it is an efficient hypnotic, and, compared with other hypnotics, its action is fairly certain and constant. The sleep produced by it is natural and tranquil



and undisturbed by dreams. It has no injurious effect on the circulation, respiration, appetite, digestion, or temperature, or on the general health. After a time it may be discontinued or the dose reduced, the patient continuing to sleep well.

It has a distinct sedative action in mental excitement or distress, and may be employed with great benefit in cases of insanity, especially in such as are of a recent or acute character.

Its chief disadvantages are the slowness of its action and the tendency of the action to be prolonged into the succeeding day, and to be followed by drowsiness, confusion, giddiness, or fatigue, and the serious cerebral and motor symptoms which are apt to follow repeated doses.

While the writer is unable to claim for sulphonal that it is a perfect hypnotic, he feels convinced that it is a very valuable one, and, while he cannot extol without reserve its undoubted sedative properties, he is satisfied that in this respect also sulphonal is a very excellent addition to the medicine chest.

Note.—The sulphonal used was manufactured by Riedel of Berlin and supplied by Messrs. J. F. Macfarlan and Co., Edinburgh.

CLINICAL NOTES AND CASES.

*The Clinical History and Morbid Anatomy of a Case of Anterior Poliomyelitis with Peripheral Nerve Changes. With Illustration.** By F. ST. JOHN BULLEN, Assist. Med. Officer, Wakefield Asylum.

R. P., æt. 61; married. Admitted into Wakefield Asylum March, 1885. Formerly labourer in a mill.

It was said that patient had been very intemperate, and that his wife and daughter had contracted venereal disease from him. His mother was stated to have been paralytic for several years before death. This is the only instance of family neurosis.

When admitted was somewhat depressed, but showed no dementia whatever, and his narrative, which follows, was coherent and detailed.

Nine years ago he partly fell through a trap-opening, his body falling across and striking the edge of the trap. Able to pursue

* A clinical history of this patient was published by my former colleague, Dr. Wm. Dudley, in "Brain" (April, 1885). The history in the present paper is taken from his brochure and from entries in the case book, together with a few additional notes.

his occupation for a week, he then sought advice at the Leeds Infirmary for commencing paralysis in the left leg. Was admitted. After three days was almost completely paralyzed in both lower limbs. Was discharged at the end of three months, able to walk with the aid of sticks. Never regaining half his former strength, he worked for two years and nine months, when he suffered another accident. A weight of nine stones fell on his left hand, and he was not released for three hours from it. The arm gradually wasted, and became paralyzed; its fellow followed suit five years after.

Three years ago his sight began to fail. He now can only distinguish print with powerful lenses. His voice has altered during the past twelve months.

Physical Condition.—Cranium small, dolicho-cephalic. A scar with depression of bone at superior angle of occipital bone. Pupils circular; right $5\frac{1}{4}$ m.m., left $4\frac{1}{2}$ m.m. Reflex iridoplegia in both; no consensual reaction. Contract slightly with accommodation; no dilatation with cutaneous stimulation. Tongue, lips, and facial muscles free from tremor, and movements of the former fairly well co-ordinated.

No reflexes, superficial or deep, are obtained in upper and lower extremities; muscular percussion-wave scarcely perceptible.

All the limbs are greatly wasted, especially the left, and the upper more extensively than the lower. The hands and forearms are nothing but skin and bone; many of the muscles seem to have disappeared entirely; the forearms are perfectly flattened on flexor and extensor aspects, both wrists are dropped, thenar and hypothenar eminences have vanished, and there are deep depressions between the metacarpal bones. The unguis phalanges are incurved so as to give the hand a clawed appearance. Also extensive atrophy of arm and shoulder and back musculature. The lower limbs are relatively more wasted below the knee, and the anterior and external muscles more than the calf. The left leg is notably incurved, owing to atrophy of the peronei.

The patient cannot approximate the thumb and fingers; completely fails to grasp with left hand, and only most feebly with the right. Can neither pronate nor supinate the hands, nor flex or extend the wrists. Movements at shoulder very limited and feeble, as also at elbow; a little better on the right side.

There is passive extension of feet on legs, and some flexion of toes. He can move the limbs a little, but their motions are irregular, jerky, and inco-ordinate. Power of resistance practically *nil*. When helped to stand, flings his legs about in disorderly fashion, and his legs double up at the knees as soon as any weight is thrown upon them.

Skin of feet and left upper arm is polished, white, and covered with branny desquamation—almost ichthyotic. There is a considerable degree of anæsthesia of the limbs and trunk; in some

places he cannot feel the prick of a pin over an extensive area; this is so in the case of the lower limbs and abdomen. In all parts sensation is much delayed, mostly so in the legs. There is analgesia as well, the face excepted; the neck is somewhat involved, the rest of the body not completely, but to a considerable degree.

Patient has but small control over bladder and rectum; sensation of evacuation of either is almost or quite abolished. Senses of taste and hearing are fairly acute; that of smell is absent. There was slight internal strabismus of right eye and diplopia.

He suffered at this time and for several months after with distressing fulgurant pains in the limbs and body, also muscular startings accompanied by severe pain. These became less frequent and intense, but never entirely departed.

Otherwise no change took place in his symptoms up to the time of his death, five years later. He was in bed the whole period, and without bed-sores except for three weeks during the later months, and these rapidly healed.

Electrical Reactions.—As regards these in the upper limbs, serial alterations present themselves in both rhomboidei and left pectoralis major; the anodic closing contraction had nearly overtaken the Kathodic closing contraction in the right brachialis anticus and left triceps, whilst no faradic or galvanic reaction could be obtained with the supinators of the forearm, the extensors or flexors of the hand and wrist, the intrinsic muscles of the hand, and the right pectoralis major.

The reactions may be tabulated as follows:—

Faradism.		Galvanism.
Deltoid	(right) minimum at 9.	KSZ>ASz
	(left) 0	KSZ>ASz
Rhomboid	(right) 0	ASZ>KSz
	(left) 0	ASZ>KSz
Biceps	(right) 0	KSZ>ASz + AOZ
	(left) 0	KSZ>ASz + AOZ
Brach. Ant.	(right) 0	KSZ>ASZ
	(left) 0	KSZ>ASZ
Supinator L.	(right) fair with weakest current.	KS—AS—
	(left) 0 with strongest.	KS—AS—
Extensors of hand	(right) } 0	KS—AS—
(Extrinsic)	(left) }	KSz>ASz
Flexors of do.	(right) 0	KS—AS—
	(left) 0	KS—AS—
Serratus magnus	(both) 0	KS—AS—
Pector. major	(right) 0	KS—AS—
	(left) 0	ASZ—KS—
Triceps	(right) minimum at 7	KSZ>ASZ
	(left) " 6	KSG>ASZ
Intrinsics of hand	0	KS—AS—

Measurements of Limbs.—

Right leg, five inches below knee, $9\frac{1}{4}$ ins. Left, $8\frac{7}{8}$ ins.
 " thigh, six " above " $13\frac{3}{4}$ " " $13\frac{3}{8}$ "
 " forearm, five " below elbow, $5\frac{1}{2}$ " " $5\frac{3}{4}$ "
 " arm, four " above " $7\frac{1}{4}$ " " $6\frac{1}{2}$ "

Tactile Sensibility.—Least distances at which two points could be separately distinguished.

Palmar surface of unguis phalanx, right index finger 1 c.m.
 " " " " left " " 2 c.m.
 " " " hand, centre—right " " 3 c.m.
 " " " " left " " 4 c.m.

Front of forearms and legs. Not distinguished at 10 c.m.

Plantar surface of great toe. " " " 2 c.m.

" " " foot. Not distinguished at any distance.

Dorsum of foot. Doubtful, even at extremes.

Abdomen. Doubtful, could hardly recognize one point.

It should have been mentioned that for some eighteen months before admission he had suffered from flying pains about the heart. Though no lesion of this organ was to be detected on admission, six months later a well-marked aortic bruit had developed.

Autopsy.—*Cranium and Contents.*—Skull bones thin and soft. Dura mater adherent slightly in frontal region. Old arachnoid cyst over left hemisphere between longitudinal fissure and Sylvian, ascending frontal and intraparietal sulcus. At thickest point 2.5 m.m.; non-adherent. No changes in brain, macroscopically, save those common to senility; no atheroma of vessels, and merely ordinary abnormalities in size and arrangement of same. Optic nerves thin, and of greyish tinge.

Trunk Viscera.—*Heart.*—Hypertrophy of left ventricle. Thickening of mitral flaps, slight; of aortic, considerable. Advanced atheroma of first part of aorta.

Liver.—Distinctly nutmeg.

Kidneys.—Cirrhosed.

Microscopical Examination of the Brain Cortex.—Sections cut on freezing microtome and stained with aniline blue black.—*Ganglionic Layer.*—*Motor Area.*—The large motor cells are nearly universally swollen and globöse; their protoplasm is faintly and patchily stained, the nuclei scarcely, or not at all, perceptible. Some have hardly any discernible limiting boundary, and pale granular material or pigment is alone seen representing the protoplasm. Very seldom is any apex process present; more often the basal and lateral remain, but indistinct and stunted; some cells show no sign of extensions except in a fringed or shreddy outline. Others are mapped out by a nearly complete encircling chain of nuclei.

Pyramidal Cell Layer.—To a very much less degree these foregoing changes are seen in the pyramidal cells of the third layer.

The main features are the pallor and indefiniteness of both cells and nuclei, the scarce-met apex processes, the faint granular appearance of the protoplasm, and the patchy staining of the matrix.

First Layer.—A few “scavenger” elements are here seen; some seem to have suffered degenerative change. There are also colloid bodies present.

The spindle cell layer is very little marked, but few of the normal shaped elements are notable, the cells by their ragged outline and imperfect staining being not readily distinguishable from the shreddy, irregular-looking connective tissue cells found here and in white matter.

These preceding changes are limited to the ascending frontal gyrus. The gyri adjacent show only the features of senile brains. A greater proportion of “scavenger” elements is found in the peripheral layers of these gyri, however.

Spinal Cord.—This is much shrunken, especially in the lumbar segment, and degeneration in the posterior columns is easily perceptible. The pia is somewhat thickened, and its vessels engorged in the lowest lumbar region.

Microscopical Examination.—*Lower Sacral Region and Filum Terminale.*—The cord with the surrounding bundles of nerves, preserved *in situ*, is comprised in the sections from this region. The nerves lying around the anterior fourth of the circumference are healthy for the most part; two show a little increase of connective tissue only, the nerve tubules remaining clear and well-defined. Nearly the entirety of those encircling the posterior three-fourths of the same are diseased. Thus in Weigert-Pal stained specimens the sections of nerve bundles leave the yellow coloration almost unrelieved by the purplish dotting of unmolested tubules; with the aniline dye, the bundles are deeply and diffusely blue-stained, and have a somewhat mosaic appearance from the coarse white septa of fibrous tissue traversing the field in close meshwork, in the spaces of which can be seen many shrivelled nerve fibres, almost unrecognizable. *Vide illustration.*

At the levels where grey and white matter are first clearly defined the posterior columns are evidently diseased, being shrunken, over-stained, their tubules atrophied, medullary sheaths deep-dyed; hardly any trace of the normal appearances remain. The postero-lateral zones have by no means escaped degeneration; the tubules look compressed, small, and ill-defined. There is, however, no diffuse staining. The pia mater around the cord is much thickened and very dense.

At sites where in healthy sections a few well-formed nerve cells are found in the anterior cornua no trace of the same is observable.

Lumbar Region.—The entirety of the posterior columns is diseased; most markedly at the periphery. All the nerve fibres

are atrophied, closely-packed, and misshapen, but there is no notable increase of connective tissue, either cell or fibre-form. Towards the circumference of cord the staining is deeper, the atrophy extreme, the texture looser, these appearances being continued for a short distance into the lateral columns. The rest of the white columns, although the anterior quadrant has escaped the most, have a greyish tinge; the detail is indistinct, the fibres appearing huddled together and the larger ones much lessened in number; all lack defined outline and clear, white medullary sheath. To a considerable extent the intervals between the larger and healthier fibres are occupied by deep-stained punctate tissue and close-placed, atrophied nerve tubules. One lateral column shows just outside the anterior horn an area marked out by a free riddling with thick-walled vessel orifices; but no obvious focal change in the tissues immediately adjacent to the vessels is seen. The pia all round the cord is thickened, but especially where investing the posterior and postero-lateral columns. It is pretty freely infiltrated with leucocytes, and its vessels are large and their coats thickened.

Anterior Cornua.—There are hardly any even approximately healthy nerve cells to be seen. At the most but two or three of these can be found in each cornu; the remaining cells, where there are any, are stunted, shrivelled, and much pigmented; whilst in a large number mere masses of pigment are the representatives of normal cells. The sheaves of emergent nerves are much thinned and deep-stained.

Dorsal Region.—The posterior columns are as in the lumbar cord, except that a far larger number of vessel-orifices exist in them, very free perforation being present.

The anterior columns show a plain but slight increase of connective tissue, and so do the lateral, mainly outside the anterior horns, and more markedly on one side than the other. The nerve fibres in the peripheral part of the anterior zones are very much wasted, and the field here consists of scattered larger tubules, with intervening deep-stained punctate tissue. The intensity of these changes gradually lessens as the zones are embraced by the anterior horns, but the aspect is never normal. In the crossed pyramidal tracts the appearances are about the same. The entire marginal zone shows notable absence of nerve tubules and excess of connective tissue. No cells are seen in the anterior cornua; several sections were examined. The cells in Clarke's column are frequently hardly distinguishable as such.

Cervical Region.—Disease in the white columns is less marked, and decreases with the higher levels of section. The tracts of Goll are the most affected, especially at their periphery; changes are also marked along the course of the entering posterior nerve roots. The lateral and anterior columns nearly escape, the margins being the most diseased parts.

Throughout the cervical cord there is no decrease in the amount of cell-destruction. Rarely is an approximately healthy cell seen. So far have they disappeared that it would be almost impossible to fix on any special group in the cornua as having suffered the most. This, too, holds good as regards the lumbar region.

The degeneration in the posterior columns of the cord is yet plainly evident in their upward continuations in the medulla. No noticeable alteration in the cells of the clavate and cuneate nuclei is seen.

The cells of the hypoglossal nuclei, whilst not fewer in number than normal, are pretty generally small, with few branches, pale or filled with yellow granules. No change can be positively said to exist in those of the glosso-pharyngeal and vagal nuclei. The oculo-motor nuclei and emergent nerves appear quite normal. No obvious disease detected in any part of the mesencephalon other than that already noted.

Peripheral Nerves.—Transverse sections of these were stained in aniline blue-black and logwood, singly and conjoined.

Sciatic Nerve.—This is greatly reduced in size, its area equalling, roughly, about a third of that of a healthy nerve. Under the low power it is evident that the whole nerve is remarkably shrunken. Even the largest bundles, many of which, however, preserve a fairly normal contour, are smaller than the healthy average, whilst the least sized are found as hardly recognizable groups of closely-packed and wasted nerves lying in a wide expanse of fatty tissue. But these bundle-remnants are only few, the more general condition being a universal atrophy of all portions of the neurine structure to a more or less equal extent. In aniline-stained sections the individual nerve tubules show, as a rule, badly; so much are they wasted as in many instances to present a merely granular aspect. In most the axes are distinguishable. Under high amplification the larger tubules all appear to have lost their normal contour, assuming a sharp-angled pyriform shape; their medulla is thin and yellow-stained, their outer investment unusually clear and defined.

With aniline-logwood stain, the nerve structure proper is almost obscured by the number of connective tissue nuclei, whilst the connective tissue itself is everywhere in striking disproportion to the amount of nerve tissue. The epi- and peri-neurium are notably thickened, and in some parts thick wavy bundles penetrate from the circumference across the nerve, quite obscuring the nerve fibres. In Weigert-stained specimens there are seen patches in which no differentiation of medullary sheath is seen at all, and for the most part the dark rings representing this are narrow and not so well marked as they should be.

Anterior Crural Nerves.—In these appearances vary somewhat from those in the nerve last described. Though the area of the nerve is only diminished to the extent of about one-third, yet the

neurine structure proper is even more wanting, the greater portion of the sectional area being composed of fat. The nerve microscopically has the characters of extreme fatty degeneration met with in some general paralytics. Magnified by 50, a few nerve bundles are seen scattered amidst a quantity of adipose tissue. Two of these bundles are of fair size, and appear free, or nearly so, from disease; three more are much reduced in size, the fibres numerously atrophied and the endoneurium greatly thickened. As in the sciatics, the connective tissue nuclei are abundant. The rest of the apparent nerve structure consists of a few tiny bundles, hardly recognizable as consisting of nerves, with very minute fibres and excess of connective tissue fibre and nuclei, as in the larger groupings. Here and there are small isolated areas of wavy connective replacing nerve tissue. *Vide illustration.*

The other nerves examined were the median, ulnar, radial, and musculo-spiral. Of these the two first were the most degenerated.

The median shows an extreme degree of compression; no separate bundles are discernible, but every portion of the nerve is traversed by coarse fasciculi of connective tissue, whilst there is a complete network of hypertrophied connective tissue fibres enclosing areas containing one or few nerve tubules. The latter are not of rounded contour, but angular or pyriform, occasionally separated by widish spaces occupied only by nucleated connective tissue.

The ulnar nerve, in general appearance, resembles the anterior crural, the main portion of its tissue being adipose, in which lie isolated bundles of nerve tubules, like to those in the median.

In the musculo-spiral and radial the nerve fibres are shrunken, angular, and separated by areas of nucleated connective tissue, which in places usurp to no small extent the position of the nerves.

In the radial there is much adipose tissue between the nerve bundles, and in it lie two remnants of the latter; one of these bundles is of large size, and consists in great part of dense nucleated connective tissue, with comparatively few and isolated nerve tubules.

Portions of muscle taken from the extensors and flexors of forearm, the short flexor and adductor of thumb, all showed similar changes, viz., atrophy of the muscle fibre, with granular disintegration and infiltration of the interstitial areolar tissue with fat. The greater part of the muscle is composed of densely nucleated connective tissue.

Remarks.—There are some details missing in the history of this case which would have been of value in determining the origin and march of the nerve lesions found. It is not evident at what period sensory disturbances were first noted, particularly as regards anæsthesia. Presuming, however, in default of positive statements to the contrary, that these

sense-disorders did not appear until a late date in the course of the symptoms, it seems to me that the patient's first attack was one of anterior polio-myelitis, more or less acute, and partially recovered from, the alternative diagnosis seeming to me to have been neuritic paraplegia. A slowly-progressive form of anterior polio-myelitis would account for the subsequent symptoms, both in upper and lower limbs, in conjunction, that is, with multiple neuritis, which was undoubtedly present on his admission to the asylum. It appears as if the severe crushing of the hand acted as an exciting cause on the development of the disease in the upper extremities. I should imagine the peripheral neuritis to have been secondary to cornual changes, as the atrophy of the limbs proceeded indiscriminately, and, it is believed, independently (at any rate, at the commencement) of sensory disturbances.

What part the affection of the posterior columns of the cord played in the symptoms is doubtful in the absence of history dealing with (a) the date of establishment of anæsthesia, or (b) its being preceded by hyperæsthesia. At the time of patient's admission, changes in them would probably have been present, as there was conjoined analgesia and anæsthesia, notwithstanding multiple neuritis was existent.

The pathological appearances were for the most part those of general parenchymatous atrophy only. No indication of a focal or disseminated myelitis was observed. Nor can the origin of the changes be elucidated; it may be noted, however, that in diseases of the nerve-roots of the cauda equina there is said to be constant degeneration of the posterior median columns. As regards Burdach's zones, it will be remembered that disease was especially marked in the root zones, and that the entering nerve fasciculi were markedly degenerated. The lesions in the lateral columns were not of much degree, but of rather diffuse distribution, and extended into mixed and anterior zones. An upward continuation of these changes in the pyramids of the medulla was not recognized. Considering that the appearances mainly indicated atrophy, mere functional disuse may have accounted in no small extent for the changes found.

I regret an oversight in not preserving the optic nerves for minute examination. Their degeneration seemed in accord with that of the peripheral nervous system.

There are two features of interest on the clinical side of

the case, viz., the long interval between the affection of the right and left upper limbs, and the occurrence of valvular heart disease rather rapidly (syphilitic, as supposed in certain cases where occurring in conjunction with tabes dorsalis).

Cases of Insanity in General Practice. By A. H. NEWTH, M.D.,
Haywards Heath.

It is very possible that if medical men were asked to give an account of cases of insanity treated by them in general practice many, especially those who have given attention to the subject, would be able to show some good results. As, however, they do not have the accessories for successful treatment in every case, such as specially-trained nurses, the quietude and repose of asylum life, freedom from the worries of friends and relatives who, from want of judgment and tact, often do much harm, and from whom it is impossible in private life to isolate the patient entirely, physicians in general practice cannot be expected to be able to do so much as those engaged in asylums.

In order to show what may be done in this respect, I have collected a few cases, amongst many, that have come under my care. No attempt has been made at classification, nor to give details of the history of the cases; they have been taken just as they suggest themselves.

Some years ago a well-known revivalist held a camp-meeting in this neighbourhood, with the result that many persons became insane and were taken to the asylum. Some of them came under my care, but not one of these was sent there.

In one instance I found the patient in an ecstatic state, almost entirely oblivious to all around her, gazing earnestly forwards as if at some distant object. She kept exclaiming, "I see a bright and shining light; the heavens are opened; the Son of Man is standing before me; He calls me; I must go to Him," etc. She would then endeavour to rush forwards as if to fly away into the clouds. She neglected her household duties, would not take food, was sleepless and restless. When I was called to see her she did not notice my presence, but went on with her delusive ravings. Waiting awhile for her to calm, I went up to her, and, taking her by the shoulders, gave her a good shaking, and said, "Mrs. C—, you are ill; your liver is out of order; you must attend to yourself." She came to herself for a time, awaking, as it were, out of a dream, and answered questions rationally. I persuaded her to

take a mild mercurial purge, and prescribed nitro-hydrochloric acid and gentian, for I noticed a yellowish tinge of the conjunctiva, and she appeared sallow and unhealthy-looking. Under this treatment she soon recovered, and has had no relapse.

A short time after I was requested to see another person who had been attending these revival meetings.

She was a poor miserable creature, with a dirty, unhealthy complexion, sunken eyes, dark rims round them, cold, clammy hands, pale fissured tongue, and other evidences of an anæmic state, with disorder of the digestive organs. She was exceedingly depressed, constantly bewailing her lost condition, saying she "had fallen from grace," that "there was no hope for her in this world nor the next," etc. She was strongly suicidal, had made several attempts to drown herself, and it was necessary to have her constantly watched to prevent her doing herself harm. This was a case that seemed to call for immediate removal to the asylum, for, as a rule, I consider it is desirable that if a person is dangerous to himself or others no time ought to be lost in placing him under restraint. However, as there were at least two sensible persons who could look after her, I determined to try what medical treatment could do before taking so serious a step. There was considerable mental agitation, with physical weakness, headache, and derangement of the digestive organs. I therefore prescribed a mixture containing small doses of bromide, with sodium bicarbonate, salvolatile, and a little bitter infusion, and a blue pill and seidlitz powder, with liberal diet frequently administered. The effects of this simple treatment were almost magical to the friends. Her morbid fears disappeared in a very short time, her suicidal impulse passed off, and she became quiet and contented; a simple tonic completed the cure.

There has been no relapse in her case. Some time after Mrs. P— wrote me a very nice, sensible letter of thanks. These are very ordinary cases, and the treatment seemed simple enough; but I am firmly persuaded that if powerful sedatives had been given, the already weakened brain, excited from deprivation of proper blood supply, would have been still further weakened by them, and these patients would have probably been ill for some time.

About this time I was called up at night to see a Mrs. B—, who was delirious and unmanageable. She had been under my care for catarrhal fever and anæmia, was naturally of a melancholic frame of mind, and, having lately lost her husband, was depressed in consequence, and also anxious as to her future possibilities of earning a livelihood. When I saw her she was in a semi-unconscious state, excited, restless, and unreasonable. She was full of perverted religious delusions, constantly raving about the blood of

Christ. "I cannot see it," she cried. "I want it applied to me; I have been a great sinner, and I want to see my sins forgiven," etc. She would not attend to anything that was said to her.

I thought I would attempt something in the way of argument. Speaking firmly and decidedly to her, though unaware whether she could really appreciate what I said, I pointed out how she might derive all the benefits of the atonement without actually seeing the means used or even understanding them; giving her as an illustration how medicine might be given to her without her seeing it or knowing what it was, and yet would do good. I daresay my theology was not quite orthodox, but it had the desired effect. She became calmer, and after a quiet night's rest, obtained by a mild opiate, was tolerably cheerful and quite rational in the morning, referring to her delirium and thanking me for what I had said to her. She has continued clear in mind now for many years; is, in fact, better in health than she has been for some time, and though she occasionally suffers from severe headaches, is able to conduct a large infant school.

In treating cases with strong mental delusions, it is always well to avoid making light of them or speaking of them with levity. To the patient these delusions are a terrible reality, and the arguments that must be used ought to be such that the person can himself turn them to account.

Another case of religious mania, so called, came under my care about this time, which was to a great extent influenced by reasoning. She was a young lady, aged 20, residing in London, of somewhat phthisical tendency, though there was no history of phthisis in the family. Her father and grandfather had both committed suicide, and her mother was rather weak-minded; she had a sister who was congenitally deformed. She was homicidal, had attempted to throw a child of a friend with whom she was out walking into the canal, but the attempt was frustrated by some passer-by at the time. She had also been found wandering along the banks of a canal as if meditating suicide, which it was feared she might commit. She had been attending some exciting religious meetings, had gone long distances to attend them, and had neglected her meals in consequence. She was in low, feeble physical health, but with no particular organic disease, little appetite, torpid state of bowels, and deficient menstruation.

Two or three medical practitioners had been consulted, who all told her that she had upset her mind by attending the religious meetings, that she must give up going to them, that they were all nonsense, etc., and advising, instead, attending theatricals, balls, concerts, entertainments, and so on. This

levity in respect to the religious services which she had attended, and in which she felt deep interest, only shocked her and made her more depressed. I carefully avoided saying anything myself against them, on the contrary, I said they were very good, and quite sympathized with her in the interest she took in them. But at the same time I told her she had upset herself by going so long without proper food, walking so far, and being present in hot, imperfectly ventilated rooms.

She acknowledged the uncontrollable impulse she had either to drown herself or her friend's child, and cried bitterly at the thought of her wickedness. This, I pointed out, was the result of her physical weakness, and that unless she did what I told her she would have either to go to prison or to an asylum. I advised her, for a time at least, to give up attending religious meetings, to take more food and rest, and prescribed a ferruginous tonic, with aloetic purgatives, as there was some menstrual irregularity. She seemed to appreciate my sympathy thoroughly, and following my advice and treatment, rapidly improved in health and became cheerful and happy, and has continued in good health, both mentally and physically, for some years.

The strong hereditary tendency to insanity was a most unfavourable factor in her case, and I am strongly persuaded that, had she not been induced to follow my advice in this early stage of her malady, she would have committed either suicide or homicide, or have become hopelessly insane.

Mrs. V., a lady of dark-olive complexion, with one child, had resided in India some time, was now separated from her husband. For some time she had been eccentric in her manner and excitable, giving way to passion and taking fanciful dislike to persons. In the middle of the night she was suddenly seized with a violent attack of mania. The friends thinking she was possessed with the devil had sent for the parish priest, who, however, declined to have anything to do with her, and advised them to send for me. I prescribed some chloral and bromide which produced sleep and quietude. On examining her in the morning I discovered that she had an ulceration of the cervix uteri, which I treated successfully, and the maniacal symptoms ceased. She left the neighbourhood, after a few months, better than she had been for some time, but I entirely lost sight of her and do not know whether she had a relapse or not.

I am strongly inclined to think that there are many cases of insanity due to reflex irritation of the womb or its appendices, which if treated in an early stage might be cured. This special treatment is difficult in asylums, the presence of young unmarried girl attendants, the fact that the assistant medical

officer is himself a single young man and the superintendent is also frequently unmarried, and the morbid feeling and ideas of the patients themselves, make an examination both difficult and unpleasant. So the case is neglected, the brain cells become diseased, and the patient is allowed to drift into an incurable maniac. The following case will show what may be done in this respect:—

Mrs. G., an elderly lady, residing near London, was sent to be under my care. She had been more or less insane for many years and had been placed in an asylum several times. There was an hereditary tendency; her brother committed suicide, and several of the family are or were insane, whilst others are more or less neurotic.

By nature a most gentle, quiet, retiring lady, when she came to me she was violent in her manner, using strong and obscene language. Her restlessness was extreme, she could not be induced to remain still a moment, and was most persistently suicidal. She obstinately refused food, and was brought to the extreme verge of starvation. Her complexion was sallow and unhealthy, her pulse extremely feeble, intermittent and rapid, skin cold and clammy. The treatment of this case was most difficult. She strenuously resisted feeding, spat out all that was put in her mouth, and obstinately refused all medicine. I used the stomach pump several times, but the difficulty and unpleasantness of using it was so great that I gave it up and relied solely on a method I have adopted of artificial feeding, which is simple, safe, and efficacious. Though the lady was constantly asking for her daughters I deemed it better that they should be sent away and the patient left entirely in my care with the nurses.

There was an enormous accumulation of fæces in the rectum and colon, which came away with much difficulty by repeated enemata; the lady fancied she was being delivered of a child. I also found, some little time after she had been under my care, that she had prolapse of the womb; this I relieved and supported, giving appropriate treatment.

Her condition was so precarious that her case seemed utterly hopeless.

After two months' anxious care the lady slowly improved in physical health, and one day suddenly recovered her mental faculties, with the remark, "I have been very ill, have I not?" She did not have the slightest recollection of what had taken place during her illness. Her health, both mentally and physically, rapidly improved, and she went home to her friends better than they had known her for many years.

She has lately, after six years, somewhat relapsed, I understand, but not sufficiently to be placed under special care. It is very

likely that the womb has prolapsed again, but her natural timidity of disposition makes it difficult to treat her for this. The friends have a reluctance in asking me to see her professionally lest it should upset her mentally, though this I consider very unreasonable and injudicious.

In this case the relief of the mental excitement so quickly followed on the reposition of the prolapsus uteri that it seems impossible not to recognize the connection between the irritation it caused and the mental symptoms. There were some domestic anxieties as well probably acting as an exciting cause.

Closely allied to this was a case of recurrent, subacute mania in a lady, residing at Brighton, of about 50 years of age (J. B.). Tall, fine, healthy person, but with somewhat inquisitive, mischief-making propensities, has been repeatedly in various asylums for recurrent mania at intervals of about twelve months. Every time she was affected she had the peculiar delusion that a man came up out of the earth and got into her bowels trying to drag them out. This persistent delusion led me to make inquiries as to whether there might not be some source of irritation to account for this. I found that thirty years previously she had been under treatment for *tenia solium*, without, however, any satisfactory result. During a tolerably rational moment I persuaded her to allow me to prescribe for her. So clearing out the bowels with a strong dose of castor oil I gave her a draught containing one drachm of oil of male fern and forty grains of Kamella powder, followed in a few hours by a strong black draught. The result was most satisfactory, and to the lady's intense delight she brought away a worm sixteen yards long, which she carefully measured; the head came away too. After this she recovered mentally and has had no relapse of any kind since, now several years.

I had another case of insanity (A. T.) cured by removal of a tape-worm, who relapsed, after a few years, from its renewal, and again there was immediate relief of the cerebral symptoms on removal of the worm.

(To be continued.)

*Case of Rupture of the Left Ventricle of the Heart.** By JOHN BRUCE, M.B., C.M.Ed., Assistant Medical Officer, Crichton Royal Institution, Dumfries.

The patient was a well-built man with florid complexion, 70 years of age. He had been in the Crichton Royal Institution for 18 months as a voluntary patient, and was subject to

* Read at the Quarterly Meeting of the Medico-Psychological Association held at Edinburgh, Nov. 12th, 1891.

periodic attacks of nervous excitement, during which he was restless, unable to keep still for a moment, had spasmodic movements of the arms and legs, and lost his appetite. When free from excitement he was able to take long walks and never complained of dyspnoea. The action of the heart was usually steady and regular, but towards the end of an attack of excitement it became rapid and feeble. A mitral presystolic murmur had been present for some years. He died suddenly one morning during an attack of excitement. There was a history of gout.

Post-mortem examination.—There was marked venous congestion of the face and neck.

Thorax.—The costal cartilages were ossified. On reflecting the sternum the pericardium was seen to be much distended, and on opening it was found to contain 14 ounces of slightly stained serum, and 16½ ounces of blood clot, dark in colour. There was no evidence of pericarditis.

The heart was enlarged and weighed 18 ounces. There was a thick deposit of fat at the base of the heart, in the inter-ventricular grooves, and on the posterior aspect of the right border. The muscular fibre was pale and flabby, being in a state of fatty degeneration. The walls of the ventricles were of normal thickness, but the auricular walls were thin, especially that of the right auricle. All the cavities of the heart were enlarged; the left ventricle was empty; the right ventricle and both auricles were filled with blood clots. One inch to the left side of the septum and two inches from the apex there was a rupture of the anterior wall of the left ventricle. The orifice was of a linear form (resembling a cut with a knife), one inch in length, and ran almost parallel to the muscular fibres.

The rupture was divided into two unequal parts by a narrow band of muscular fibre running obliquely across it, the lower part being one-fourth the size of the upper. At the point ruptured there was a local dilatation and thinning of the muscular wall. The aorta was thickened and atheromatous; the ascending part of the arch was dilated.

The aortic and pulmonary valves were competent. The mitral valve was slightly incompetent and the orifice was narrowed.

The lungs were healthy.

The liver was enlarged and cirrhotic. The other abdominal organs were healthy.

A Case of Rupture of the Heart occurring in a Melancholiac.
By VINCENT NASH, L.R.C.S.I., Assistant Medical Officer,
Richmond Asylum, Dublin.

Through the kindness of Dr. Conolly Norman, I am enabled to report the following case of spontaneous cardiac rupture.

A.H., age 64, was admitted to the Richmond Asylum May 22nd, 1888. She was a widow in decent circumstances, who had borne several healthy children. She had been treated to recovery for two attacks of melancholia in an asylum in England.

On admission it is noted in the case book: Patient very depressed, replies slowly, says that she wishes she was dead, that life is a burden to her. At times she refuses to speak; lungs normal; heart, weak action.

May 27th.—Patient last night attempted to commit suicide by cutting a vein in her arm with a piece of glass, which she had concealed for the purpose. The night nurse's attention was drawn to her by hearing the dropping of the blood on the floor.

June 25th.—No improvement in mental state; has had one or two attacks of syncope lately; she is full of delusions, and imagines that she has some dreadful disease which she will impart to the other patients if she is not removed to some place where she will be alone. She continued pretty much in this state until she came under my observation in March, 1890.

She was then greatly emaciated, with face pale and very anxious looking; skin dry, rough, and wrinkled; appetite fair; bowels confined; slept fairly well at night. The lungs, with the exception of weakened breath sounds at the right apex, were healthy; heart sounds feeble, slight blowing mitral systolic murmur. She complained occasionally of pain over the region of the heart, which sometimes shot down the left arm to the finger tips. There was nothing to suggest that she at any time had suffered from syphilis. She was constantly moaning, wringing her hands, bewailing her fate and the destruction she had brought on herself and the asylum. She implored everybody she met to put an end to her existence, as she was a constant source of danger, not only to the institution, but to the world at large. "We are all lost, the whole world is destroyed; don't come near me or you will get the dreadful disease. It is eating us all up; we are a mass of sores, and I am the cause of it all. Give me a dose of chloroform and let me die." She remained in this condition until October 1st, 1890, when she was attacked with acute pneumonia of the left base, which ran an ordinary course until the morning of the seventh day, when she was suddenly attacked with extreme dyspnoea; her face became ashy pale and covered with a cold sweat.

She sat up in bed gasping for breath, throwing her arms about. Extremities cold; the temperature which an hour before had been 100°, was now fallen to 98°. Pulse very weak and irregular; heart sounds scarcely audible. She gradually recovered from this state, and in the course of three or four hours was quite as well as she had been before the attack. Her pulse was fairly strong and regular; the heart sounds were still very weak and muffled, and I was unable to detect the mitral murmur which she had before the seizure. She stated that during the attack she suffered intense pain over the region of the heart and a dreadful sense of suffocation. She slept very little that night, and had to sit up in bed, as she complained of shortness of breath and sudden short attacks of pain in the chest. She continued to improve in every way until the morning of the ninth day, when, about 48 hours after the above seizure, while turning in bed, she gave a loud shriek, attempted to sit up, and fell back dead.

Post-mortem examination 10 hours after death.—The pericardium was found distended with partially clotted blood, which concealed the heart from view; the heart itself was slightly larger than natural, was pale and flabby; the surface of the right ventricle had a thick coating of fat, and its walls were thinner than normal. Tricuspid orifice and valves healthy; the pulmonary artery and valves were also quite healthy. The left ventricle had a good deal of fat on its surface, particularly along its left border and towards the apex. Its walls were somewhat atrophied, tore easily, and were of a pale yellow colour; towards the apex they became thinner and thinner, and at a point a little posterior to the actual apex there was a rent about a quarter inch long. Its edges were irregular, ragged, and everted. The muscular tissue for about the size of a two shilling piece around the rupture was soft, ecchymosed, and contained blood clots between its layers. The internal orifice of the perforation was partially closed by a blood clot, which extended backwards for about three-quarters of an inch into the cavity of the ventricle.

The anterior segment of the mitral valve was healthy; about the centre of the posterior segment there was a well-marked calcareous nodule. The auriculo-ventricular orifice was slightly contracted. The aortic valves were quite healthy, and the aorta, with the exception of one or two atheromatous patches, was healthy.

The base of the left lung was in a state of red hepatization; right lung healthy; liver, kidneys and spleen, slightly congested, but otherwise normal. Microscopic examination showed an advanced state of fatty degeneration of the muscular fibres of the heart. Had it not been for the occurrence of pneumonia, which threw an extra strain on a heart already weakened by degeneration, it is not unlikely that the rupture would not have taken place until a considerably later period.

My principal reason in bringing this case before the Association is not so much on account of the comparative rarity of the lesion, as on account of its further example of a case in which the patient survived for a lengthened period after rupture of the heart had undoubtedly taken place.

OCCASIONAL NOTES OF THE QUARTER.

*Report on Irish Lunacy Legislation.**

This Report (for we take two Reports as practically one), signed by Sir Arthur Mitchell, Mr. R. W. A. Holmes, and Dr. F. F. MacCabe, is one of very exceptional interest. The time had come when it was the duty of the Lord Lieutenant to grasp the situation in Ireland in regard to the lunatic asylums and to obtain the best authoritative advice as to their condition and the reforms necessary to render them a credit to the Lunacy Department of that country.

The points of inquiry embraced are—the questions whether the inspection of the institutions is adequate to their requirements; whether the powers of the lunacy inspectors ought to be transferred to the Local Government Board; whether, if so, the work of inspection should be distributed among the general medical inspectors of the Board, or whether it should be assigned to inspectors with no other duties; and whether any other amendments of the Irish Lunacy Laws are desirable.

À l'outrance, the members of this Commission unhesitatingly report that fresh legislation is “beyond question necessary.” Codification of the lunacy statutes is required. Far beyond this, however, it is requisite that existing provisions should in some instances be abolished, and others should be introduced. At the bottom of the difficulties by which the provision for the insane and their treatment are provided for, is the fact that the early Lunacy Laws, still in force, precede the Poor Law Acts, differing in this from the order of legislation in England and Scotland. It appears to be due to this, that the poor rate in Ireland does not embrace the necessities of the insane poor. Their maintenance comes out of the county cess, the local tax in operation when the lunacy

*First and Second Reports of the Committee appointed by the Lord Lieutenant of Ireland on Lunacy Administration (Ireland), 1891. Edinburgh, 1891.

laws were placed on the statute book. Hence, technically speaking, there are no *pauper lunatics* in Ireland. It is true that many are in workhouses supported out of the poor rate, but they are not registered lunatics.

The opinion is expressed that although the transference of the powers of the lunacy inspectors to the Local Government Board would be an improvement, *the creation of a separate lunacy department is that which is really necessary*. We should have deeply regretted, had anything short of this fundamental change been recommended. The transference might, indeed, have been an improvement on the present muddle, but it would have been infinitely worse than the system which obtains in Great Britain. An uncertain sound on this most important preliminary question would have gone far to render the report before us nugatory. That this recommendation will be ultimately adopted we cannot for a moment doubt.

It is very properly pointed out that the duties of inspection are not restricted to the class of patients paid for by the State, but extend over the insane of the middle and higher classes. It would be a waste of time to give reasons why there is no valid argument against this course on the ground that there would be an overlapping and consequent friction between the two separate jurisdictions. Whether there might not be a saving of expense is another question, but granting that such would be the case, the argument must be unhesitatingly dismissed if, as we maintain, the present unsatisfactory condition of Irish asylums calls loudly for the creation of a separate lunacy department. It is proposed, however, in view of the time that must elapse before legislation can effect this desirable change, or even the transference to the Local Government Board, were that desirable, to revive, as a temporary expedient, the Board of Control and Correspondence, the provision for which is, it appears, still in force under the Statute 57 Geo. III., cap. 106.

It is stated that this Board of Control did not originally concern themselves about the *management* of asylums, but only in the erection of buildings, etc. The function which was not exercised by this Board was undertaken by two medical inspectors of lunatics, added to it about 1860. The revival (without a separate Act of Parliament) of a modified and strengthened Board of Control is therefore recommended, but only as a makeshift till the entirely separate Lunacy Board is created.

It is not necessary for us to enter into many details included in the report before us—details referring to workhouses, some of which might be converted into provincial asylums, and to the transference of pauper lunatics from workhouses to private dwellings. We may, however, state that the recommendations of the Committee include the following points:—

It is proposed that the Board should consist of seven members, or if that number is considered too large, five; two of the members to be medical men, the present inspectors of lunatics being appointed. The other members are to be unpaid and not medical.

When this Board is created the code of law under which the Privy Council and the Board of Control intervene in the formation of districts, the building of asylums, the purchase of sites, and the control and the direction of asylums would be repealed.

The authors of these reports naturally indicate as a guide the way in which the Scotch Board of Lunacy proceeds. It is, however, pointed out that it would not be desirable to adopt all the provisions of the Scotch law.

It is recommended that power should be given for the erection of a succursal asylum by any district or combination of districts, these asylums to be cheaply built and adapted to the wants of the incurable and tranquil class of patients. As there would be a danger of unsuitable cases being admitted, no application for a reception order ought to be made without the sanction of the General Board, this approval being submitted to the magistrate with the usual statutory form required on admission. It appears that an Act of Parliament already provided for this (8-9 Vic., cap. 107, sec. 15, 1845), but it was never carried into practice. The adoption of this course is calculated to make the district asylums assume more of an hospital character, fitted for the curable class.

We have already referred to workhouses. It is recommended that the Board of Governors of any district asylum should be permitted to purchase an unoccupied workhouse and use it for lunatics not requiring medical treatment and not dangerous. They would stand on the same footing as the succursal asylum above mentioned.

The utilization of portions of occupied workhouses is also recognized as possible, but not strongly recommended. Such licensed lunatic wards must be subject to the same

rules as to inspection, admission, etc., as are district, succursal, and private asylums.

We regret, but are not surprised to find, that the condition of the great mass of lunatics in Irish workhouses "is highly unsatisfactory." Most of them, it must be noted, "are not allowed to discharge themselves, or to quit the workhouse as the ordinary inmates are allowed to do," and this without legal authority. It is very properly recommended by this report that it should be made illegal to keep insane persons in any workhouse which does not possess wards licensed for their reception. It is shown, as pointed out, that "the retention of lunatics, transferred to workhouses, on the asylum books is an evasive way of obtaining participation in the Government grant towards the maintenance of the insane poor." Altogether the present condition of things creates surprise that it should have been so long permitted.

It was to be expected that this report should contain strong recommendations in regard to the insane who do not require confinement in asylums and can be provided for elsewhere. We have no means of knowing how far the boarding-out system will be likely to answer as in Scotland.

A distinction is very properly made between private lunatics and lunatics under private care, maintained out of the rates, whether residing with relatives or strangers. The former class do not need to be brought under the supervision of the General Board unless they are kept for profit, or whether kept for profit or not, have been insane for upwards of a year, and are subjected to compulsory confinement, restraint, cruel treatment, or gross neglect. The latter class (the insane poor in private dwellings) must be brought under such supervision.

Private patients, even if kept for profit, should not come under the Board's jurisdiction if a medical man certifies that it is desirable to place him temporarily in a specified house. Certainly this portion of Scotch law is a very remarkable one, and we should like to see it extended not only to Ireland, but to England. This, however, is a hopeless wish, being altogether opposed to the recent mischievous restrictive legislation under which we labour. The report before us has the courage to propose that this temporary residence, free from the control of the Board, should be extended from six months, as in Scotland, to the whole year.

A point on which the reporters lay great stress, and very properly, is that the procedure for authorizing the admission

and detention of lunatics should be identical for all classes—for the destitute and those in comfortable circumstances.

With regard to the introduction of the magistrate as authorizing the admission and detention of patients into asylums, the report is favourable to this course. It is recognized, however, that this can be carried out sufficiently without the cumbrous clauses which disfigure the English Act, which is a clumsy imitation of the law of Scotland. Simplicity and breadth ought to characterise fresh Irish legislation, and in these respects even the latter may be improved upon.

An urgency certificate without a magisterial order must be provided for in the contemplated Irish legislation.

The admission of voluntary patients into asylums is of course recommended, as is also permission for the manager of a licensed house to receive as a boarder any relative or friend of a patient as long as the assent of the Board is obtained. We should have thought that such assent was totally unnecessary.

In regard to dangerous lunatics and those who are neglected, the report recommends that provisions similar to those in force in England and Scotland should be carried out for the future in Ireland.

At the present time in Ireland medical superintendents are appointed by the Lord Lieutenant. We recommend that the General Board should have the power of vetoing the appointment of superintendents, however rarely it should be of exercising it. The position of the superintendent is clearly and properly laid down. The asylum having 200 patients should be provided with one resident assistant medical officer, and two or more according to the size of the institution.

Full power should be given as recommended to the General Board to send medical men to examine into and report upon patients in asylums where it appears to be desirable.

Access to patients should not be discouraged, although the medical superintendent should be empowered to refuse such visits, his reason being forwarded to the General Board.

On the irritating question of what letters are to be sent and what are to be detained by the superintendent, it is recommended that he should exercise his discretion unless the letters are addressed to certain official persons enumerated.

As to restraint and seclusion, the recommendation is delightfully simple and elastic—the General Board “should be empowered to do what seems to be desirable.”

Our space will not allow of entering into further details in regard to the provisions which ought, in the opinion of the reporters, to form part of the proposed new Irish Lunacy Law. They appear to us to be judicious and to be guided by an honest attempt to adopt what is good in the English and Scotch Lunacy Acts, while avoiding their defects. We have no doubt whatever that if the recommendations of the reports before us are carried out, the future condition of the insane in Ireland, within and without the walls of asylums, will be vastly improved. There is no denying that a thorough reform has for long been necessary. We confidently look to a brighter record than that of the past. It may be that the change has already commenced, and "the Reports of the Committee appointed by the Lord Lieutenant of Ireland on Lunacy Administration" (consisting of the competent gentlemen mentioned at the commencement of this review) will, we hope, exert a beneficial influence in the regeneration of Irish asylums.* May this report not follow its many predecessors to the Vice-regal waste-paper basket! Here is the weak link in the chain, we are sorry to say. Of what advantage is the best advice, if it is not taken?

Important Lunacy Action.

In a recent trial a verdict was given against a medical man for writing a certificate to the effect that the plaintiff was insane. The medical man in question pleaded that the words written were not a certificate, but were for the information of the relieving officer, and given to him to enable him to take the steps provided for such cases under section 20 of the new Lunacy Act.

In 1889 the plaintiff had attempted suicide, and had been confined in an asylum. He was, however, discharged recovered after some months' treatment. In November, 1890, a quarrel had arisen between his wife and himself, and the wife applied to the defendant, who wrote the words complained of, viz., that the plaintiff was a person of unsound mind and dangerous to those about him. On receipt of this document the relieving officer, aided by two police officers, removed the plaintiff to

* Although the admissions into district asylums have steadily risen during the decade 1879-1888, and this in spite of diminishing population, the Committee point out that the conclusion of there being an increased liability to mental disease would be unwarrantable. Emigration causes a larger proportion of *defective* persons to the population of the country, and, along with other circumstances, explains the apparent increase.

the infirmary on a Saturday, and on the following Monday he was taken before a magistrate, who, after examining him, refused to sign an order for his detention, and he was immediately liberated. In the course of cross-examination he declared that his family evinced feelings of hostility towards him, and that it was untrue that he had threatened the members of his family.

The defence raised was to the effect that from the defendant's previous knowledge of the case, and the wife's statement, he had written the certificate to enable the relieving officer to set on foot the necessary inquiry with regard to the plaintiff's state of mind, although he admitted it would have been more desirable that he should have seen the plaintiff beforehand; but knowing how important it was that such cases should be dealt with promptly he had given the certificate without seeing him, in order to save time.

Mr. Justice Cave, in summing up, put the following points to the jury:—1st. The action for libel must fail because the occasion was privileged, and no malice was proved; that the proceeding was under the Lunacy Act, and the question was whether it was necessary for the safety of the public or for the welfare of the plaintiff that he should be detained as a person of unsound mind, and if so the verdict would be for the defendant. Then, again, did the defendant act in good faith and with reasonable care? If he did not the verdict would be for the plaintiff.

The jury found for the plaintiff, and gave him £25 damages. There can be no doubt the jury were influenced by the fact that the defendant had not seen the plaintiff for some considerable time before giving the certificate, and that consequently he had failed to exercise reasonable care in signing the document complained of. Nor do we see how they could have decided otherwise. We do not think a medical practitioner should sign any document bearing upon the mental condition of a person without being perfectly aware of the consequences of his so doing, and without a full knowledge of the penal clauses in the recent Lunacy Act. The care that is taken throughout the Act to make it plain that no certificate shall be signed without the patient having been seen within a very few days, should have warned the defendant to be careful in stating in writing that the plaintiff was of unsound mind, and it would clearly have been exercising more reasonable care if he had had a personal interview with him before committing himself to a written opinion.

Inebriate Asylums.

In a former number of the Journal we recorded the progress made in regard to institutions for inebriates—a term happily substituted for habitual drunkards.

We have before us the last, that is to say, the “Eleventh Report of the Inspector of Retreats under the Inebriates Acts, 1879 and 1888,” presented to Parliament in 1891.

Dr. Hoffman states that he has had no occasion to find fault with their sanitary or general condition. A new Retreat has been opened during the year 1890—The Grove, Fallowfield, near Manchester. In a short time it was filled with twenty female patients.

During the year 109 patients were admitted to the different establishments. The following passage in the Rickmansworth Retreat may be quoted:—“With regard to our work, the year 1890 has been a very successful one. The Home has been full throughout, and the results of treatment have been more than usually encouraging. Including private cases, 59 have been under our hands during the year. I (Dr. Braithwaite) think the main points requiring urgent attention to make legislation for inebriates of more universal value are :—

“(1.) Less obstruction to the entrance of voluntary patients by doing away with appearance before Justices, or, at all events, of appearance before *one* Justice.

“(2.) Compulsory reception and detention of inebriates too will-paralyzed to apply of their own account.

“(3.) Need for provision for the poorer classes.”

Statistics of this Home since its opening are given. The number of patients discharged during this period amounted to 224. The average length of period under treatment was about $6\frac{1}{2}$ months. Of these, 94 are doing well, 10 are improved, 10 were discharged as insane, one died, 35 were not heard of after discharge, and—a melancholy confession to make—74 were not improved. Of the various forms of inebriants used whisky was by far the most frequent—namely, in 84 of the number discharged (224).

A new Retreat is to be opened, if it has not been so already, at Saltash, in Cornwall, during the year 1891.

The existing number of Retreats amount to seven, the number of patients licensed for being 100. There were, however, only 59 under care January 1, 1891.

The following is a list of the Homes, the name of the

licensees, with the number and sex of the patients licensed for:—

Number of Retreats 7

Name and Situation of Retreat.	Name of Licensee.	Number of Patients Licensed for.	Sex.	Number of Patients remaining Jan. 1, 1891.
Colman Hill House, Hales Owen, Worcestershire.	Emma T. Branthwaite, Eleanor F. Branthwaite, and George C. Branthwaite.	10	Female	—
Dalrymple House, Rickmansworth, Hertfordshire.*	R. Welsh Branthwaite, L.R.C.P. Lond., M.R.C.S.	20	Male	11
High Shot House, East Twickenham, Middlesex.	Charles J. Boorne and Alfred H. Gibbs.	10	Male	10
St. Veronica's Retreat, Chiswick.	Isabelle F. Smith.	10	Female	—
Old Park Hall, Walsall, Staffordshire.	F. J. Gray, L.S.A.	10	8 males and 2 females	6
The Grove, Fallowfield near Manchester.	(Mrs.) Mary Hughes	20	Female	20
Tower House Retreat and Sanatorium, Westgate, Kent.	John H. Brown.	20	14 males and 6 females	12
		100		59

N.B.—Private patients, as well as patients under the Act, are received at all the above Retreats.

PART II.—REVIEWS.

Thirty-Third Annual Report of the General Board of Commissioners in Lunacy for Scotland. Edinburgh. 1891.

The year 1890 has witnessed a further increase in the total number of lunatics coming under the official cognizance of the Commissioners. On 1st January, 1891, the total was 12,595, an increase of 282 since the corresponding date of the previous year. The changes during the year as regards the distribution of the insane are as follows:—In royal and district asylums there is an increase of 46 private and 188 pauper patients. In private asylums there is a decrease of four private patients, and in parochial asylums

an increase of six pauper patients. A decrease of one has taken place in the general prison at Perth, and in training schools for imbecile children there has been an increase of five private and seven pauper inmates. In private dwellings there is a decrease of four private and an increase of 44 pauper patients. Private patients have increased by 38, and paupers by 244. Lunatics in asylums have increased by 242, and those accommodated in private dwellings by 40. The increase in establishments of 40 private and 200 pauper patients is above the average annual increase for the five years 1886-90, when the figures were respectively 35 and 123.

As regards *establishments* (under which term are included royal and district, private and parochial asylums, lunatic wards of workhouses, training schools for imbeciles, and the lunatic department of the general prison), the following changes have taken place during the year:—The number of private patients directly *admitted* was 522, 43 more than during the previous year, and 45 more than the average for the quinquenniad 1885-89, while the number of paupers admitted was 2,213, 52 more than the preceding year, and 151 more than the average for the five years 1885-89. Ninety voluntary boarders were admitted, an increase over the average for the 10 years 1881-90, and the number resident on 1st January, 1891, was 61, an increase of six over the number at the corresponding date of the previous year.

The number of private patients discharged *recovered* was 199, which is two below the number for the previous year, but 13 above the average for the five years 1885-89, and the number of paupers recovered was 975, 31 above the number for the previous year, and 45 above the average for the five years 1885-89. The proportion of recoveries per cent. of the numbers admitted into each class of establishment is shown in the following table:—

CLASSES OF ESTABLISHMENTS.	Recoveries per cent. of Admissions.	
	1885 to 1889.	1890.
In Royal and District Asylums	39	38
„ Private Asylums	34	35
„ Parochial Asylums	42	46
„ Lunatic Wards of Poorhouses	6	11

The number of private patients who *died* was 140, 41 more than in 1889, and of pauper patients 638, 45 more than

during the previous year. The following table gives the death-rate of private and pauper patients per cent. of the average number resident:—

CLASSES OF PATIENTS.	Death-rates in all Classes of Establishments per cent. of the Number Resident.	
	1885-89.	1890.
Private Patients... ..	6·6	8·4
Pauper Patients... ..	8·1	8·1

The death-rate in the various establishments is shown in the following statement:—

CLASSES OF ESTABLISHMENTS.	Proportion of Deaths per cent. on Number Resident.	
	1885-89.	1890.
Royal and District Asylums	7·8	8·5
Private Asylums... ..	8·0	7·8
Parochial Asylums	8·9	8·9
Lunatic Wards of Poorhouses	5·5	4·0

A further diminution of *escapes* from establishments during the year has again taken place, the proportion per 100 resident being 1·9, as compared with 2·0 during the preceding twelve months.

The number of reported *accidents* is 110, 14 less than during 1889. Of these nine ended fatally. In three instances the death was suicidal, one by hanging, one by cut-throat, and one by drowning. Another case of drowning was probably suicidal. Of the five deaths not suicidal one was due to drowning while bathing, three to the impaction of food in the pharynx in general paralytics, and one to asphyxia in an epileptic fit. In 43 cases the accident involved fracture of bones or dislocation of joints, occasioned in 18 instances by falls, in four cases by assaults by fellow-patients, and in 11 by struggling with patients or attendants. In seven cases the accident was unintentionally inflicted, and in three the cause was not ascertained.

In the section dealing with the *present condition of Establishments* references to increasing population and the necessity for providing additional accommodation are not in-

frequent, and it is noteworthy that in considering the question of additional buildings the provision of improved hospital accommodation for the sick and those requiring special care takes a very prominent place.

The systematic boarding-out of pauper lunatics in private dwellings as adopted in Scotland has unquestionably so far tended to diminish the necessity for additional asylum accommodation, but whether the relief afforded by this method has not nearly reached its limit would appear to be matter of doubt. So much, indeed, was hinted at in the Psychology Section of the British Medical Association at its last meeting by the Medical Superintendents of two Scotch Asylums. It appears from their remarks that there is a disposition on the part of those who receive such boarders to demand increased payments for their maintenance, and that in consequence the difference of cost between boarding-out and asylum care is becoming so little that the parochial authorities do not exert themselves to provide accommodation in private dwellings. This view is not, however, supported by the statistics given in the Commissioners' report, where it is clearly shown that in recent years the proportion of pauper lunatics maintained in private dwellings has increased, while the proportion in asylums has diminished. Taking the last six years given in Table I. of Appendix A., calculation shows that the proportion per cent. of all pauper lunatics in asylums and private dwellings is as follows:—

1st January.	In Asylums.	In Private Dwellings.
1886	77·9	22·1
1887	77·2	22·8
1888	76·5	23·5
1889	76·8	23·2
1890	76·1	23·9
1891	76·2	23·7

Dividing these six years into two periods of three each, the proportion is:—

1886-88	77·2	22·8
1889-91	76·4	23·6

The average maintenance rate per week for pauper patients in asylums has diminished during the past 10 years from 10s. 2½d. to 9s. 7¼d., while that for patients in private dwellings has increased from 5s. 3d. to 5s. 11¼d., but even with this approximation of the cost of maintenance under the two conditions the figures given above show no falling

NUMBER OF LUNATICS AT 1ST JANUARY, 1891.

MODE OF DISTRIBUTION.	Male.		Female.		Total.	PRIVATE.			PAUPER.		
	M.	F.	M.	F.		M.	F.	T.	M.	F.	T.
In Royal and District Asylums...	3459	3657	7116	727	800	1527	2732	2857	5689		
„ Private Asylums ...	44	108	162	44	108	162	—	—	—		
„ Parochial Asylums, i.e., Lunatic Wards of „ Poorhouses with unrestricted Licenses ...	708	809	1517	—	—	—	708	809	1517		
„ Lunatic Wards of Poorhouses with re- stricted Licenses ...	444	438	882	—	—	—	444	438	882		
„ Private Dwellings ...	1033	1580	2613	40	84	124	993	1496	2489		
	5688	6592	12280	811	992	1803	4877	5800	10477		
„ Lunatic Department of General Prison ...	42	15	57	—	—	—	—	—	—		
„ Training Schools ...	164	94	258	81	61	142	83	33	116		
TOTAL ...	5894	6701	12595	892	1053	1945	4960	5633	10593		

off in the number of pauper lunatics who are provided for in private dwellings; quite the reverse.

Accidents, escapes (or "purposeless wanderings") and untoward occurrences are, of course, inseparable from such a system in which the amount of liberty accorded is so large, but these, in the opinion of one of the Deputy Commissioners, are not more frequent or more serious than they are in asylums. In one case an imbecile young woman was found to be pregnant, but the perpetrator of the outrage could not be discovered, and in another case a man was accidentally drowned.

Careful consideration of the exhaustive statements and statistics contained in this report leave little or no doubt on one's mind that the system of boarding-out pauper lunatics, as carried out in Scotland, and the peculiarity of which is that every individual member of the class so provided for is brought directly under the supervision of the central administration, has in the past met with a large measure of success, and, so far as one can judge, there is little reason to suppose that it will in the future be attended with any other result. At the same time the possible moral injury done in some cases to the families of those who take charge of them must not be lost sight of.

The table on p. 101 shows the number of lunatics on 1st January, 1891, and the mode in which they are distributed.

Fortieth Report of the Inspectors of Lunatics in Ireland.

The insane of whom the Inspectors had cognizance on January 1, 1890, and January 1, 1891, numbered as follows:—

	On 1st January, 1890.			On 1st January, 1891.		
	Males.	Females.	Total.	Males.	Females.	Total.
In District Asylums	6,037	5,143	11,180	6,194	5,924	11,488
„ Private Asylums	259	372	631	253	368	621
„ Central Asylum, Dundrum...	146	30	176	150	29	179
„ Workhouses.....	1,600	2,438	4,038	1,566	2,395	3,961
„ Gaols	1	—	1	2	—	2
	8,043	7,983	16,026	8,165	1,086	16,251

Following the order adopted by the Inspectors, we may consider first what is said about the district asylums. With reference to these institutions, we are at last presented with some information that is of interest. The Inspectors have for the first time adopted the laudable custom of appending to their general report copies of the reports made at individual asylums.

The most striking feature of these "memoranda of inspection" is the singular sameness they exhibit. Elsewhere asylums vary according to the constitution of their governing bodies, and largely according to the character of the medical officers. We in England are accustomed to hear much said about the differences existing between the conditions of life in different parts of Ireland, the different nature of the population, etc. Our Irish colleagues, as we know, have not been all brought up in the same school. The most obvious cause which suggests itself for the very uniform condition of the Irish asylums is to be found in the circumstance that central control has always been much more developed in the sister island than in other parts of the kingdom. The sense of individual responsibility has thus been numbed both in governing bodies and in asylum physicians, and all healthy competition, as well as all originality, has been checked by a system of management adopted to meet departmental convenience, without any regard for or knowledge of the peculiar requirements to be dealt with. Irishmen are too apt to attribute all their difficulties to the "state of the country." This is no better than the hypothesis of a double dose of original sin. At any rate, the fault which we have adverted to has existed in the construction of the Irish asylum service, and the condition (which is at least a *post hoc* condition) described in the report before us is not satisfactory.

Overcrowding seems general. "All the district asylums throughout Ireland may be said to be more or less overcrowded." According to the tables, the least overcrowded appears to be Maryborough, which had 69 vacancies at the end of the year, and the most overcrowded the Richmond, with 268 in excess. The most overcrowded in proportion to the population, however, would appear to be Mullingar. Here what is oddly called the limit of accommodation was 430, while the number of inmates was 606. Of the twenty-two district asylums twelve were over full, several very much so; in two the population exactly equalled the

accommodation, in eight there was room vacant, though usually very little. The local authorities seem curiously apathetic on this point. It is evident that they regard it as the duty of the central authority, and not theirs, to make the necessary provision. That they should accept this view is not unnatural, if we are correctly informed that the buildings are constructed by a Central Board, called the "Board of Control," which, in fact, stands in the position of landlord to the asylum properties. In many of the asylums, it would appear, an effort is being made to provide adequate accommodation; in others, as we gather from the report, the Inspector's representations on this subject have been ineffectual. The state of affairs at Carlow is thus described:—

"We are sorry to have to report that no progress whatsoever has been made to carry out the very necessary improvements and additions required at the district asylum at Carlow—although they have now been under consideration for more than a year. Unprovided with a sufficient water supply, with its drainage system defective and obsolete, overcrowded, with insufficient accommodation and appliances for cooking and washing, with flagged cells in some parts, with wards meagrely furnished and devoid of all those comforts universally seen in modern public asylums, this institution must be looked on as inferior to all other public asylums in Ireland, and calls for the serious consideration of all responsible for its management. At the instance of the Board of Control plans to meet all requirements have been prepared by the local architect, but they have not as yet been considered by the Governors."

Apparently a project for turning workhouses into succursal asylums, and thus providing the needful accommodation, has found favour with Boards of Governors in some places. It is thus dealt with by the Inspectors:—

"Buildings suitable for harmless and chronic lunatics may, as we have just stated, be erected or obtained at a less cost than would be required to build new asylums, or to make additions to those already in existence. It must, however, be remembered as regards the present condition of many of the public asylums of this country that the lunatic wards of a Scotch or English workhouse are much more handsomely decorated and better furnished. Many Irish asylums at the present time have nothing but whitewashed walls—are utterly devoid of all those articles of decoration which render the wards of a modern asylum home-like—and their furni-

ture is of the most meagre and shabby description. When, therefore, we hear so much of the 'costly edifices for the insane in Ireland,' no accusation of undue liberality in their internal decoration can be reasonably made against the governors. Although it may be allowed that persons labouring under certain forms of insanity may be treated in establishments with less architectural pretensions than the Irish public asylums, no class of the insane should be permitted to receive less care and attention than the patients of these institutions receive at the present time."

The devices adopted in other places for showing accommodation which does not exist are not good. In the case of Maryborough Asylum, above referred to, we learn that "there is no Board-room, except the superintendent's dining-room; no clerk's office, no visiting room for either males or females." Have the governors been reading *Oliver Twist*, and do they desire to relieve the difficulties of any little *Oliver* who may be called upon by *Bumble* to "bow to the Board" by providing the unmistakable hospitable board of the medical superintendent as the object of his salaam? And of course the friends of the patients can be excluded—such people are long suffering in Ireland, but what does the clerk do for an office? Does he work in a tent? By the way, we find no trace in this report of the circumstance with which a perplexed Irish superintendent used to convulse his English friends, when he assured them that his asylum buildings were so overcrowded that he had to place his patients under canvas. The tale has the ring of *Harry Lorrequer*, but such odd things happen in the distressful island that we actually gave it credit!

Again, kitchens and means of cooking appear to be generally inadequate. At Armagh we are told the kitchen is not "sufficiently large for the requirements of the institution," while "great difficulties exist in furnishing the extras, such as beef tea, for the use of the sick, and they have generally to be provided out of the medical superintendent's kitchen." Here a new cook is recommended, as well as a new kitchen. *Horresco referens*, but one cannot help hoping that the Board will not endeavour to combine the offices of cook and medical superintendent. In Kilkenny the following memorandum is made by the Inspector:—

"The dietary does not in my opinion appear to be in accordance with the food in general use amongst the Irish

peasantry, and is inferior to the dietary given in many Irish asylums, but it is useless to go into the matter at present, as no improvement can be attempted until a proper kitchen has been provided."

In Maryborough:—

"The kitchen has never been altered to meet the increasing demands of the institution. It remains as it was on the first opening of the asylum, and is so small as to be utterly unequal to cook for so large a number. The scullery measures 9 feet by 4½ feet, and can only be described as a closet. More adequate provision for cooking is therefore urgently required."

And so forth.

Another defect so common as to be almost universal is a want of sufficient laundry accommodation. In some of the institutions this is assigned as a reason for a somewhat deficient supply of fresh clothing. It is difficult to understand how cleanliness can be at all preserved in many places considering such statements as the following, made at Mullingar:—

"Only one sheet is allowed. This, the Resident Medical Superintendent informed me, is owing to the difficulty of washing, and that a second sheet will be given as soon as the new laundry is in working order."

Or this at Cork:—

"A separate building set apart as a daily laundry for the washing of the clothes soiled during the night is also required. . . . The room at present in use for this purpose is so small as to render it impossible that the work can be properly done."

In the same way complaints are made in most of the asylums of the insufficiency of stores. In Belfast the stores and the laundry appear to be amalgamated in some strange fashion, and the Inspectors judiciously suggest that the female patients working in the laundry should be "isolated from any communication with the stores, and should not be overlooked by strangers coming on business to the asylum."

In most of the institutions the Inspectors comment on the subject of heating, and note unfavourably that there is no means of warming the rooms save by open fireplaces, so that dormitories and single rooms are unheated. It is pertinently observed at one asylum —

"It certainly seems anomalous that while provision is made in all the Irish prison cells for maintaining in the

coldest weather a temperature of 65° Fah., so few of the single rooms in our asylums are heated artificially, notwithstanding the well-known fact that many of the insane who occupy such rooms are restless in the extreme, and constantly spend the night standing on the floor in a state of nudity or semi-nudity. We are, however, glad to be informed that these subjects were engaging the attention of the Governors, and when they come under the consideration of the Board of Control we shall be happy to give every assistance in forwarding the proposals of the Board of Governors."

An absence of decoration and even of ordinary furniture is noted in several places. At Omagh, "except in the cases of the paying patients on the female side, no tablecloths, plates, cups, knives or forks are supplied for the use of the patients, who are only allowed vessels of tin with spoons. In the most modern asylums every attempt is made to improve the habits of the insane by supplying as far as possible all those articles which will tend to foster habits of respect and control."

At Mullingar "I saw a relay of the patients at dinner, and I was strongly impressed with the urgent need of the dining hall, where the joints can be carved and distributed in the presence of the patients, and where the dinners can be served with the decencies of civilized life; tablecloths, knives, forks, glasses, and simple castors. The resident medical superintendent is fully aware of the necessity, and I feel confident that he will provide them as soon as the necessary accommodation has been completed."

At Belfast "we saw the patients at dinner in their hall. The meal was served in electro-plated bowls with tin spoons. No knives, forks, plates, or delf bowls were provided." ("Electro-plated" is probably a slip of the pen for enamelled metal.)

In some places what the furniture wants in quantity it makes up in unique quality. Thus at Omagh:—"The chamber utensils are of galvanized iron, forming most dangerous weapons of offence." We wonder how the night staff are protected. Do they wear iron skull-caps, or does this "weapon," like that of Roderick Dhu's Saxon opponent, serve both for helm and spear? Luckily there appears to be in that asylum only one night nurse and one night attendant (for 297 males and 264 females!)—a fact on which the Inspectors rightly comment with severity. We noticed last

year that the present Inspectors adroitly disclaimed responsibility for the building of the district asylums. Having in view what the report before us reveals we do not wonder at the disclaimer, but we cannot but condemn the system under which such structures, so radically defective and planned with such utter want of foresight, have been erected to serve as an impediment to progress and an obstruction rather than an aid to the charitable purposes of the Commonwealth. This Journal has always protested against the system by which in Ireland the real management of the insane was removed from local control and kept in the hands of a central department. We are informed that most of the modern Irish asylums were erected by a gentleman who was architect to the Board of Control, and that all "structural alterations and additions" were carried out under his care. We see in the report the result of this system. Uniformity, indeed, has been fairly brought about, but it is the very bad sort of uniformity which usually comes of over-centralization.

When the medical officers of asylums are placed in such difficulties as are almost universal in Ireland it is not to be wondered at that in many points of administration and domestic rule the asylums in that country are somewhat backward. The trouble and anxiety involved in contending against the state of affairs inherent in the very structure of the buildings must be enough to occupy the entire mind of the officers and must serve as an effectual extinguisher to scientific zeal and medical work. We notice that the old deficiency of assistant-medical officers appears to be still felt. The Inspectors draw attention to this want in several places, but have not suggested to the Board of Governors what would be very acceptable in a country where economy is so much studied, a cheap and easy means of providing these officers. The place of assistant medical officer can be very inadequately filled by a visiting physician, though we learn that in Londonderry Asylum the latter officer keeps the case book; but a great advance in efficiency could doubtless be secured by doing away with the obsolete visiting staff and replacing it with assistant medical officers. This is a reform which we have thought it necessary to suggest many times during the last quarter of a century.

Under the unfortunate conditions in which they are placed it is very creditable to our Irish colleagues that suicides and accidents seem to be so rare. Five suicides occurred during the year under review. None of them appear to have called

for special comment. The most serious accident was a death by violence at the Richmond Asylum. This event we commented on at some length in a previous number of the Journal.

“At the same asylum (Dublin) a female patient, who had been for years working in the kitchen, was found to be pregnant. The mental condition of the woman was such that no dependence could be placed on her evidence; but it was supposed that the guilty person was another patient employed in the stores. Unfortunately, so faulty is the construction of this department that proper supervision is impossible.

“At Enniscorthy a female patient opened with her fingers an old wound in her abdomen, and pulled out a coil of intestine. She, however, made a good recovery.

“Eleven attempts at suicide were recorded, and twelve accidents, resulting in fracture or dislocation of bones.”

We are glad to observe a tendency in many instances to give encouragement to the medical staff. It being necessary to speak severely of the state of Cork Asylum the Inspectors take care to exonerate Dr. Oscar Woods, who had been recently appointed medical superintendent, and who could not, of course, be responsible for a condition of things evidently of some standing. Two or three of the medical superintendents are praised for their energy, intelligence, and courage, and a kindly word is said sometimes for an assistant, which we hope the governors will bear in mind. Unstinted praise is bestowed on Dr. Finnegan, of Mullingar, praise which no one who knows him will grudge, particularly as it is evident that Dr. Finnegan has his share of the difficulties which beset all our Irish friends. At least one asylum in Ireland has thoroughly satisfied the Inspector, and it is pleasant to read so agreeable a break in the monotony of official reserve as the following:—

“The management of the asylum (Mullingar) by the Board of Governors is liberal and enlightened. Both the assistant medical officer and the matron seem excellent officers, while the resident medical superintendent has evidently his heart in his work, and is earnestly endeavouring to make the asylum fulfil the objects for which it was founded—first, as an hospital for acute cases of insanity, and, secondly, as a comfortable home for other classes of mental invalids who need the care and appliances of a fully-equipped lunatic asylum.”

It is to be feared that it may be some little time before some of the other Irish asylums are entitled to the praise of being "fully equipped."

Idiots and Imbecile Children.—Closely connected with the public provision for other classes of the insane is the special provision which ought to be made for idiots and imbeciles. The story which the Inspectors tell is a pitiful one. "One of the greatest requirements in connection with lunacy in Ireland is the establishment of a National Institution for the training and education of idiots and imbeciles, such as are the Larbert and Baldwin Institutions in Scotland, and the Royal Albert and Earlswood Asylums in England. We may estimate roughly that there are not less than 3,000 idiots and imbeciles in Ireland, of whom probably 500 are under fifteen years of age, and at least half of these would be improvable, and derive benefit from the special training in idiot schools. The existing Lunacy Laws were not made for imbeciles, and we find in Ireland no less than 418 of this unhappy class occupying in district asylums accommodation properly intended for different forms of insanity, mimicking the shameless indecencies which are brought before their eyes, their moral degradation completing their mental deficiency, while no less than 1,888 are scattered over the workhouses, where the provision made for them is often inadequate, where their very presence exercises a painful and demoralizing influence on the other inmates, and where in some cases (as pointed out in our reports on particular institutions) they live in mechanical restraint to prevent their mischievous and destructive habits. The great majority, however, remain as hopeless wanderers, exposed to want and suffering, residing in homes where they can only in rare instances obtain the treatment suitable to their condition, while often they are grossly neglected. A case recently came to our knowledge where a poor woman, residing in one of the thoroughfares of Dublin, and occupied at work during the day, having an imbecile child and no means of caring for him, has been obliged to chain him to her bedstead while she is absent at her daily work."

This hardly seems quite *fin de Siècle*, and appears a strange pronouncement to be uttered in the *Fortieth Report of the Inspectors of Lunatics in Ireland*.

The Inspectors go on to say:—"Not alone did the preamble to the Irish Church Act declare that the released funds should be appropriated mainly to the relief of unavoidable

calamity or suffering, but Mr. Gladstone, in his introductory speech, *discriminating between lunatics and idiots*, estimated that the provision in aid of the former would amount to £185,000 a year, while the provision for idiots might cost £20,000 annually," and then in newspaper phrase they complain that "by the very irony of fate" Mr. Gladstone's intentions have never been carried out. Fatalism is not to our mind. It would appear to us that the unhappy idiots have been thrown over and neglected simply because there was nobody to care about them.

Private Asylums.—The Inspectors repeat their assertion of last year that "the condition of these houses, with some few exceptions, is not entirely satisfactory." They have found it necessary to recommend the revocation of the license in one case. The House of Saint John of God, licensed to the Rev. Eugene Picard, is highly spoken of, though the illegality of confining "dipsomaniacs" in an asylum is noted. This class is a curse, and a difficulty everywhere. The institution is flourishing, and is about to be enlarged. The Inspectors very properly urge the appointment of a resident medical officer.

Boarding-Out.—The Inspectors refer briefly to the boarding-out of pauper lunatics, which they hardly seem to think feasible. They point out the difficulty of obtaining suitable hosts in Ireland, owing to the poverty of the population, and they rightly say that to develop the system would take a long time. It seems too slow a process to be of any immediate service in meeting the congested state of the Irish asylums.

There is a great improvement in the arithmetical part of this report. It is still to be noticed with regret that the Inspectors do not seem to have sufficient means of correcting and verifying their statistics. At page 5 the following table is given:—

	Number of Private Patients in Asylums on 31st December, 1889.	Number of Pauper Patients in Asylums on 31st December, 1889.	Proportion per cent. of	
			Private Patients.	Pauper Patients.
Scotland	1,765	10,233	14·7	85·3
Ireland	847	15,002	5·3	94·7

The proportions should be, on the first line:—Private patients, 17·25 (nearly); pauper patients, 82·75 (nearly). On

the second line:—Private patients, 5·64 (nearly); pauper patients 94·46 (nearly). The first error is of some importance, as it involves an under statement of the case the Inspectors are making.

The Neuroses of Development: The Morison Lectures for 1890.
By T. S. CLOUSTON, M.D., F.R.C.P.E.

We welcome in this book a most valuable contribution to psychology, but the book will repay the general medical reader as well as the mental specialist, for it grapples with fundamental propositions which concern us all. Dr. Clouston starts with the proposition that every organic tissue shows two periods in its development, viz., a stage during which the tissue is growing in bulk, each individual unit of the tissue advancing to its full stature, and another stage during which the functions of the elements of the organ or tissue are being perfected, whilst in outward form there appears to be no change nor does the bulk increase. Not a doubt that changes in form are occurring in the latter stage, but they are as yet hidden; they are molecular, so to speak.

Applying this proposition to the nervous system, we find that the brain attains its maximum weight at the age of seventeen or eighteen years, though it only falls short of this full weight by a few ounces at the age of seven. From the age of seventeen to about twenty-five, when the brain attains its full maturity of function, there is no further increase of weight. During this long period the changes which have been wrought are as invisible as the changes which have taken place in a bar of iron which has been magnetized. During the period of growth in shape and bulk, the formative period, there is, according to Clouston, more absorption of oxygen, more excretion of carbonic acid, than during the subsequent stage. Also during the formative period the type which disease assumes is more proliferative than functional and degenerative, these latter characterizing the disturbances of the later period. Of course it will not be maintained that the period of plastic change is unattended by that inner molecular arrangement which must accompany functional advance—this latter obtains in both periods—but functional changes are less pronounced, whilst the raw material is being actually prepared, and the tissues are actually growing.

Next it is clear that we may establish two periods of vital importance in the growth and development of the brain, viz., the periods of non-reproductive capacity, and of establishment and maturation of this capacity, *i.e.*, the period preceding puberty, and that from puberty through adolescence up to maturity. Of these the author says (p. 3), "The periods of brain growth and of non-reproduction do not absolutely correspond, but it may be held as a great law that when active cell growth ceases in the cortex, then only does reproductive function begin." Dr. Clouston holds it probable that if our knowledge of heredity and of physiology were sufficiently advanced we should be able to fit into one great scheme the whole of the neuroses of development, from the acephalous foetus, the hare-lipped, cleft-palated, open-spined child, through a long list of developmental defects or disturbances up to the moral perversions, volitional paralyses, and intellectual peculiarities which are met with in both sexes during this period of life.

Dr. Clouston then discusses the possibility that one tissue of the body may mature, whilst another tissue is still undeveloped, and shows the strong physiological grounds there are for believing this. We cannot doubt that, as he says, the blood has attained its complete development, and in general the heart and vascular system also, either before birth or in early childhood. But the brain—where is it? However, if we introduce, as a test of development, the power which a tissue possesses of resisting disease, we must, perhaps, modify this statement as to the vascular system, for Dr. Clouston puts forward the proposition that "*Any tissue or organ that is abnormally non-resistive to disease may be fairly considered not to have attained maturity, or to have undergone retrogression, temporary or permanent.*" Applying this he points to the lungs as being more susceptible to the bacillus of tubercle during adolescence, to the skin of the child as less resistive to certain parasitic skin affections, and he argues that though the lungs and skin appear as perfect, perhaps even more perfect in their structure in childhood, yet this non-resistance would indicate incomplete development. Tried by the same test the vascular system, also, would fail, for we know that in the disease rheumatic fever the danger of inflammation of the endo-cardium is greater in childhood than in later life. Making all due allowances, however, and taking into account this test of stability of the tissue, there can be still no doubt that the several tissues and organs of

the body follow different rates of development, and that perfection is attained latest by the higher nervous tissues, the last to reach completion being the cells of the cortex.

Speaking on "the long period of development of function that succeeds incomplete growth of the brain," the author wrote, on page 7, "It is not a mere question of the education of cells that have a certain innate power to be brought out; it is a question of a true development of a lower capacity into a higher." How far is this statement capable of proof? The innate power we must grant, but that of the development or bringing out of this innate power is independent of the envioning circumstances, can this be sustained? Is it, indeed, a true development of a lower *capacity* into a higher, or is it not rather a development of a lower *efficiency* into a higher?—the *capacity* or potential of the cells being an initial grant not capable of subsequent augmentation?

Just as, morphologically, we see one tissue after another in series come to structural perfection, so corresponding functions are elaborated in corresponding series, and each function will hence have a definite relation of sequence to the other functions of the organism. In the evolution of the functionally complete nervous system this is well illustrated; group after group of cells become co-ordinated. The group of cells which preside over the co-ordinated movements of sucking are functionally organized at birth. At a long interval follows the organization of the centres for movements of the limbs, and when these have attained some degree of perfection the centre for speech is still far from developed. Lastly the centre for speech may have become fairly organized, yet "the great function for which speech exists, viz., mentalization," may postpone its advent. At one or other stage in this onward march delay or arrest may obtain, and various degrees of imbecility or backwardness result. But a fault of another kind may occur, viz., the premature or precocious development of one or more groups of cells, for from such it will result that the normal sequence is set at naught, and however marvellous the prodigy which ensues it must be looked upon as pathological—because lacking proportion—ill balanced. Dr. Clouston wisely advises us on this subject, when he says, "But I think that development of any faculty or power in a boy or girl, in a lad or a maiden under twenty-five, that is premature in time, or that is clearly out of pro-

portion to other faculties and powers, should be carefully watched and looked upon with much medical suspicion."

The ugliness of disproportion, the lack of harmony, resulting from inconsequential development, may take outward and visible shape when it affects the bodily framework. This is remarkably portrayed in Plate I., which displays J.R., an example of developmental ugliness, and it is also well seen in Plate II., showing an example of developmental dwarfishness. The mischief is, however, less in such cases than when a deformed or defective mind puts on the mask of a beautiful and expressive face and eye, not an uncommon occurrence in an idiot, according to the author, who says, forcibly, "The face and eyes of such an idiot tell lies when they thus express mind."

Lecture II. is devoted to "the morphological signs of a bad neurotic heredity." Dr. Clouston enforces the truth of the rule that an abnormal mental faculty tends to be accompanied by an abnormal facial physiognomy, though he does not fail to admit the exceptional occurrence of beautiful minds in ugly bodies and of ugly minds in beautiful bodies. In this chapter we find, in particular, the results of some important investigations, by the author, into the shape of the palate and its relation to idiocy and imbecility, to adolescent insanity (which the author had long ago demonstrated to be the most hereditary of all forms of mental disease), to other forms of insanity, and to criminality. The palate is divided into three types, the typical, the neurotic, the deformed, and it is striking to observe the large percentage of deformed palates among those classified under the above headings. Thus, whereas in the general population 19 per cent. only show deformed palates, in idiocy and imbecility, and also in adolescent insanity, the proportion reaches 61 per cent. and 55 per cent. respectively. These percentages are obtained on large numbers of the investigated. If concerning these results it may be said that these mental failures have at least the good taste to build their palates on Gothic lines, the consolation after all is but small.

In discussing the relation of the palate to the base of the brain, Dr. Clouston embodies in a series of propositions the reasons for the dependence of the shape of the palate bone upon the development of the base of the brain. His results traverse those of Clay Shaw, but confirm those of Langdon Down.

Among the neuroses of development the author includes chorea. This must mean that he assigns to this disease a much greater neurotic heredity than some writers, Gowers, for instance, who places at one-sixth the history of neuropathic tendency. Is not the marked relationship of "certain cases" to acute rheumatism and also of certain others to endocarditis, apart from acute inflammatory joint troubles, difficult to account for on the lines of a developmental neurosis? Perhaps it is a question rather of name, whether, for instance, we shall call acute rheumatism or neurotic heredity the exciting or predisposing cause. Will not this view satisfy the demands of the problem that the inherited unstable brain predisposes to the inco-ordination which rheumatic fever, *amongst other agencies*, excites?

The barking cough of puberty described by Sir Andrew Clark under the name *cynobex hebetis*, and mentioned here as a developmental neurosis—how does it differ from the well-known barking cough of hysteria, the *tussis ferina*? Its description fits in accurately with the characters of this cough given, in 1837, by Stokes in his "Disease of the Chest," p. 263.

Two most interesting cases, regarded by Dr. Clouston as of general paralysis, occurring at about the age of puberty (14-15 years), are recorded in full. Both patients, girls, showed marks of congenital syphilis, and a neurotic heredity was also strong in both cases. Clouston looks upon the syphilis and neurotic heredity as predisposing causes, on puberty as the exciting cause, and he comes to the conclusion that general paralysis may in rare cases show itself as a developmental neurosis.

On tuberculosis in relationship to developmental neuroses, especially to insanity, some important points are raised. The high rate of mortality from phthisis which is observed both among the insane and among idiots is of great interest. Dr. Clouston thinks that the facts of the case warrant the conclusion that a heredity towards phthisis may determine insanity and *vice versâ*. Of course, the bacilli, assuming their causal relation to phthisis, will rank as exciting causes.

The third and end chapter we must leave, though it discusses very interesting problems, such as developmental epilepsy and epileptic insanity, hysteria, etc. In conclusion we would say that this short treatise, which claims to be a sketch, rather than a magnum opus, leads us to hope that

the great work may yet be forthcoming, and from the same hand, and that in it the propositions put forth here may be further elaborated.

Le Crime et la Peine. Par LOUIS PROAL, Conseiller à la Cour d'Aix. Ouvrage Couronné par l'Académie des Sciences Morales et Politiques. Paris: Alcan. 1891 (dated 1892). Pp. 544.

M. Proal has exercised the functions of a magistrate for many years at Rouen, Lyons, and Aix, and has now embodied in this lengthy prize essay the reflections which his duties have suggested to him. He includes a wide range of very interesting subjects, such as crime and atavism, crime and heredity, crime and insanity, crime and degeneration, crime in relation to sex and race, crime and ignorance, crime and destitution, together with his own thoughts as to the foundations of penal justice. He appears to have read most of what has been written in French bearing on the subject of his work, and his acquaintance with ancient literature is very extensive. It cannot be said, however, that he has himself made a very novel or important addition to the literature of criminology. His position throughout is not that of the philosopher or the man of science, but of the magistrate; and, as he himself very truly remarks, magistrates are not without justice charged with "an extreme attachment to common sense, an excessive love of tradition, and an exaggerated scepticism with regard to new ideas." The chief "new ideas" towards which M. Proal here shows himself not so much sceptical as actively antagonistic are determinism and Darwinism. His hostility to them runs throughout the book. With his polemical defence of the doctrine of free-will against J. Stuart Mill, Herbert Spencer, Fouillée, and Guyau we are not here concerned, though it may be noted that his arguments are somewhat primitive; one of the strongest is to the effect that the criminal must be free because he believes he is. Darwinism he attacks in association with what is usually called the "Italian School" of criminal anthropology. It is an association which may not perhaps seem very obvious to English readers, but is not altogether unfair, since Lombroso and his fellow-workers were directly inspired by the work of Darwin, and applied several of his conceptions to the study of the criminal. A considerable part of the early chapters of the book is devoted

to a criticism of the various extravagancies, errors, and inconsistencies into which criminal anthropologists have sometimes fallen. Here and throughout, M. Proal exhibits a degree of urbanity, intelligence, and knowledge of the writers he criticizes, which is rare, not merely among the legal, but even the psychiatric critics of criminal anthropology. His arguments are, however, frequently vitiated by his ignorance of the medical sciences and of general anthropology. His conclusion is that the moral and physical degeneration of the criminal is the result rather than the cause of his crime; on the causes he is unable to throw any light. It is worthy of note, as a sign of the times, that even a writer who holds so strongly as M. Proal to the old traditions and conventions recognizes the importance of the movement initiated by the criminal anthropologists. "After having pointed out what he considers the errors and contradictions of Dr. Lombroso," he remarks, "I hasten to add that the Italian scientist possesses the great merit of having called the attention of doctors and philosophers to the causes of criminality. Thanks to the movement which he has created, the questions of penal philosophy have become the order of the day; lawyers and doctors who had previously shut themselves too closely within their own special studies have gained the habit of exchanging their ideas in reviews and congresses. This approximation of medicine and law can bring nothing but profit to criminal justice."

In the latter portion of the book, dealing with the foundations of penal law, he brings forward a few reforms which, though very moderate in character, carry weight on account of the author's conservative attitude. "Thus," he remarks, "I believe it would be extremely useful if law students followed a compulsory course of lectures on mental diseases—not that they might, when they become magistrates, themselves settle questions respecting insanity without the aid of a medical expert, but that they might at least be preserved from gross errors, and be able to recognize the cases in which the accused should be examined by an alienist. A judge who is ignorant that insanity may coexist with premeditation, cunning, and skill in defence, that the lunatic usually repels the suspicion and plea of insanity, and that epilepsy may in some cases be a cause of irresponsibility, may consider a medico-legal examination superfluous, and wrongly believe in the integrity of the mental faculties from signs that are without value. It seems to me difficult for a magistrate to fulfil properly the very delicate mission confided

to him if he has not made a study of mental disease" (p. 359).

In this connection he alludes to the non-compulsory lectures on mental disease actually given at the Paris Faculty of Law by Dr. Dubuisson, and to the resolution passed at the last International Congress of Criminal Anthropology in favour of the compulsory character of such a course.

On another matter M. Proal makes some remarks which are of interest as coming from a lawyer. It appears that in France in the course of a year (1879, for example) out of 100 accused persons having received a superior education 35 were acquitted, while of 100 illiterate accused persons only 18 were acquitted. The reason is, as M. Proal points out, not that there is a larger proportion of innocent persons among the educated accused, but that the latter are in a far better position to obtain skilled advocates to make emotional appeals to the jury, and to produce a miscarriage of justice. He quotes the remark of Diodorus Siculus, that the ancient Egyptians considered that the speeches of advocates merely spread obscurity over questions of law, and that it was best that accusation and defence should be simply and nakedly set forth in writing. In this connection it is interesting to note that in the industrial courts now being established throughout the German Empire (as expressly laid down in the law of 1890, which governs their constitution) neither of the parties in a dispute "may be represented by lawyers or by persons who are professionally engaged in legal proceedings."

The British Guiana Medical Annual and Hospital Reports.

Edited by J. S. WALLBRIDGE, M.R.C.S., and E. D. ROWLAND, M.B. Georgetown, Demerara, 1891.

In his address as President to the Guiana Branch of the British Medical Association, delivered 23rd January, 1891, Dr. Grieve lets us know that there are 41 members in the local branch.

When we remember how little men are inclined to mental exertion within the tropics, we cannot fail to acknowledge that these reports do much credit to the activity of the medical officers of the colony. Dr. Grieve, who is Surgeon-General of British Guiana, has shown himself in every way worthy of this important position, not only by his medical knowledge and sagacity, but by the kindness and benignity of his disposition, as well as by his desire to encourage pathological research. In commenting upon a paper at one

of the meetings, Dr. Grieve remarked that "he had discovered that many of the cases set down as locomotor ataxy were really general peripheral neuritis, dependent on one of two causes : alcohol or the presence of syphilis. The amount of nervous disease existing in the colony was immense, and presented a wide field which was open to everyone, and could be worked to advantage."

Amongst the twelve reports there are two which deal especially with nervous disease. In his "Notes on the Insanity of British Guiana," Dr. W. S. Barnes, who is now the Medical Superintendent of the Leper Asylum at Mahaica, gives some generalizations which he had reached when doing duty at the Lunatic Asylum at Berbice. He found acute mania and melancholia less common than in England, and attempts at escape and suicide less frequent. Delusions and hallucinations are of a simpler character. Amongst coolies the notion is common that they are being visited by their gods and being blessed or cursed by them. Smoking of Indian hemp is a common cause of insanity amongst the coolies, as it is in asylums in India. In Guiana it is frequently combined with excess in alcohol. These patients are the most acutely insane amongst the inmates of the public asylum. The mania is fierce, and they are recklessly violent and regardless of consequences, recalling frequently to one's mind the furor of epilepsy. When the form of the disease is melancholic their mental distress is profound, and they require careful watching. The earlier attacks are usually very curable; but they return again and again unless the drug is given up, and at each recurrence recovery becomes less likely. In most cases hallucinations are a very marked feature, and appear to occupy the patient's mind so fully and vividly, as to render him almost unconscious of his actual surroundings."

In a paper entitled "Notes on the Pathological Conditions found in the Insane at the Public Lunatic Asylum, Berbice," by T. Ireland, attention is drawn to the great prevalence of Bright's disease. During the year 1890 thirty-five deaths were due to this cause, 23 being males and 12 females. The patients were both coolies and blacks. "In most cases," Dr. Ireland observes, "the kidneys after death were found to be pale and granular on the outer surface, with thickened adherent capsule, and tough on section. Usually there were small cysts, scattered through the cortical substance, which was decreased in depth, sometimes appearing as a mere shell. The pelvis was generally increased in

extent, and contained a considerable quantity of unhealthy looking fatty and loose connective tissue. The pale yellowish colour of the kidney more resembled that of the small white kidney of Bright than the small red." This condition is often accompanied by degenerations of the liver and spleen, and sometimes by atheroma of the great arteries and wasting of the heart. In these cases of Bright's disease accompanied by insanity "the brain was pale, soft, and generally wasted. The ventricles were often dilated, and the cerebro-spinal fluid rather in excess. The membranes were usually more or less thickened and opaque. Up till the time of death in the great majority the mental condition was that of dementia, and it is an interesting fact that many patients suffering from Bright's disease are demented when first admitted into the asylum, with no history of an acute stage, and in whom it has either been so short or so slight as to escape notice altogether. It would almost appear as if the functions of the brain were gradually impaired by the altered condition of the blood in such a manner as to produce a state of dementia without any previous acute mental disorder. These patients when admitted are dull, obtuse, and indifferent to their surroundings, though not markedly melancholic. They exhibit impairment of memory and apprehensive power. Occasionally they have delusions or hallucinations which are never of an acute character nor seem to excite or annoy the patient to any great extent."

No doubt insanity is sometimes produced by the action of the fluids upon the brain. The precise composition of the blood in such conditions is more difficult to ascertain than that of the brain substances. Though Bright's disease is more common in some British asylums than in others, it cannot be held to be frequent in any of them. Dr. Clouston, in his "Clinical Lectures on Mental Diseases," has described a form which he calls "Insanity of Bright's Disease." The symptoms assigned to it are of a more acute character than those noted at the Berbice Asylum. It has been asserted that general paralysis does not occur in Guiana, but Dr. Barnes has repeatedly seen cases, and Dr. Ireland notes one in a full-blooded negress of twenty years of age. "During life she showed all the characteristic mental and physical symptoms of the disease, the diagnosis of which was fully borne out by the post-mortem condition of the brain."

We have naturally preferred to notice those reports which deal with subjects of especial interest to our readers, but the

whole series is of an instructive character, and reflects credit upon the writers.

There are papers "On the Communicability of Yellow Fever," by Dr. J. S. Wallbridge; "On the Fertility of Negro Women," by Dr. E. D. Rowland; on "Dysentery in the Gold Diggings," by Dr. W. F. Laws; and on "Pathological Studies," by Dr. J. E. A. Ferguson.

An Introduction to Human Physiology. By AUGUSTUS D. WALLER, M.D., Lecturer on Physiology at St. Mary's Hospital Medical School. London: Longmans, Green, and Co. 1891. Pp. 612.

Human physiology grows and enlarges its borders with so much rapidity that there is always a possibility that a new text-book will be able to justify its existence. Dr. Waller is at once an experienced teacher, familiar with the practical requirements of students, and an original and thoughtful investigator, enamoured of science for its own sake. He contrives to compromise between these two somewhat opposing points of view, and the result produces a very satisfactory impression. In the preface Dr. Waller insists on the importance for the student of "an acquaintance with at least the existence of frontier interests, and even a participation *de tactu* with the science at its growing surface." Many of these "frontier interests" here receive attention, while they are duly subordinated. At the same time, various other subjects usually included under human physiology (such as locomotion) are here either omitted or very briefly touched on. The volume is divided into two equal parts—"The Phenomena of Nutrition" and "The Phenomena of Excitation." This is an excellent broad grouping, but it involves the rather noticeable omission of all the phenomena connected with reproduction. Menstruation is unnoticed (except briefly in a short appendix on the origin and nutrition of the embryo), and the secretion of milk is considered in a paragraph thrust into the section on the salivary glands. Dr. Waller's explanation is that these matters belong to the obstetrician. It might be replied, however, that the eye also belongs to a specialist, yet it here receives attention in over fifty pages. Perhaps it would be a sounder defence to say that the student who has fully grasped certain aspects of physiology will be well able later on to take up any other aspects.

Dr. Waller's style is concise and clear-cut; his sentences are always very free from superfluous adipose tissue, and his brief discussions and summaries of complex questions are often most admirable. The concentration of his style, while it rarely involves obscurity, enables him to say much in little space. It may be doubted whether this concentrated brevity is always an advantage to the beginner, who may fail to catch points with which he is unfamiliar, and which are not hammered into him. But, as Dr. Waller would himself insist, physiology cannot be learnt from a book alone; it needs the vivifying and stimulating presence of a teacher and a practical laboratory.

The section devoted to the brain is somewhat brief (less than that devoted to the eye), but it covers a considerable amount of ground. In reference to cerebral localization, Dr. Waller concludes that "the balance of evidence is in favour of localization, but that the counter-evidence has shown that localization is not sharply defined, but blurred." He devotes to the question of psycho-physics more attention than is usually given; he also sums up judicially the great Helmholtz-Hering controversy, inclining somewhat to Hering's side. The book concludes with a section, rather slight in character, dealing with hypnosis.

The illustrations, chiefly of a diagrammatic character, are numerous and good. There can be little doubt that the volume will take a very high place among the hand-books of human physiology.

Hypnotisme et Croyances Anciennes. Par le Dr. L. R. REGNIER.
Progrès Médical, Paris.

Thérapeutique Suggestive, Son Mécanisme, Propriétés diverses.
Hypnotisme Provoque et des états analogues. Par le
Dr. A. A. LIÉBAULT. Octave Doin, Paris.

*L'Hypnotisme, Ses rapports avec le droit et la Thérapeutique
de la Suggestion Mentale.* PAR ALBERT BONJEAN.

*Leçons Cliniques sur l'Hystérie et l'Hypnotisme faites à
l'Hôpital St. André de Bordeaux.* PAR A. PITRES, Prof.
et Doyen de la Faculté de Médecine de Bordeaux,
précédé d'une Lettre—Préface de M. le Prof. J. M.
Charcot. Paris, Octave Doin. 1891.

The number of works on hypnotism steadily increases, and it is well to refer to the interesting book of Dr. Regnier if one wishes to trace the growth of the subject from the

most ancient down to the present time. The work is well worth perusal. As a historical sketch it is admirable, and is evidently the outcome of much reading and research. It is illustrated with numerous drawings of the condition of persons placed under hypnotic influence, with sketches from ancient Egyptian writings, representing the goddess Ramen in the form of a serpent, the symbol of abundance, with reprints from that extremely curious work, the "Le Sabbat des Sorciers," by Bourneville and Leteinturier, and others copied from various sources. A point which appears to us of much interest is the difference Dr. Regnier makes between what he calls the religious ecstasy of the fakirs and the condition of hypnosis, which we have seen and heard so much about within the last two or three years. He says, speaking of the induction of the state of ecstasy: "C'est la contemplation que pratiquent les initiés brahmanes, c'est à dire un tension extrême de l'esprit vers une idée fixe, tension dont l'immobilité des yeux n'est qu'un indice, par laquelle on arrive à cet état parfait," and he goes on to give the methods of assisting the production of the ecstatic state. These are much the same, however, as we employ to bring about hypnosis, and they briefly mean concentration of thought, and of the special senses until the power of attention wavers, and finally ends in the hypnotic state. Again the author says: "Souvent au sortir de son accès, l'extatique accuse une vigueur corporelle plus grande. C'est une prétention fréquente chez les fakirs. L'hypnose provoque toujours une fatigue marquée." This, in our experience, is incorrect, for the majority of those hypnotized awake from their induced slumber invigorated and refreshed.

Dr. Regnier concludes his work with a *resumé* of his experience of the circulation among hypnotized subjects. Tracings were taken by fixing the sphygmograph not on the radial, but on the carotid artery. Some of these tracings are given, and clearly demonstrate the different conditions of the circulation before, during, and after hypnosis. The last paragraph is strongly condemnatory of public exhibitions of hypnotism; it is worth reproduction: "Qu'il doive ou non être employé en thérapeutique, l'hypnotisme dans des mains maladroites ou malhonnêtes est dangereux—il faut donc interdire rigoureusement au public la libre disposition car, quel que soit l'usage qu'il en fera il ne peut être que funeste, ou tout au moins inutile à l'hypnotiseur, à l'hypnotisé, et aux spectateurs."

As an appendix to his book Dr. Regnier gives an "Index Bibliographique" of 12 pages. 1st. The historical works. 2nd. Works concerning animal magnetism. 3rd. Works relating especially to hypnotism. Of these there are no less than 140 different authors. 4th. Books which have treated of hypnotism in connection with other subjects. The name of Dr. Liébault, of Nancy, has become familiar to all who have studied the subject of suggestive therapeutics, for, in connection with Dr. Bernheim, he was the means of founding what is known as the school of Nancy in this connection. Dr. Bernheim, who holds the position of professor in the faculty of medicine at Nancy, in his well-known work, "A Treatise on the Nature and Uses of Hypnotism," gives to Dr. Liébault the credit of stimulating him to make the investigations which he has so ably recorded, and he freely acknowledges that he owed the knowledge of the methods he employed to induce the hypnotic condition and the production of certain incontestable therapeutic effects to the example and teaching of Liébault. In the work under our notice, Dr. Liébault treats of moral causes as the source of maladies, and as a means of their cure; he gives numerous interesting examples, showing how sudden cures have been effected, and explains them by the theory that it is the superabundance of attention on the part of a patient being suddenly called into play, some sudden and painful emotion breaking through an induced habit of restraint. His examples are not confined to physical ailments, but certain cases of mental disorder are also quoted where delusions were eradicated. He admits, however, the difficulty he experienced in dealing with the insane, for he says: "Ainsi le plus grand nombre des formes de la folie, et principalement l'hypocondrie, résistent à l'influence par suggestion; et l'obstacle à la guérison que l'on rencontre, tient surtout à la difficulté qu'il y a de mettre ceux qui sont atteints de cette maladie dans le sommeil artificiel; leur esprit a comme perdu de son ressort, absorbés qu'ils sont, depuis longtemps, par des idées fixes morbides." And he adds, "Nous avons de raisons qui nous font presumer que le pouvoir de la pensée est supérieur même à l'action des remèdes les plus héroïques." In Chapter IV. he treats of the act of inducing sleep and making suggestions. He believes the number of subjects who are somnambulists, *i. e.*, in whom hypnosis reaches its deepest form, is equal in both sexes, and that this peculiarity is hereditary. The greater part, however, stop at the stage

equal to the depth of their natural sleep. Chapter V., which takes up nearly half of the book, is devoted to "Contributions au traitement des maladies par l'action de la pensée sur l'organisme." This is subdivided into (a) maladies par manque d'excitation des nerfs sensitifs—deaf mutes and such like; (b) maladies par excès d'excitation des nerfs sensitif—headache, migraine, neuralgias, etc.; (c) maladies ou états morbides analogues au sommeil—insanity, dipsomania, convulsions; (d) maladies par trop peu ou trop d'excitation, affectant les nerfs et les organes en mouvement—nervous vomiting, the vomiting of pregnancy, chorea, stammering; (e) maladies par manque ou par excès d'excitation avec altérations diverses des liquides et des solides—anæmia, derangements of menstruation, hæmorrhage, constipation, acute articular rheumatism, etc., etc. This list will give the reader a fair idea of the range of the cases given by the author as being within the scope of suggestive therapeutics. The cases quoted are simply given as they present themselves to the writer, and there does not appear to be any attempt at exaggeration. The proof of the effects produced can best be found by personal investigation of the subject. Can such results be obtained by hypnotic suggestion in the hand of others, when other means have failed to relieve or effect a cure? As to the power of hypnotic suggestion to relieve pain there can be no doubt; and it would be advisable for those who are sufficiently interested in the subject as to read the book to try the effect for themselves. Dr. Liébault's clinique has been visited by many medical men from all parts of the world, and we have never heard a breath of suspicion cast upon his *bonâ fides*. His book is written in a simple, straightforward manner, and his successes are modestly recorded.

We shall resume our notice of these works in our next issue.

Ambulance Lectures on Home Nursing and Hygiene. By SAM. OSBORN, F.R.C.S. H. K. Lewis. 1891.

This handy little book, arranged specially for the ambulance classes which Mr. Osborn has been in the habit of holding, is very appropriately noticed in our pages, for it gives very neatly all the ordinary general measures, surgical and medical, which the home nurse requires to know about; we believe that for the first part of the association nursing

training it will be found both easy and clear; the illustrations of bandages and the like greatly assist the learner.

The book is only 150 pages, and is divided into eight chapters, which include the following subjects: The sick-room; infection and disinfection; details of nursing; application of local remedies; bandaging; sick dietary; and practise questions.

The day has passed when developed Mrs. Gamps had charge of the insane. The physician needs nurses who can take the temperature, and can use their senses in the observation and recording of symptoms; for this the senses must be trained and the memory prepared. Such books as the one now noticed will be found useful for the junior nurses.

We presume that most of the seniors will have got beyond this, and will depend on the more elaborate books which have been issued for nurses; but we can recommend this book as trustworthy and useful.

Text-Book of the Principles and Practice of Medicine. By the late Dr. HILTON FAGGE and Dr. PYE-SMITH. Third edition. J. and A. Churchill. 1891.

The first edition of the book only appeared in 1886, and this, the third, has already been called for by the exhaustion of the second. This is evidence alone sufficient of the esteem in which the text-book is held. Dr. Hilton Fagge unfortunately did not live to see the fruits of his life's work, but he is very fortunate in having such a loyal and capable colleague as Dr. Pye-Smith, who without slavishly following Fagge has still left all that is most characteristic of his style and work, while in every part developing and embellishing it.

It is constantly being said of asylum physicians that they do not maintain their position as physicians, but sink into a kind of commissary generals; this is true of some and is not to be wondered at, and we fancy that the general run of medical practitioner is not free from the tendency to rest on his earlier scientific acquirements, and adapt his treatment to his own experience.

We would most heartily recommend the volumes before us to the asylum physicians who wish not to fall out of step with the advance of medicine; we are satisfied that they will find no truer, safer, and more pleasant guide to what is new,

and none more satisfactory as a reminder of what is partly forgotten. The book is not a cram book, but is one in which the two sides of questions are fairly put, and much that is not only knowledge, but much that is suggestive and encouraging to future work will be found. The whole has been most carefully revised and in great part rewritten, there being much compression and condensation of some parts. We are glad to see that in this general medicine a chapter is devoted to insanity. This plan was started by Dr. Bristowe, who himself did the work in this. Dr. Savage has written the brief summary of mental medicine, giving the chief legal forms demanded by the new lunacy law. It is a good sign that general physicians see the need for treating the subject as part of their science, and we will say no more than that the asylum physician must not overlook his duty in studying general medicine.

“*Heads, and what they tell us:*” *Phrenological Recollections.*
By W. PUGIN THORNTON. Illustrated by ELLEN WELBY.
Sampson, Low, Marston, and Co. 1891.

This is only a shilling book, but it is unusually well got up, the illustrations being very good indeed; there are none of the bump charts, but there are heads and faces far away better than them, of the supposed types of mind or rather character. The book is chatty, and gives evidence that the author not only believes in phrenology, but acts upon his belief. He selects his servants, regardless of characters, on the shape of their heads; perhaps some of our superintendents will take lessons from him, and so engage their attendants.

We like the book because of its freshness and of its full assurance of faith. We still are not believers in phrenology, though we admit that there are certain co-relations between shape of head and character, but we cannot admit that anything like localization of faculties is possible from the outside; and the more we hear, the more are we in doubt as to the evident existence of anything like absolute independent faculties in the cortex itself. We are inclined to think we are a long way from certainty in the localizations of the simplest sensory and motor functions in the cortex, and we cannot admit that their complex associations, such as exist in language, are likely to be more readily discovered

by pure empiricism from without than by careful experiment on the brain itself. We do not believe, for instance, that philoprogenitiveness is an absolute faculty derived always from the same sources. That the function of reproduction has cortical representatives we admit, but that there is one little part of the brain concerned altogether in this, we doubt. In man the sense of sight is the chief inciter to love, while in the lower animals the incentive is through the nose, yet the function is the same. One man is a good linguist through his memory, another through special associative faculty, while another has special memory of signs, and thus is good at languages; we do not see how the possession of one type of head is to cover the various possible factors of the one faculty. But the book before us is interesting and worth reading. At the end there is an interesting illustration of the skull which was discovered in Canterbury Cathedral, and which was attributed to St. Thomas-à-Becket.

Subjective Noises in the Head and Ears: their Ætiology, Diagnosis and Treatment. By H. MACNAUGHTON JONES, M.D. London: Baillière, Tindall, and Cox, 1891.

A paper read at the Annual Meeting of the British Medical Association at Birmingham, on the "Ætiology of Tinnitus," was the origin of this little book.

The mental physician is well aware that noises in the ear may be the starting point of auditory hallucinations. From this point of view a portion of this essay will prove interesting to him. Thus in one case reported, a lady fell into ill-health after marriage, became despondent about noises which she heard in her ear, and developed a delusion in regard to them. She screamed, and was with difficulty controlled. Weakness of mind followed, but her great idea was that this organ was the cause of her trouble. Dr. Ringrose Atkins, quoted by the author, has clearly expressed this relationship.

There is, of course, a large class of cases in which auditory hallucinations arise from disturbance of the psychosensorial centres, the aural apparatus being healthy; or, again, they may arise (and we have no doubt they frequently do so) from centric cerebral disorder, determined, in regard to their special character, by tinnitus aurium. Be the sequence what it may, it cannot but be of importance to

ascertain the condition of the ear, in order to remove, if possible, any mischief which may be seated there.

Although, therefore, a book of this kind is primarily intended for the otological practitioner, it will be seen that we are not travelling out of our record in pointing out the line at which it impinges on the clinical study of the insane. We are disposed to think that the attention of alienists might more frequently be directed than it is to the condition of the aural apparatus.

The Fire Protection of Hospitals for the Insane. By L. H. PRINCE, M.D. Chicago: C. H. Blankley and Co. 1891.

The manual before us by the Resident Physician, "Bellevue Place," Balavia, Illinois, and formerly Assistant Physician at the famous Hospital for the Insane, Kankakee, cannot fail to be of great use to those who are in any way connected with the management of asylums. He deals with the faulty construction of buildings, the modes of lighting and heating them, as directly bearing upon the prevention of fire. He gives practical advice as to the best apparatus for extinguishing it when it occurs. He discourses on fire brigades and the drill, and concludes a most useful book by a chapter on the "Fighting of Fire." He quotes a passage from remarks of his former chief, Dr. Dewey, which is so forcible and true that we must reprint it: "I trust the time will come when a full equipment for fire-protection will be regarded as indispensable to every institution for the insane, and the necessary provision will be made to establish it in the same manner that provision is made for the ordinary expenses of each institution."

We strongly advise every asylum committee to obtain a copy of Dr. Prince's timely book.

The Pathology, Diagnosis, and Treatment of Intra-Cranial Growths. By PHILIP COOMBS KNAPP, A.M., M.D. Boston, 1891.

The aptness of the quotation from Dante's "Purgatory," which Dr. Knapp chose as the motto under which he should compete for the Fiske prize, was in itself almost a sufficient reason for awarding him the laurels:—

" . . . Color che vanno
 Con cosa in capo non di lor saputa."—Purg. xii., 127.

Little did Dante think he should introduce a work on cerebral localization.

The essay is based on the records of 40 cases with autopsies. The plan is good, and Dr. Knapp possesses the gift of writing clearly. The chapter on special symptomatology occupies the chief place, and is followed by short, but useful, chapters on the diagnosis of the existence, site and nature of tumours—they are somewhat sketchy, however. Two interesting tables of the results of operative treatment, including 46 cases in which a tumour was removed and 26 in which there was *no removal* after trephining, conclude the book.

Of works on localization, however, we must confess that if they continue to multiply at the present rate we shall soon be unable to locate *them*.

Atlas of Clinical Medicine. By BYROM BRAMWELL, M.D., F.R.C.P., F.R.S.E., Assistant Physician Edinburgh Royal Infirmary.

We welcome Part II. of Vol. I. of this important clinical work. Two diseases are specially considered, Addison's disease and Hodgkin's disease. Neither affection can be said to have immediate alienist affinities, yet the former trouble, illustrating, as it does, a condition of profound nervous prostration, will always be of interest to the student of "nerves" in its widest aspect. Moreover the strange fact of pigment formation, taken in connection with the nerve prostration of this disorder, and the known relationship of some forms of pigmentation to nervous manifestations adds to the interest of the disease. Both affections are beautifully illustrated.

Ophthalmic Charts.

We have received copies of the charts introduced recently by Mr. Frank Haydon. They are of two kinds, one designed for the record of appearances seen by the ophthalmoscope, in which the fundus is represented as a red ground with a central white circle for the optic disc, the other for noting the position of lesions in external eye diseases, and which contains outline diagrams of the front part of the eye and of an antero-posterior section of the globe.

We have on several occasions made use of the first

mentioned charts for the rough delineation of ophthalmoscopic appearances and have found them of real service. Even those gifted with a minimum of artistic skill can, with the aid of these charts and coloured pencils, easily produce a sketch of the fundus oculi, which, however crude, will recall the main features of the case, perhaps more accurately and certainly more rapidly than a somewhat lengthy description.

The charts are published by Messrs. Down Bros., who supply with them a printed sheet of instructions.

Annual of the Universal Medical Sciences. Edited by C. E. SAJOURS, M.D., etc. 1891. Vol. II.

The section on mental diseases is again undertaken by Dr. Edward N. Brush, formerly of Philadelphia, but now medical superintendent of the recently opened asylum near Baltimore. This is alone a sufficient guarantee of the excellence of the retrospect of psychological medicine which is given. Such a record is of great interest and is extremely convenient for reference. We regret that overcrowded pages render it impossible for us to extend our review to greater length. In commending the manner in which Dr. Brush performs his task, we seize the opportunity to express our satisfaction that the institution above referred to has the great advantage of having for its first superintendent so able and experienced a physician.

The Man of Genius. By CESARE LOMBROSO, Professor of Legal Medicine at the University of Turin. With illustrations. London: Walter Scott. 1891. "The Contemporary Science Series," by Havelock Ellis.

We must confine ourselves to simply drawing the attention of our readers to the English translation of this original work, by a remarkable man, although it is impossible to accord assent to all his conclusions. It now forms one of the excellent series edited by Mr. Ellis. Our brevity is not due to any lack of appreciation, but in consequence of the sufficient reason that we have already reviewed the work at length when it appeared in Italian and French. Our readers are referred to the "Journal of Mental Science" for October, 1890 (p. 551).

On the Simulation of Hysteria by Organic Disease of the Nervous System. By THOMAS BUZZARD, M.D., F.R.C.P. J. and A. Churchill. 1891.

In a small volume of about 100 pages, Dr. Buzzard treats of the above subject from an essentially clinical point of view. The substance of the work is based upon the presidential address delivered by him before the Neurological Society in 1890. Very special consideration is given to the subject of disseminated sclerosis, more particularly in regard to its simulation of hysteria. On p. 96 the author says: "There can be but little doubt that of all organic diseases of the nervous system, disseminated sclerosis in its early stages is that which is most commonly mistaken for hysteria." Truly this must undoubtedly be so when we learn that the shifting about of a state of powerlessness from one limb to another is not characteristic of hysteria, but rather of disseminated sclerosis, and that a like shifting about of a numbness, or sense of pins-and-needles, points also "with considerable distinctness to disseminated sclerosis." The difficulty of diagnosis becomes yet more increased when we consider what the author says on p. 52, viz., that the characteristic symptoms of disseminated sclerosis, *e.g.*, the tremor on voluntary movement; the spasticity of muscles, the nystagmus, the scanning articulation and the so-called apoplectiform seizures, may all be absent. A recent case which has come under our observation brings home to us the force of these remarks, yet at the same moment we are tempted to ask, must we not review our definition of organic disease, if instability of symptom is to be a mark of it? The book is well worth studying by alienists and others.

PART III.—PSYCHOLOGICAL RETROSPECT.

1. *English Retrospect.*

Asylum Reports for 1890.

(Continued from Vol. xxxvii., p. 590.)

Isle of Man.—Various structural improvements have been effected. These include the construction of a billiard room. It is mentioned in Dr. Richardson's satisfactory report that an imbecile boy has been taught to plough and do other agricultural work, and is now working for his own living.

Newcastle-upon-Tyne.—A limited outbreak of typhoid fever

occurred, resulting in one death. The cause appeared to be the escape of sewer gas into the wards from the insufficiently sealed ends of old drains.

Norfolk County.—Six cases of typhoid fever and 20 of dysenteric diarrhoea occurred. This led to a thorough examination of the drainage, when some grave defects were discovered. Eight cases of erysipelas also occurred.

Dr. Thomson reports that Nonconformist services are now held in the recreation hall on Sunday afternoons for those patients who do not wish to attend the Church of England services. On an average 70 men and 40 women are present.

The wages of some of the charge attendants and nurses have been increased £2 12s. per annum. Dr. Thomson hopes that this increase may be extended to all in charge of a ward.

Northampton. St. Andrew's Hospital.—Although Mr. Bayley does not refer at length to any special subject in his report, it is quite evident this hospital continues to be directed with great success. The proposed improvements on the male side have been postponed.

Northampton.—The estate has been increased by the purchase of 53 acres at a cost of £3,020.

Scarlet fever broke out in the children's block. Fourteen patients and six nurses were stricken. The mode of infection was never discovered. One death occurred. Typhoid proved fatal in one case, and enteritis in two. The drainage was examined, but nothing faulty discovered.

After due instruction by one of the Assistant Medical Officers, 16 nurses received certificates from the St. John's Ambulance Association.

The Commissioners refer favourably to the arrangements made in this asylum for pensions. As it is well known and universally approved by asylum officers, we need not refer to it further.

Northumberland.—Various minor structural alterations have been carried out, but others of greater magnitude have not yet been taken in hand. These latter include the building of blocks containing w.c.'s, baths, etc.

For the better protection of the buildings from fire the apparatus is examined by an inspector from Messrs. Merryweather and Sons, and the staff drilled by him every three months. This appears to be a good arrangement.

A monthly celebration of mass is now provided for the Roman Catholic patients. The wages of the married attendants have been increased by £4 per annum.

It is reported that the establishment of an out-door department has been a comparative failure.

Norwich. Borough.—Private patients, paying a low rate of board, are now admitted to this asylum.

Lighting by electricity has been introduced into nearly the

whole building, and many structural and other improvements effected during the year.

The following remarks by Dr. Harris on the value of employment may be reproduced :—

With respect to the experimental workshop block for men, there cannot be a shadow of doubt in the mind of any observer who has watched the increased number of usefully employed patients that the time has arrived when proper provision should be made for patients anxious to employ themselves. I believe the time is not far off when it will be deemed wise and economical to provide women with workshops.

The census will undoubtedly show the necessity for this, especially in manufacturing districts where women are largely employed; but no census is necessary to prove the oft-told tale, "Satan finds some mischief still for idle hands to do," and I believe idleness begets idleness, and idleness destruction, and so on to the loss of hope, and then a patient may become a chronic lunatic and a life-long expense. I do not say employment will cure everybody, but rightly applied it cannot fail to do good.

Some patients now employed were formerly very destructive, and would soon lapse into their old ways and dirty habits but for legitimate occupation.

I am a thorough believer in occupation for sane and insane alike, and trust, when you decide on building workshops (which need not be erected all at once), the space and accommodation will be liberal in order that as large a number of patients and attendants as possible may be employed, and thus the result of gloomy hours of an idle and unprofitable day avoided. Only those who are constantly in the society of the insane can realize the blessings of healthy occupation, and it is not an infrequent occurrence for attendants to murmur at not having had a "turn out" with the working parties, this being preferred to taking out-door exercise with many of the, at present, unoccupied class.

Experience has taught that those attendants who employ themselves get their patients to work, and are the healthiest in mind and body, least irritable, and best fitted to have charge of the insane.

The winter months test the working of an asylum, the inability to provide necessary out-door change of scene and occupation for patients and attendants is then sorely felt, and is an unhealthy strain alike on weak and sound minds—workshops are then a boon. To the employed insane much good is done, and to the irritable additional elbow room and space in the then thinly occupied wards provided.

Nottingham. Borough.—To utilize the spare accommodation 110 patients have been admitted from the London asylums. Private patients are also admitted at 15s. per week.

Dr. Powell found it necessary to ask for further assistance on account of the work devolving on the medical staff by the increased number of patients, and by the operations of the new Lunacy Act. A clinical assistant was therefore appointed, and his services are very favourably spoken of.

Nottingham. County.—The Commissioners still urge the necessity of providing a new asylum, but no steps in this direction appear to have been taken by the Visitors.

An additional night attendant has been appointed on each side.
Nottingham Lunatic Asylum.—

In January, 1889, an assessment was made on the committee for Income Tax upon £1,000, under Schedule A., and also for Inhabited House Duty for the same amount. Mr. Henfield appealed against these assessments to the Local

Commissioners, who decided that the hospital was exempt from both assessments. From this decision the Surveyor of Taxes appealed to the Queen's Bench Division of the High Court of Justice. This appeal was heard by Baron Pollock and Mr. Justice Charles on February 5th and 6th, 1891, when the Judges confirmed the decision that the hospital is exempt.

Oxford.—Two male and two female attendants have been added to the staff. Further additions might be made with advantage.

Perth Royal Asylum (1889).—This hospital continues to exhibit every sign of successful management, and as a consequence its affairs present every aspect of prosperity.

There are many subjects mentioned in Dr. Urquhart's report to which we would like to direct attention, but this is impossible. Some of them have, we believe, been referred to in previous notices.

We hear from time to time of "asylum-made lunatics," and the strongly expressed idea that residence amongst the insane would shortly drive the strongest-minded mad. An asylum, of course, is by no means the best place for every insane person, and discrimination in treatment must begin before such a step is advised. It is, however, the first plunge into a mad world that is most keenly felt by the sensitive, even by those who, after a time, find a power of accommodation to surroundings—an anæsthesia of use-and-wont to round off the fictitious horrors of asylum life. But others, who are elated by mania or depressed by melancholia, are rendered in some measure oblivious of their environment. The selfishness of their disease, their extreme and constant concentration on their own fanciful life, causes, in many instances, an obtuseness of feeling, whether of mental or bodily pain. The man whose bladder, without obvious inconvenience, can hold four pints of urine (a recent experience of ours), or the man whose eternal damnation is, to him, an assured and ever-present fact, is not likely to be troubled by the lesser inconveniences of life in a lunatic asylum.

Such observations for long obscured the truer view, that enfeebled or morbid minds are undoubtedly to be influenced by their surroundings. It is now fully recognized that science and art must be laid under contribution to brighten, to interest, to regulate, to cure. We seek to strike chords of mind responding to the sense of colour, proportion, sight—to harmonize faculties jangled out of tune. Therefore it becomes necessary to devote so much of valuable time to the problems of asylum architecture, the occupations and amusements of the patients, as well as to questions of purely medical treatment and microscopic pathology. It is not given to everyone to be an original investigator or a philosophic commentator, although it is within the province of all to patiently observe and record—to add a stone to the monumental edifice of science. Still more is it the duty of each to succour the sick and care for those committed to his charge, and nothing is common or unclean that falls to him to do if it but come within the scope of his duty.

The arrangements for meals have been much improved. All, except the infirm and excited, get their food away from the wards, and the attendants and nurses have their meals in their mess rooms. The proportion of married attendants has been increased, and it is proposed to erect cottages for them in the neighbourhood of the asylum. The amount of leave has been increased.

The inducements that can be held out to those capable of the arduous and responsible work of nursing the insane are never in danger of being too great. In former times they were but little more considered than the insane themselves; but of late it is recognized that at least we should have the insane as well nursed as the patients in ordinary hospitals, and efforts are made to secure this in the

asylums of the country generally. By reducing the hours of duty, by affording time for relaxation and opportunities for self-improvement, by increased pay and improved quarters we hope to retain the services of the most suitable.

Great attention continues to be devoted to the occupation of the patients, male and female.*

Perth Royal Asylum (1890).—Another satisfactory report. In the following passage Dr. Urquhart maintains the importance of heredity over and above the surroundings of the patient whatever these may be.

The causes of insanity have been studied with care and attention, and it yearly becomes more manifest that some inherited constitutional tendency to the more obvious forms of mental disease, or a mere nervous instability, is a fundamental necessity in the evolution of these disorders. In one case only did a mental (moral) cause, without ascertainable physical cause, produce insanity. It would almost seem that the cares and troubles of mortal life are impotent to overturn a well-balanced brain. A certain inherited vice, or acquired pathological habit, is apparently the prime factor in producing mental disease. The heredity may be paternal or maternal, and may show itself in the insanity of collaterals or descendants. It may be the heredity of alcoholism, or epilepsy, or less grave neurotic troubles. Or, again, the nervous instability may have been acquired by habits of intemperance or vicious excesses. In such cases calamity or other undue excitement merely gives the last impetus to an already over-burdened nervous system, and so it comes about that a bank failure or a wave of emotional religion leaves its mark on asylum statistics.

Salop and Montgomery.—At the suggestion of Dr. Strange the Visitors agreed to increase the leave of the attendants and nurses and to provide means for their rational amusement.

By an increase of the staff it is now possible to exercise the patients in greater numbers and more frequently beyond the asylum grounds. This is a most important improvement, and might be advantageously followed in other asylums. The whole difficulty is one of cost—it is therefore easily curable.

Suffolk (1889).—Dr. Eager reports that though there has been a decided improvement in the health of the inhabitants as compared with past years, no less than 25 cases of dysentery and eight cases of typhoid fever occurred during the year, besides 23 cases of diarrhœa of a less severe type; two of erysipelas and one of severe tonsillitis. It is satisfactory to learn that the provision of a supply of wholesome water has at last been taken in hand. Some of the sanitary arrangements have been improved, and much has been done to improve the older parts of the buildings.

Somerset and Bath.—It became necessary to discuss how to provide for the ever-increasing number of patients, and it was decided to erect another asylum, such asylum to be in the western part of the county.

* An indication of the healthy activity which continues to pervade this Institution is the appearance of a new series of the *Quarterly Magazine*, bearing the title "Excelsior." It is, as we should expect it to be, æsthetic in form, and we wish it every success.

Dr. Wade's report is chiefly devoted to a discussion of the same subject.

Warwick.—The new sanitary works are in progress, and are under the superintendence of Mr. Rogers Field. The mortality was high, and included deaths from typhoid, etc. Grave defects have been discovered in the ventilation. When these have been rectified, the number of deaths due to lung disease will no doubt diminish.

Dr. Miller speaks favourably of the training of attendants. Lectures in "First Aid" have been delivered, and some of the staff have sent in their names as candidates for examination.

The estate has been increased by the purchase of 20 acres of land.

The heating of the wards has been improved by the employment of a night stoker. This is a matter too much neglected in some asylums. No doubt it is expensive to continue artificial heating during the winter months, but this is no reason why so desirable an arrangement should not be carried out in every asylum. Dr. Miller says that since he introduced this method the night temperature in the wards has never been below 50 degrees, and is generally from 55 to 60 degrees, whereas previously it frequently was as low as 40 degrees; and in the early mornings, when the patients were getting up, the cold was a source of great discomfort, besides being injurious to the health of the old and debilitated.

A superintendent's clerk has been appointed. Besides assisting with the superintendent's correspondence, he enters nearly all the notes in the case books, which have then only to be signed by the medical staff. Probably a clinical clerk would be more convenient for the medical work.

It is hoped that the new hospital may be ready for the reception of patients during the year.

Worford House.—It is reported that substantial progress has been made with the improvements begun in 1889. During the last three years forty acres have been added to the estate at a cost of about £10,000.

Perkins' system of heating by means of hot water circulating at a high pressure was in use during the winter. Dr. Deas speaks in the highest terms of its efficiency.

Concerning transfers, Dr. Deas says:—

Eight of those admitted were brought from other institutions, and had been under care for several years. Several of those have improved very considerably, two to so marked an extent that recovery seems not improbable. The effects of change of scene and surroundings in promoting and restoring health are well recognized in bodily ailments, and also in the early stages of certain forms of brain trouble; but the value of similar change in cases of insanity, which have of necessity been placed in asylums, and which are apparently becoming chronic and hopeless, is not, I think, sufficiently recognized and acted on.

York Retreat.—A large amount of benevolent work is accom-

plished here. During the year 46 patients received all the care and comfort of this institution for the extremely low charge of 10s. per week; and in 88 cases the sum paid was less than the actual cost.

Various structural improvements have been effected during the year. A villa residence is nearly ready for occupation. This building is to be lighted by electricity, and arrangements have been made for extending the same system to the other parts of the building.

Wilts (1889).—The accommodation has been increased by the construction of two dormitories of 25 beds each. A hospital for infectious diseases has been built at a total cost of £2,581 17s. 7d.

The committee entertain some doubt as to whether or no its power of granting pensions has been taken away by a resolution of the County Council.

Dr. Bowes is of opinion that much relief would be afforded to the asylum if the Boards of Guardians would more readily co-operate with the Asylum Committee, by encouraging the removal of harmless and incurable cases to workhouses.

Berks.—The new irrigation works are reported to be working well, and it is believed that a wise course was adopted in removing the sewage to a piece of ground more remote from the asylum.

Five cases of typhoid fever occurred during the year. Further steps have been taken to improve the sanitary condition.

Concerning the supervision of suicidal cases Dr. Douty makes remarks which we most highly commend :—

It seems only fair to asylum nurses and attendants that I should call attention sometimes to the numerous attempts at suicide in which a fatal result is averted. Hard and foolish things are publicly said and written about asylum nurses and attendants when, as must be the case from time to time, an attempt at suicide is successful; the public, however, have no knowledge of the frequency of the attempts frustrated in an asylum, or they would cease to express surprise at the occasional fatalities. The whole question of the management of suicidal patients is one which causes us more anxious care perhaps than any other, and hence this special reference to it. As you are probably aware, "caution tickets" are issued with all cases known to be actively suicidal. These tickets are kept on a file, and every nurse or attendant taking duty in any ward has to sign his or her name upon each ticket before commencing duty. All cases in which such tickets are issued receive extra supervision; this, however, can only be of a general and not of a special nature; to make it special would require an enormous increase of the nursing staff. Our plan, therefore, is to obtain a medium amount of supervision for suicidals, and not to allow any fear of fatalities to deter us from allowing such patients to go for walks, to employ themselves with the mechanics, upon the lawn, or in the garden and grounds, or from attending entertainments, etc. Such things all tend to vary the monotony of asylum life, and to improve the physical condition of the patients, although naturally each is attended with opportunities for escape and for suicide. I confess I would rather run such risks, as I do daily, than attempt to render the occurrence of suicide an impossibility. The knowledge on the part of a patient that we are beginning to trust him is, as patients have often told me, a powerful stimulant to cheerfulness and self-reliance; I therefore take the responsibility of withdrawing suicidal caution tickets as

soon after the admission of each case as appears to me to be possible; and I aim at having in each ward a minimum number of these tickets, because I think that a familiarity with a large number of them must produce, to a certain extent, a contempt for their individual importance.

Worcester.—It has been decided to provide at once accommodation for 140 male patients. When occasion requires the same will be done for 140 women. This will bring up the total accommodation to 1,200 beds, beyond which it is not considered advisable to go. The water supply continues to give much trouble. No case of typhoid has occurred during the year. A Roman Catholic chaplain has been appointed.

Devon.—Both divisions of the building are much overcrowded. A block for about 50 male patients has been completed, and one for females is progressing rapidly.

The Commissioners suggest that the number of attendants and nurses should be increased, and that a third assistant medical officer should be appointed.

Dr. Saunders reports that a markedly increased number of melancholic and determinedly suicidal patients was admitted during the year.

Hull.—The wages of the attendants and nurses have been increased, as has also the amount of leave of absence.

Dr. Merson's report is largely devoted to a consideration of the circumstances which influence the death-rate in asylums. His remarks are full of interest, but are too long for reproduction, and do not admit of curtailment.

Cheshire. Chester.—A Roman Catholic chaplain has been appointed at a salary of £60.

An electric tell-tale clock is now in use for testing the vigilance of the night attendants. It is reported to act satisfactorily. The recovery rate was unusually high—57·63 per cent. on the admissions, transfers being excluded.

Eastern Counties' Asylum for Idiots and Imbeciles.—From Dr. Roberts' report it would appear that the general health of the inmates had not been very satisfactory during the year. Ten of the sixteen deaths were due to tubercle. Two cases of typhoid fever, two of septicæmia, and one of erysipelas occurred. Defects in the drainage were detected, and at once rectified.

Roeburgh, Berwick, and Selkirk.—Further improvements have been effected in the sewage drains outside the asylum buildings, the majority of which have been overhauled, trapped, and ventilated. The internal sanitary arrangements, however, have been reported by the Edinburgh Sanitary Protection Association to be in an unsatisfactory condition, and the Board are taking the necessary steps for their thorough rectification.

Leicester. Borough.—The Nonconformist Evangelical ministers of Leicester having volunteered to conduct a service each week at the asylum, the offer was thankfully accepted.

A new wing on the female side has been occupied. It contains a dormitory, 58 beds for epileptic patients on the ground floor, with a large day room upstairs. Twenty-three single rooms have been provided.

The following paragraphs from Dr. Finch's report are of interest:—

Notwithstanding that the population of Leicester has increased during the last ten years from 123,000 to 142,000, it is a remarkable fact that the number of patients admitted from the Borough of Leicester has not only not increased in proportion to the population, but has absolutely diminished during the last five years, as the subjoined table will show:—

1881	...	...	...	...	103
1882	...	...	...	...	86
1883	...	...	...	...	104
1884	...	...	...	...	83
1885	...	...	...	...	87
1886	...	...	...	...	81
1887	...	...	...	...	67
1888	...	...	...	...	72
1889	...	...	...	...	67
1890	...	...	...	...	74
					—
					824

From some points of view this diminution is very satisfactory, though somewhat difficult to account for. I think, however, having regard to the fact that there were 17 cases of suicide in Leicester last year, it is very doubtful whether more patients might not have been admitted with advantage to themselves if their mental condition had been earlier recognized.

Ennis.—Twenty-one male patients were transferred to work-houses, thus affording sufficient accommodation for the treatment of recent cases.

Argyll and Bute.—Several important improvements have been effected in the kitchen, the supply of hot water for baths and the heating of the wards.

Dundee.—Dr. Rorie continues to devote much care to the training of his nurses and attendants.

The proposals of the London County Council to establish an asylum on new lines have been discussed *ad nauseam*. We must, therefore, reproduce only Dr. Rorie's concluding remarks:—

The past thus affords ample evidence of steady and satisfactory progress, and, above all, of confidence in medical treatment, and this leads us to the second consideration, namely, what further steps can be taken to keep the asylum abreast of the continued advances of medical science, for an institution such as ours cannot remain stationary, when it ceases to advance it begins to retrograde; and here two problems have of late years received much, and deserve further, attention, but to which we can refer only briefly. In the first place, the question has arisen whether asylums, as at present constituted, and the valuable materials accumulating in their case-books, might not be more thoroughly utilized and rendered more available than they are for clinical instruction and educational purposes. In this direction progress has already, to a certain extent, been made in this asylum in the more extended medical records and the addition of a clinical assistant to the medical staff. It is satisfactory to be able to report that the latter appointment has been so much appreciated that during

the past year four gentlemen have availed themselves of the opportunities thus afforded, and there is little doubt that the number of such appointments might be increased with advantage. Greater facilities for the study of insanity would thus be afforded, and increased benefit would result to the patients from the more careful consideration of the individual cases which would be received. The other problem is that of the better training and higher education of the nurses and attendants, etc., etc.

Earlswood.—It is Dr. Jones's belief that were the work carried on at Earlswood better known to the public, the State would soon be persuaded to see the necessity of providing suitable and proper homes for the poorer classes of imbeciles who are disqualified from or are unable to gain admission there.

The death-rate was unusually small. This is partially attributed to the introduction of additional steam radiators into the section for infants.

Enniscorthy.—On account of the increased number of patients resident it has been necessary to add one female and two male attendants to the staff. The governors have under consideration an increase of wages. This, if approved by the inspectors and sanctioned by the Privy Council, it is hoped will attract a better class of applicants, and retain the tried, experienced, and efficient hands in the service.

Exeter.—The want of a suitable boundary walk is much felt. It is noted that only 49 men and 24 women walk beyond the asylum grounds once a week, and only 13 men and no women daily beyond the airing-courts.

Ipswich.—The staff has been increased by the addition of one nurse. It is still small. No fewer than 17 deaths, out of a total of 36, were due to phthisis.

Kilkenny.—This asylum is overcrowded. Many structural alterations and additions are required to bring it up to modern requirements. The farm consists of 26 acres only. The number of attendants is inadequate. During the day there are ten male attendants in charge of 176 patients, and seven nurses for 148 patients. The rate of wages appears to be very low.

Lancashire. Rainhill.—The record of work accomplished during the year or still in progress justifies the remark of the Commissioners:—

We were well satisfied that there is no standstill in the management of this asylum after we had inspected it throughout.

A more liberal rate of pay for the attendants has been adopted, and has occasioned much satisfaction.

Dr. Wigglesworth says:—

Next to heredity there is no more frequent cause of insanity than indulgence in alcoholic liquors. The two causes are, indeed, very frequently associated. Out of 357 male and female cases in which reliable personal histories were obtained, drink was the cause assigned in 128 instances, a percentage of 35·85 (males, 42·85; females, 30·54). Unfortunately the evils of drink do not end with the individual, but are often passed on to the offspring,

who thus have a terrible curse laid upon them on account of the sins of their progenitors. In not a few cases the only cause which could be detected for the patient's insanity was the intemperance of the parents; thus this was so in 28 out of 186 female cases. The influence of the habits of one generation in moulding the character of the next one is probably nowhere more clearly shown than in such instances as these. Although drunkards are not generally regarded as insane, it is a question whether the habitual tippler might not, with advantage, be considered an irresponsible being, and treated as such. On the other hand, insane persons may themselves beget children who become dipsomaniacs; another fact which might lead one to consider habitual intemperance as a species of insanity.

Lancashire. Whittingham.—The estate has been increased by the purchase of 186 acres. The total acreage is now 516, of which 412 are freehold, and 104 leasehold.

A pathologist has been appointed. As the time for providing further asylum accommodation has arrived, Dr. Wallis, in his report, explains to his visitors how this should be effected. He details the difficulties and drawbacks inseparable from such a huge establishment, and though he gives ample credit to Mr. Holland, the designer of the asylum, he clearly shows that the structural arrangements for the treatment of recent cases are defective. He, therefore, expresses his firm conviction that

The erection of an acute hospital block, with not less than four suitable subdivisions on either side, together with the necessary offices, laboratory, and officers' rooms, is requisite as a complementary addition to supply the deficiencies on which I have been compelled to enlarge, and that such an addition would make this asylum in every respect one of the most complete and finest public hospitals for the insane in the United Kingdom.

(To be concluded.)

2. American Retrospect.

By FLETCHER BEACH, M.B., F.R.C.P.

American Journal of Insanity, April, 1891.

Alienist and Neurologist, January, 1891.

Journal of Nervous and Mental Diseases, January, 1891.

Proceedings of the Annual Congress of the National Prison Association of the United States for 1889.

The "American Journal of Insanity" opens with the continuation of an article entitled "The Mechanism of Insanity," by Edward Cowles, M.D. In the observation of the phenomena which result from putting the normal mechanism into use, manifestations of the regular operation of forces and conditions that work under certain physiological laws constantly appear. These laws are important, not only in the development of the human organism, but are potent in evolving and fixing disordered activities when once disorder is begun. He treats of the law of habit, the

law of association, inhibition, the energy of muscle and nerve, and fatigue of the normal mechanism, and draws certain conclusions. There is no doubt that in the human body, in a healthy condition, the balance of waste and repair is maintained, and by the removal of waste products and the supply of nutritive material a healthy activity is sustained. Four factors, two positive and two negative, possibly operate in producing fatigue and the graver degree of exhaustion. Divergences from the normal in the functions of the mental mechanism may be clinically observed, and it is possible to discriminate between the influence of fatigue and the effect of toxic substances in producing conditions of exhaustion and disorder of psychical processes.

"The so-called Motor Area of the Cortex" is the title of a paper read by Dr. Edward B. Lane before the New England Psychological Society. It has been customary to speak of the motor and sensory regions of the brain or of the cortex, and the opponents of the motor theory seem to be yet in the minority both among physiologists and psychologists. In England, Bastian stands almost alone in his position that the so-called motor region is as purely sensory as any part of the cortex. The facts resulting from laboratory experiment are admitted by all, but the conclusions drawn from them are widely different; we must look to clinical study and pathological research to confirm what we know of human cerebral physiology. The author ranges himself on Bastian's side, and refers to speech disturbances as illustrating his views. It is known that stimulation of a sensory centre, the occipital lobe, the centre for vision, is followed by movements of the eyes and head, and he is of opinion that if we accept the Rolandic ideal of the area being a sensory one, we have a much simpler view of the physiology of the cortex, and do no violence to accepted facts in physiology and clinical medicine. Reference is made to a paper by Tamburini on "Motor Hallucinations," which the author thinks clearly illustrative of the theory of the sensory nature of the so-called motor area.

"The Importance of Systematic Co-operation in Study and Research among Pathologists in American Hospitals for the Insane," by Dr. W. P. Spratling, is an important contribution. It is an appeal to the pathologists of the American asylums to form such an association, and details the advantages which would be gained. There would be a free interchange of specimens in all shapes, and an exchange of ideas, methods, and discoveries among the members. Certain uniform methods in carrying on pathological work would naturally result, but at the same time such uniformity should not debar the member from prosecuting his studies in any direction he may wish, or from recording facts and phenomena as a result of his labour. More exhaustive study could be given to every class of insanity coming under observation, and each member might select, or be given, some type of insanity to

which he should devote his special attention. Much study should be devoted to recent and curable cases, as conclusions of practical value cannot be drawn from the post-mortem appearances of the brain in chronic cases, such as dementia, which may not have altered in character for years. It is very desirable that such an association should be formed, and it is a matter of regret that at present so few pathologists are to be found in English asylums.

This number of the Journal also contains Dr. Howden's scheme for a pathological index and a translation of a report by Dr. Giuseppe Seppili on "The Therapeutics of Mental Diseases by means of Hypnotic Suggestion." A commission had been appointed to consider the question, and, after making various experiments, came to the conclusion that although hypnotic suggestion was not useful in mental diseases, it succeeds most readily in the hysterical and epileptic. Conclusions of the same character have been arrived at in this country, but the enquiry must be continued.

"Insanity in the Coloured Race in the United States," by Dr. Witmer, appears in the "Alienist and Neurologist." The Government Hospital for the Insane at Washington, which was opened in 1855, had treated fifty-eight coloured patients during a period of seven years and a half, and there were twenty-one remaining under treatment at the close of that period. According to the census of 1860 the 766 coloured people known to be insane were distributed among the several States, and the slaves were specially provided for in separate cottages, being under the care of the physician specially appointed by the owner to look after the bodily ailments of the slaves. The most eventful period in the history of the recently-liberated people was that following the cessation of hostilities after the Civil War. There is known to have been an increase of insanity at that time, but no separate provision was made except in the State of Ohio, in 1866, by the late Dr. Langdon, then superintendent of the well-organized hospital for the insane for Hamilton county. The census of 1870, which is known to be defective, reported only 1,822 as insane, but that of 1880 gave 6,157 out of a total coloured population of 6,580,793. This great increase in the number of the coloured insane excited an interest among those whose duty it was to provide for them, and from this time onwards the causes of insanity in the coloured race, their susceptibility to the disease, and the results of treatment were fully treated in the annual reports of the institutions where those patients were resident. The author believes that the types of insanity are essentially the same in white and coloured people. Mania is common, but melancholia is not often seen, as the friends of the patient attribute the mental disturbance to evil spirits, and while he is being doctored for this he either dies or passes into a state of dementia. The influence of heredity, it appears, plays little part in the production of the disease, and suicidal tendencies are uncommon, but paralytic dementia is well defined, although the

delusions of grandeur are not so defined as in the white race. As to the relative curability in the two races, Dr. Witmer believes that where the circumstances are favourable the results of treatment will be the same in both.

Dr. Kiernan, of Chicago, has an interesting paper on "The Evolution of Delusions from Imperative Conceptions," which had been read before the Chicago Academy of Medicine. Reference is made to Dr. Hack Tuke's view that while imperative conceptions frequently occur in persons with an insane diathesis, this is not necessarily a factor. The essential feature of the imperative conception is "its recognition as an abnormality by its victims, and its relative frequency as compared with other abnormal mental manifestations." The author is strongly impressed with the intimate relation between this phenomena and delusions, and cites cases in support of his view. According to Laségue the imperative conception becomes a delusion in the following manner:—The patient has many ideas; the origin of some of these he recognizes, of others he does not. The consequence is that he has two individualities, "one of which is himself, and the other is a 'he' which is not himself." The latter commands, and the patient cannot free himself from the parasite. Something or someone speaks to him, and controls his thoughts and imposes on him its will. Auditory hallucinations form a communication between his thoughts and the parasite. Cases are on record where patients, who at first recognized the absurd nature of their ideas, gradually began to consider the possibility of these being produced by some enemy. In minds otherwise healthy the conception disappears with improved health, but in states of exhaustion true impulsive insanity may result. The prognosis depends upon the neuropathic state of the patient. As a rule it is not favourable, but still the patient is considered sane by those with whom he associates. Frequent relapses, however, tend to weaken the mental condition and predispose to delusion.

"The Journal of Nervous and Mental Disease" has an article by Dr. E. B. Fisher on "Syphilis of the Nervous System." The author divides syphilitic disease of the brain into three classes, viz., "Those involving the cranial bones, the brain and its meninges, and the cerebral vessels." In the majority of cases of cerebral syphilis the meninges are involved, and the base is said to be more often affected than the convex surface. The pathology of syphilis of the cord is the same as that of the brain, and in both cases there may be endarteritis independent of meningeal affection. No part of the nervous system escapes, and the diagnosis of the disease rests upon the multiplicity of symptoms, which disappear and reappear in the various stages. Headache, arousing the patient from sleep at night, is common; sometimes there is mania, and the patient is sent to an asylum. Somnolence is not uncommon, and this condition, combined with loss of

memory, apathy, and affection of the third or optic nerves may be considered diagnostic of syphilis. The disease is most often situated in the arteries, and, according to the author, the morbid anatomy closely resembles non-syphilitic general paralysis. Ptosis, diplopia, inequality of the pupils, with no history of a blow, as a rule indicates cerebral syphilis. Syphilitic disease of the vertebræ is rare, but meningitis is frequent, and is usually diffused. The symptoms may be divided into those which affect the meninges, the cord, and the motor and sensory nerve roots. Dr. Fisher closes his paper by referring to specific affection of the peripheral nerves.

"Aural vertigo" (Menière's disease?) is the title of a paper read by Dr. Harrison Mettler before the Philadelphia Neurological Society. Dr. Mettler believes that the name aural vertigo is a misleading one, as aural symptoms are not necessarily indicative of disease of the ear. A case is related at length which illustrates the author's views. Clinical evidence shows that the semi-circular canals alone do not subserve the maintenance of equilibrium. "The principal factors in the preservation of equilibrium are consciousness and normal sense impressions." Consciousness is greatly obscured at the height of an attack of vertigo, but is never actually lost; the two causes of the disease are disturbance of the cerebral centres which make up consciousness, and of the peripheral sensori-motor apparatus which is manifested through muscular sense. The views of Spitzka and Starr are referred to, and the author concludes that the centre of equilibrium must not be looked for in any particular part of the brain, "but in the harmonious action of the various sensory and motor centres upon one another." The views of Menière, Knapp, and Gowers are examined in detail, the experiments of Steiner and Sewell on the semi-circular canals of the shark are considered, and it is noted that Boettcher and Baginsky conclude that the cause of the rotation of the head in Flourens and Goltz's experiments was injury done to the brain, and not to the semi-circular canals. Dr. Mettler is of opinion that the source of irritation in Menière's disease may sometimes be in the semi-circular canals, but gives several reasons why the immediate cause of the vertigo cannot be there.

The National Prison Association has been in operation for some years with the twofold object of repressing crime and improving the condition of the prisoners. A sketch of the present condition of prison reform is given in the preface to the book, which gives the proceedings of the Congress of 1889. The Bertillon system for the registration and identification of criminals has been adopted by the Wardens' Association, of which Captain Nicholson is President. The annual address was given by President Hayes, who touched upon various subjects, the most important of which were indifference as to the condition of the convict, the means of dealing with the hardened criminal, and the best mode of reform. The

religious aspect of the prison question was discussed, and it was shown that the two great principles—severity and goodness—have to be reconciled in dealing with prisoners. One of the speakers was of opinion that the best industries should be cultivated in prison, and that the inmates should be “instructed in the finest arts, the profoundest sciences, as well as the coarser industries”—rather a Utopian idea from the English point of view. According to General Brinkerhoff crime is increasing year by year in the United States. The census for the past forty years shows that it has doubled every decade, out of proportion to the population. A paper was read upon the “Identification of Criminals” by Charles E. Felton, Superintendent of the House of Correction, Chicago, Illinois, who advocated a uniform method for the identification of persons previously convicted of crime. A knowledge of the ancestry and environments of prisoners would aid the superintendent in classifying and determining the treatment in each individual case, so that if the prisoner will not himself reform he shall be prevented from interfering with the progress that may be made by others. The Act for the Identification of Habitual Criminals, passed by the State of Illinois, is referred to, and a scheme for the anthropometric description of prisoners is fully described. The Ohio Parole Law is discussed by Mr. Smead, and the results of the system, which has been in operation for four years, are given. From the records we find that during that time 535 prisoners have been paroled, of whom 299 were discharged at the expiration of the parole, 841 were still on parole, 40 were sent back for violating it, 46 were delinquents, and two refused to accept it. Many letters from the recipients of this benevolent law were read. “What to do with Recidivists” is the title of a paper by R. Brinkerhoff. A recidivist is “one who, having been convicted of one offence, and having served his term in prison commits another offence, and is recommitted.” They are chronic criminals, and in the United States amount to 30 per cent. of all prisoners. The great mass of them are chronic drunkards who go to the workhouse to become sober and recuperate for another debauch. Cumulative sentences, and then the intermediate sentence, with privilege of parole upon satisfactory evidence of reformation, seem to be the remedy. Interesting papers on “Some Peculiarities of Criminals,” on “Punishment of Juvenile Offenders,” on “Life Prisoners,” and on many other subjects were read. The Congress closed after being five days in session.

3. *Therapeutic Retrospect.*

By HARRINGTON SAINSBURY, M.D.

Trional and Tetronal in Mental Affections. ("Therap. Monatsh.," October, 1891.)

In the above journal Dr. Ernst Schultze reports the results of his trials with these two substances. His object is to compare their action with that of the allied compound sulphonal. All these three are built up on the same type—they are all methanes. They differ, however, in the number of ethyl groupings in their respective molecules; thus there are two ethyl groupings in sulphonal, three in trional, and four in tetronal, and for those interested in the relationship between chemical structure and pharmacological action there is much interest in the comparison of these bodies. Kast and Baumann had asserted that the soporific action of sulphonal belonged to the ethyl groups, and that accordingly trional and tetronal would be found more active than sulphonal because richer in these groups. Their assertions were based on experiments on animals. Barth and Rumpel next examined trional and tetronal clinically, and though they found them excellent hypnotics, they were not able to sustain Kast and Baumann's contention of a distinct superiority over sulphonal.

The trional and tetronal employed by Schultze were obtained from the firm F. Bayer and Co., Eberfeld. Trional occurs in the form of glistening tabular crystals melting at 76° C., soluble in 320 parts of water at the ordinary temperature, freely soluble in alcohol and ether. The watery solution has a distinctly bitter taste. Tetronal crystallizes out in similar form; the melting point of the crystals is 85° C. It dissolves in 450 parts of cold water, freely in alcohol, moderately freely in ether. It has a camphoraceous and bitter taste.

In all 15,500 grains of trional and 10,850 grains of tetronal were used in doses varying from 15-60 grains. These doses were administered as powders, either in a large quantity of warm water, or at times in soup, and about half-an-hour before bedtime. Seventy-six cases of mental affection were treated; these comprised 20 cases of mania, 15 of general paralysis, eight of paranoia, 16 of melancholia, and 17 of feeble-mindedness with excitement.

For simplicity's sake mania and general paralysis are taken together, since the indications in these two affections were very similar. It was found that trional acted with certainty as a soporific in a mild case of mania, and in two cases of general paralysis, but that in maniacal cases with great excitement it was exceptional to obtain sleep, though a considerable diminution

of the unrest was effected. In those cases where sleep was obtained the dose was large, 45-60 grains, and trional was always more efficient than tetronal. Endeavour was also made to discover if any advantage resulted from a divided dose given at intervals, e.g., 15 grains thrice daily, but none such was witnessed. Perhaps some advantage followed the dosage of 30 grains morning and evening; six patients were submitted to this method. Trional and tetronal, according to the results in mania and general paralysis, are not drugs which enforce sleep, but which induce or predispose to sleep, and their effect is the more striking the more feeble-minded the patient, or the less recent the excitement. In three cases of general paralysis and one of mania, sleep was never obtained by either drug, but in these cases sulphonal was equally ineffectual. Under the influence of the morning and evening dosage a troublesome patient became much more manageable.

In six out of eight cases of paranoia with marked hallucinations very decided benefit was obtained, especially with trional. In the cases of feeble-mindedness with excitement, good results, on the whole, were obtained. In two cases tetronal was more effectual than trional.

Lastly, in melancholia, with sleeplessness, trional and tetronal proved satisfactory, and gave, in general, from six to eight hours' sleep. One case, however, was wholly intractable, and another case, in which sulphonal in 30 grain dose caused, almost invariably, sleep, resisted both trional and tetronal.

Dr. Schultze further refers to four cases of sleeplessness from overwrought nerves in persons otherwise healthy. Doses of 15 grains of trional proved generally efficient in these cases.

The effects of suggestion in such of these cases as were possessed of sufficient intelligence to be open to suggestion were eliminated by controlling the results by occasional substitutions of an indifferent white powder in place of the hypnotic.

In comparing together sulphonal and these other sulphones, Schultze remarks that in three cases sulphonal failed, whilst trional in the same dose, or in smaller dose, acted efficiently. Again, hallucinations were not infrequently complained of during the use of sulphonal, whilst, on the other hand, trional in 10 cases, with marked hallucinations, appeared to exert a lessening effect upon the hallucinations.

Lastly, delayed action, common enough with sulphonal, was not observed for either trional or tetronal, sleep setting in, if at all, during the first hour.

On the other side, the tastelessness of sulphonal must be placed against the bitter taste of trional and tetronal. This quality of the latter drugs did not cause much objection on the part of the patients, and in no case were they refused. Further, in two cases in which 45-60 grains of trional were taken over-night complaint

was made next morning of ataxy of the limbs, especially of the legs. This symptom, however, passed off during the course of the day.

In five cases of tetronal use vomiting set in a few hours after the administration of the drug, or else the next morning; with this there was anorexia. Both symptoms, however, soon disappeared. For the rest no unpleasant effects on lungs, heart, or kidneys were at any time observed.

Schultze found trional, on the whole, more effective than tetronal. Roughly he values them numerically as 75-60. He thinks that trional can rank as equal to sulphonal, perhaps in some respects as its superior.

Subcutaneous "Infusion" of Salt Solution in Collapse from Abstinence in a Case of Acute Psychosis. ("Therap. Monatsh.," October, 1891.)

Dr. Mercklin, of Riga, refers to a most interesting case of collapse successfully treated by the hypodermic injection of salt solution. The record is as follows:—The patient, æt. 22, the wife of a publican, had been infected with syphilis since her marriage, and had undergone prolonged inunction treatment. On October 23rd, 1890, the first symptoms of mental excitement, sleeplessness, motor unrest, etc., appeared; food was taken in insufficient quantity. On admission, October 29th, great motor unrest was noticed; the attention could not be fixed. For two days all nourishment had been refused. Great mental confusion was next recorded. On November 1st patient looked very prostrate, and the œsophageal tube was employed, and continued for the next two days; sulphonal was also given for the unrest. November 4th—Patient vomited after each feeding with the tube; increased weakness. Two subcutaneous injections of ether. November 5th—Complete abstinence; increased prostration; skin cool, eyes dull. Food by the tube vomited; an enema of lukewarm water returned quickly. 10 a.m.—Facies hippocratica; pulse not palpable. A solution of common salt, 0.3 per cent., in distilled water, was now made, filtered, and boiled, and of this 500 c.c. (17½ fl. oz.) were introduced under the skin of the thigh. The apparatus had to be improvised. A needle of about 3 × the bore of an ordinary Pravaz syringe was fixed to the end of a long rubber tube, to the other end of which a glass funnel was attached. To prevent cooling of the solution several coils of the tube were placed in a vessel of warm water. The infusion of the solution was very slow, though the funnel was raised high. Careful massage expedited the absorption of the solution. Rapid improvement occurred. The radial pulse was soon felt, and the features of the patient became reanimated. At 2 p.m. the same quantity was injected into the other thigh. Patient distinctly stronger. 8 p.m.—Patient fed with the œso-

phageal tube (milk), but vomiting followed directly. At 9 p.m. patient more lucid. Stated that she had held the food to be poisoned, and now asked for and began to take food. From November 6th the patient progressed satisfactorily. On November 28th she left the institution. The reviewer, Rabow, then refers to a similar case of his own, viz., great mental confusion, with motor unrest and collapse, in which surprising recovery followed similar treatment. In this case the patient had wasted to a skeleton. The subcutaneous infusion, to the extent of three times $17\frac{1}{2}$ oz. of salt solution, took place on two separate days. By the time the patient had left the asylum she had gained 60 pounds in weight.

Dr. Mercklin's original paper is to be found in the "Sep. Abdruck des Cblatt f. Nervenheilk. u. Psychiatrie," March, 1891.

In the supplementary volume of the "Zeitschr. f. Klin. Medicin," 1891, pp. 49-86, an elaborate article is contributed by Dr. Biernacki, of Warsaw, on the influence of hypodermic injections of large quantities of 0.7 per cent. solution of sodium chloride upon the blood and the secretion of urine. The author refers to the rise and progress of the intravenous injection of saline solutions (0.6-0.7 per cent.), and subsequently to the use of hypodermic injections of the same solutions in the same states, e.g., after losses of blood, in the collapse of cholera, in other states of collapse. The author next proceeds to examine physiologically the effects of subcutaneous injections upon animals, seeking to establish the physiological basis upon which this treatment rests, he worked in the like manner that Ott investigated the *intravenous* method. All the animals experimented upon recovered sooner or later. The quantities injected varied from $\frac{1}{4}$ of the bulk of the blood in the animal (reckoned as $\frac{1}{3}$ th of the body weight) up to $\frac{1}{2}$ - $\frac{3}{4}$ or even an equal volume. The salt solution was first warmed to about the body heat (37-39°C.), and then the injection was made by means of a syringe of 15 c.c. capacity under the skin of the thorax or of the flank. Massage was never employed to accelerate absorption. Complete absorption took place in from $\frac{3}{4}$ -1 hour, sometimes rather longer. The blood pressure was tested, and the amount of hæmoglobin, the proportion of red cells, the specific gravity, etc., determined. The blood was also examined chemically as to its proportion of water and organic and inorganic constituents. The following results were obtained:—Following the massive injection of saline the red cells per unit of blood diminish in number, the hæmoglobin percentage falls, likewise the specific gravity and the proportion of solids; on the other hand, the number of white cells, the water percentage, and the inorganic blood constituents rise—in fact, but for the increase of white cells, we have the phenomena of simple

blood dilation. After a period of 1-2 days a second period supervenes, in which the number of red cells, the hæmoglobin percentage, the sp. gr., and the quantity of organic solid constituents rise above the normal. The number of white cells, however, lessens. The inorganic salts remain in excess. After another day, rarely two days, the red cells fall greatly in number; the white cells show oscillations in their number, but gradually reach the normal standard. By about the fourth day from the injection the proportion of water and of red cells attain about the normal percentage. The proportion of salt and the sp. gr. are the last to return to the normal levels.

The phenomena of blood-dilution, first stage, do not reach the degree witnessed when the saline is injected directly into the veins. The fall in sp. gr. is more marked in the venous than the arterial blood. Blood pressure is not appreciably altered.

Strong diuretic action follows the injection, and this causes the appearance of the second stage, viz., condensation or thickening of the blood. During the diuresis the watery element of the injection is thrown out in greater proportion than the saline.

Marked chemical changes in the blood determine the appearance of the third stage. The red cells are destroyed in great numbers, and accordingly we witness for two or three days a hæmoglobinuria.

Toxic Effects of Cocaine and their Treatment. Andrew Fullerton, M.D., B.Ch. ("Lancet," September 19, 1891.)

Dr. Fullerton's results were obtained chiefly from the local application of cocaine to the mucous membrane of the nose and mouth in the treatment of local affections in these regions. He is of opinion that the stronger solutions are less readily absorbed than the weaker, and that, for example, two grains in one per cent. solution would be more liable to yield toxic symptoms than the same quantity in a 10 per cent. solution. He has experienced very unpleasant effects from the absorption of less than one grain. The symptoms produced may come on in a few minutes, and last 3-4 hours or more. With small doses there is exhilaration, the mental faculties being stimulated. With much increase of the dose a kind of affective insanity may result. It appears to consist of a kind of mild mania, "in which illusions, hallucinations, and delusions have not yet made their appearance." Insomnia is a troublesome symptom, but strangely it does not appear to be followed next day by as much fatigue as would have been expected.

The vascular system shows excitement except for large doses; with such there may be a rapid, weak, irregular pulse, with oppression at the chest, and some orthopnoea. The temperature

may be slightly raised. The pupils suffer moderate dilatation apart from any local effects, *i.e.*, as the result of absorption into the general circulation. With prolonged use of cocaine there is wasting, and the urine shows abundant urates. Cocaine craving may come on early, and, even after a few days' use, it may be necessary to exercise some strength of will to overcome the desire.

In the treatment of the insomnia of cocaine "chloral gave the best results and opium the worst." Bromides came in between. Enormous doses of chloral were, however, required to produce sleep; the author has used 40 grains of chloral and 40 grains of bromide without producing sleep. Chloral is better given alone, the author thinks, to avoid the unpleasant effects of the bromide next day. The resistance of cocaine insomnia to chloral is referred to by Dr. Willoughby, of London ("Lancet," February 14th, 1891). For the cardiac weakness, ether and ammonia are best given.

What about the safety of these large doses of chloral? The author does not speak of any dangers, so we presume he had no bad results. On his method of chloral dosage we should have been glad of further statements.

PART IV.—NOTES AND NEWS.

MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

The Quarterly Meeting of the Medico-Psychological Association was held at the house of Dr. B. W. Richardson, F.R.S., 25, Manchester Square, London, November 19th, 1891, E. B. Whitcombe, Esq., President, in the chair.

The PRESIDENT—I have to announce that the Council have received a report from Dr. Tuke on the subject of an application for a Royal Charter for the Association, and that the Council have fixed the second Thursday in December for a special meeting of members of the Association to approve of the question that application be made for a Royal Charter. The next question before the meeting is balloting for members. The following is the list of candidates :—

Cornelius Suckling, M.D.Lond., M.R.C.P.Lond., Physician Queen's Hospital, Birmingham, 103, Newhall Street, Birmingham.

W. E. St. Lawrence Finney, M.B.Univ.Ireland, Kenlis, Queen's road, Kingston Hill, Surrey.

Charles D. Musgrove, M.B. and C.M.Edin., Assistant Medical Officer, Wye House Asylum, Buxton.

John Custance Shaw, M.R.C.S.Eng., L.R.C.P.Lond., Assistant Medical Officer, Hull Borough Asylum.

Thomas Stewart Adair, M.B., C.M.Edin., Assistant Medical Officer and Pathologist, Wadsley Asylum, near Sheffield.

James Humphrey Skeen, M.B., C.M.Aber., Assistant Physician, Stirling District Asylum, Larbert.

Robert Renton, M.B., C.M.Edin., M.P.C., Assistant Medical Officer, Crichton Royal Institution, Dumfries.

John J. Cowan, M.B., C.M.Edin., Assistant Medical Officer, Roxburgh District Asylum, Melrose.

Bedford Pierce, M.D.Lond., M.R.C.P., Bethlem Royal Hospital, London.

It is usual to vote for these members *en masse*, and if there is a black ball we take them individually.

The ballot was then taken.

The PRESIDENT—I think we shall be studying Dr. Richardson's convenience if we ask him to at once proceed with the paper which he has so kindly undertaken to lay before this meeting. (See "Original Articles.")

Dr. BLANDFORD—Gentlemen, I have to propose a vote of thanks from this meeting to Dr. Richardson for this extremely valuable and interesting lecture that he has given to us. If we were living in the last century we should speak of him as "that ingenious gentleman, Dr. Richardson," and I sure that although we are now at the end of this 19th century, the term is equally applicable. I am sure you will vote him those thanks which he so eminently deserves for this lecture. (Cheers.)

The PRESIDENT—I am sure a vote of this character scarcely needs seconding or putting to you. The paper which we have heard is of the greatest interest to us individually, and, coming as I do from the provinces, where we look upon Dr. Richardson as a man, who, if he undertakes a thing does it thoroughly and well, I cannot help feeling that we this evening have been receiving from him a most interesting and valuable contribution to our scientific knowledge, and one which he has taken an immense amount of pains and labour to bring before us. I am sure on your behalf I shall be right in saying that we are extremely obliged to Dr. Richardson for his very valuable and interesting paper, and we thank him most heartily for having taken the trouble and care which he has done in preparing it. I have now to state that the candidates for election to the membership of the Association have been unanimously elected. I will now ask gentlemen present for some remarks upon the very interesting paper we have just heard.

Dr. HACK TUKE—I beg to express my entire concurrence with the remarks which have been made by Dr. Blandford and the President in regard to the lecture which has been given this evening to us. I am very glad that an honorary member should do what I think very few honorary members do—contribute to our papers and discussions. Dr. Richardson states that his theory will explain many of the grand mental phenomena of life. I am sure that if it explains only a small part of the phenomena which are so interesting to us all, and are so difficult to study and to explain, we shall feel exceedingly grateful to him. I do not think the members of the Association present will blame me for having asked Dr. Richardson to concentrate what he had to bring before us in a form which would apply more especially to the studies which occupy our own attention. I will only add in reference to Dr. Richardson's remark in regard to his paper being placed in our Archives, that his paper will appear in the next number of the "Journal of Mental Science," when all members will have an opportunity of studying it.

The PRESIDENT—I understand Professor Hughes is here. I am sure we should be delighted to hear his views upon this paper.

Professor HUGHES—I am much obliged to you for calling upon me. This is not a subject which I am acquainted with, but I have been perfectly wonder-

struck with the amount of research which Dr. Richardson has brought to bear upon it. He has mentioned my instrument which I gave to him many years ago, but I had never the slightest idea that he would employ it to such enormous value as he has. He has employed it in a way really that I could not have conceived of myself. He has employed in this research pneumatics, chemistry, electricity, optics, and the most extraordinary statement he has made is that you can distinguish diseased states by sounds through the telephone; that is very important. I made many experiments myself, trying to insulate directed sounds to the microphone, but I must confess I have never been able to succeed in insulating the sounds and directing them. I can only join in expressing the greatest thanks to Dr. Richardson for the lecture.

Dr. RICHARDSON, after explaining that the use of the telephone in diagnosis, to which Professor Hughes had referred, was as yet very limited, added—I am sure I am very much obliged to you for your kindness in passing this vote of thanks. You must take this only as the first instalment of a research which has lasted for a great many years. Since the year 1860 I have been working at this matter. This is, at the present moment, the last outcome of what has occurred to me, but it is very little indeed. Your kindness will stimulate me to still further progress, so that I may leave a little more to those who shall follow me. (Applause.)

The meeting was then adjourned.

SPECIAL GENERAL MEETING OF THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

A Special General Meeting of the Association was held at Bethlem Hospital, Dec. 10, 1891, for the purpose of considering the question of an application for a Royal Charter, the meeting having been empowered to act by the annual meeting held at Birmingham.

The chair was taken by E. B. Whitcombe, Esq., President.

The PRESIDENT said the time of the present meeting had been fixed by the Council, and was called for the special purpose of giving its sanction or otherwise to an application to be made in the proper quarter for the granting of a Royal Charter to the Association. At the last annual meeting Dr. Hack Tuke brought the matter forward, and it was then decided that counsel's opinion should be taken upon the question. The Council of the Association had had that opinion before them at their last meeting, and upon that it was decided to call a special general meeting of the Association. The Council at a rather full meeting were unanimous in their opinion that the application should be made, subject to the decision of a general meeting of the members. He would call upon Dr. Tuke to explain the matter further.

Dr. HACK TUKE said that after the annual meeting, he undertook, in the absence of the secretary, to ask the solicitor, Mr. Wigan, to obtain counsel's opinion on various points which it was wished to place before him. The questions referred to counsel were:—(1). The steps to be taken by the Association for obtaining the Royal Charter. (2). What is the prospect of success in making the application? (3). To what expense is the Association likely to be put (first) if unopposed, and (second) if opposed? It was stated that the application for a Royal Charter is made at the present time on the occasion of the Jubilee of the Association. We had then to give various particulars in

regard to the Association, its aims and constitution, and what it had already done. That information was supplied, but it would be unnecessary to read it to the meeting, as they were already well acquainted with its history and objects, and counsel's opinion was given at considerable length, and if it was the wish of the meeting he would read it, if not he would simply refer to its main points instead of reading it in full. (Agreed.) The counsel to whom the questions were submitted advised that in the first place the application should be sanctioned by a resolution of the Association; that a resolution should also be passed stating whether the expenses should be paid out of the funds of the Association altogether or partly by a special subscription. A petition to the Queen in Council must be prepared, as also a draft Charter when settled by counsel. Then having been submitted to a meeting of the Association, the documents were to be left at the Privy Council office, and were usually referred to the Board of Trade. If the reply was favourable, the Charter was prepared and sealed. It was then sent to the Home Office, when the petitioners obtained it on paying the usual fees. Counsel proceeded to say that he thought the application would be successful, and that the case of the Medico-Psychological Association was immeasurably stronger than that of a scientific society which had recently obtained the Charter. In answer to the question as to the cost, he said that in a recent unopposed case the total cost amounted to £173 9s. In another instance, that of the Incorporated Law Society of Scotland, it was only £96, and in a third case which he mentioned it was £100. If opposed that would involve an additional expense for having the case argued before the Privy Council. Counsel then referred to the question of granting a degree in Psychological Medicine, and his opinion was that power to grant it should be inserted in the draft Charter, but that it should be privately conveyed to the Committee of Council that the clause would be sacrificed if the Charter would not be granted without its abandonment. Of course as to claiming any right to give a diploma that was entirely out of the question. Counsel also stated that the Association might, if it failed in obtaining a Royal Charter, apply for Incorporation under the Companies Act of 1867, section 23, by licence from the Board of Trade, and he stated that he had no doubt that such an application would be successful. Dr. Tuke added that in such a case it would be competent for the Association to apply for the prefix "Royal" altogether independent of the Royal Charter. There were therefore two courses before them, the one trying to obtain a Royal Charter, the other applying to be Incorporated under the Companies Act, and also for power to prefix the term "Royal" to the Association. These were the only points in counsel's opinion to which he wished to refer. It was perhaps unnecessary to repeat what he had said at the annual meeting as to the grounds on which it would be an advantage to the Association to possess one or other of these titles. Though it was perhaps rather difficult to define, there was no doubt a certain status, dignity, or prestige connected with the title "Royal," and the number of applications made for a Charter was a proof of the estimation in which it was held. Unfortunately that was one of their difficulties, because the fact of there having been so many applications recently rendered the success of the Association less probable than at one time it appeared to be. It was also thought in regard to the examinations that the possession of a Royal Charter would cause their Certificates for Efficiency in Psychological Medicine to be held in higher esteem, and more candidates would present themselves for examination than at present if they knew that they were to be connected with the Royal Medico-Psychological Association. The same thing would apply to certificates for nurses and other matters. Perhaps it was a matter of prestige, but still it was something of which they could all understand the value. In conclusion he proposed: "That the question of an application for a Royal Charter be referred to a Committee, who shall have power to apply in the name of the Association either to the Privy Council for a Charter or to the Board of

Trade for registration under the 23rd section of the Companies Act of 1867." The President suggested to him that the application should be referred to the Council instead of to a Committee, and he was quite willing to accept that suggestion.

Mr. WIGAN said in regard to the question of expense, that in the case of the Royal Colonial Institute, the fees on obtaining the Royal Charter were £104 19s., and the solicitor's costs and counsel's fees came to £68 10s., making a total of £173 19s. That was the figure Dr. Tuke quoted. The alternative cost of registering under the Companies Act was a very much cheaper proceeding, the costs being between £50 and £60. The status and stability legally were very much the same whether they had a Royal Charter or were registered under section of the Act 1867. They were allowed to register without putting the word "limited" after their title, provided they were a scientific society, or one for promoting general welfare, and did not divide profits in the form of dividends. Possibly one objection to registering was that they did not necessarily get the word "Royal," but the Home Office had power to grant leave to companies registering under that section to use the word "Royal." In such a case their position would be really very much the same as if they obtained a Royal Charter, and they would have it for £50 or £60. He might also say that registration under that section was very commonly used as a stepping-stone towards a Royal Charter. The advantages of getting the Charter or of being registered were shortly as follows:—That the Associations could in that way obtain credit and stability, that they could have a common seal, and own property without the intervention of trustees, and that their members were free from personal responsibility and liability. There was of course a certain amount of dignity conferred by the title "Royal."

Dr. BLANDFORD asked whether in the case of registration under the Companies Act the members of the Association would acquire the title of Fellows as they would under a Royal Charter.

Mr. WIGAN said he was hardly prepared to say they would, but he saw no reason which would prevent the Board of Trade passing a clause allowing members to call themselves Fellows.

Dr. TUKE said he would formally propose the first resolution, and it would of course be open to anyone to propose any modification, especially as to whether the question should be referred to the Council alone or to the Council with some members of the Association added, or to a Committee.

Dr. BLANDFORD seconded the resolution.

Dr. NICOLSON thought it might be advisable if the names of a few members of the Association were added to the Council to assist in this special matter. From inquiries he had made at Dr. Tuke's suggestion at the Home Office he found that the courses suggested by Dr. Tuke were all open to the Association, but they disliked having the application made directly to them for a Royal Charter, and said that the rule followed since the passing of the Act of 1867 was that incorporation should be obtained under that Act, and that the application for a Royal Charter should follow afterwards. He feared that the hope of getting a Royal Charter now was not very brilliant. With regard to the word "Royal," that might be applied for, direct, to the Home Office, and he was informed that there would not be any great difficulty in getting such an application acceded to, whether they were incorporated or not. Seeing that it was thought desirable to have the word "Royal" prefixed to their title, he thought every means should be used to follow out the suggestion in such a way as would not only meet their requirements, but give likelihood of success. With that view he thought it would be desirable that the matter should be referred to a committee composed of the Council and of some members of the Association who took an interest in it, and amongst other names he would suggest those of Dr. Blandford and Dr. White. A good many members of the Council not living in London might not be able to attend the Committee meetings, and

the Association generally would be more satisfied if they were specially represented. He would suggest that five other names should be added to the Council, and that they should be authorized to act in accordance with the proposal now before them.

Mr. RICHARDS agreed that there might be some little doubt as to obtaining a Royal Charter. Some few years since he was on the Council of the Medical Society of London, and they were very anxious about the time of their centenary to obtain a Royal Charter. The matter was thoroughly discussed, and the Council thought they had sufficient interest and sufficient friends at Court in order to obtain it. In fact, they felt perfectly certain of doing so. The application was made, but he was very sorry to say it was refused. If that was the case with the oldest Medical Society in London, they might be too sanguine if they hoped that a society of fifty years' standing would have such an application acceded to. Perhaps it was more than they could expect under the circumstances.

Dr. MERCIER said the proposition before the meeting was whether the subject should be left to the action of the Committee or to the action of the Council. In a question so extremely important as this, involving the entire reconstitution of the Society, the entire body of members had a right to be consulted. That meeting was scarcely sufficiently numerous to decide so important a matter. He would suggest that a circular should be sent out in which members should be asked definitely to reply "Yes" or "No" to certain questions as to whether the change was desirable, and whether they would wish it carried out. It might be said that every member of the Association had received the circular convening that meeting, and that it was open to each member to attend if they took an interest in the subject. The great majority of members were prevented by circumstances from attending a meeting in London. If an application of the kind proposed was made, and was backed by the entire influence of the whole of the Association, it would carry a very great deal more weight with it than if made only by a few members. He would propose as an amendment that before any further action was taken every member of the Association should be consulted by circular as to the proposed change.

The PRESIDENT said that would not be in order. At the annual meeting the following resolution was passed: "That it is desirable to apply for a Royal Charter, and to add the prefix 'Royal' to the title of the Association; and that the Secretary be requested to take counsel's opinion as to the proper course to be taken in order to carry this resolution into effect." That was carried unanimously at the annual meeting. He would also point out that the question which that meeting was specially called to consider was whether sanction should be given for the application to be made now that they had counsel's opinion. With regard to members of the Association having the opportunity of giving their opinion about it, he might say from his own practical experience that so far as post-cards were concerned, or any circular letter, only about one-half the members, if that, of the Association ever took the trouble to answer them. The circular calling that meeting had been sent to every member of the Association, but only one apology for non-attendance had been received. At the annual meeting it was resolved that a special meeting be called to take definite action if such was their judgment. There was only one of two courses open—either to sanction that action or to disapprove of it entirely.

Dr. REES PHILLIPS asked whether it was not clear that there was but slight chance of getting a Royal Charter, at any rate, in the first instance. Dr. Tuke's explanation certainly conveyed that idea, seeing that he strongly advised an alternative application for registration under the Companies Act. They had also heard from Mr. Richards that the Medical Society, the oldest Society of the kind in London, failed in its application. He was afraid that any similar application on their part made now would meet with the same result. He therefore thought that any application for a Charter should be dropped,

and that they should not incur the expenditure of solicitor's and counsel's fees. The only question they should consider was whether they should proceed to register under the Companies Act, and obtain the prefix "Royal."

Dr. BONVILLE FOX said what they had to consider was not so much whether they were likely to meet with a snubbing—that was a thing they were accustomed to in the ordinary course of daily life—as whether they were willing to expend the money of the Association for this purpose. Were they willing to throw away any money on the chance of getting what they were asking for? That was a matter for serious consideration. If the application for a Royal Charter would cost but little, he should say apply for that first of all, and never mind the snubbing.

Mr. WIGAN said the expense of such an application might be about £40. It really depended on when they withdrew as to how much expense was incurred. The principal item was for fees, and most of them were not payable unless the Charter was actually obtained. The counsel's and solicitor's fees were principally involved in settling the petition, which had to be settled very carefully, and also the draft Charter. If they got a hint to withdraw at once the only expense would be that of the petition, but if they went on a little longer they would incur some other fees.

Dr. WHITE thought it was advisable that they should know the exact financial state of the Association, and also to what extent the Council was to have power to spend money of the Association. He said that as a member of the Council, because he should feel certainly a grave responsibility if he took an active part in spending more than the general body of the Association would wish.

Dr. HACK TUKE said that the balance-sheet showed that the sum in the hands of the Treasurer at midsummer was £325, and the amount invested £306. Of course they had in addition to that £1,347 Stock in connection with the Gaskell Trust, making altogether about £2,000. The sum available, reckoning what they had invested, would be about £600 at the time of the annual meeting. He should be quite willing to modify the resolution to meet the suggestion of Dr. Nicolson, so that the question of the application for the Royal Charter should be referred to the Council with the additional names of Dr. Blandford, Dr. Orange, and Dr. Rees Phillips, who should have power in the name of the Association either to apply to the Privy Council for a Charter or to the Board of Trade for registration under the 23rd section of the Companies Act, 1867. If that were passed another resolution might be proposed limiting the Committee to a certain sum to meet Dr. White's view.

Dr. BLANDFORD seconded.

Dr. ORANGE thought other names should be added. He proposed the name of Dr. Mercier.

Dr. MERCIER said he should not like to take the function upon himself unless he felt that he had the support of a large body of the Association. At present he did not feel that the Council had that support, and he should not like to act under such circumstances.

Mr. C. M. TUKE thought the better way would be to leave it in the hands of the Council to act as they in their wisdom thought desirable. He did not see why there should be any further hesitation in the matter.

The PRESIDENT said he was afraid that the resolution proposed by Dr. Tuke was scarcely in order. They were met purely and simply for the purpose of sanctioning or not the application for a Royal Charter. The proposition before the meeting must be that the question of an application for a Royal Charter be referred to the Council, with the additional members of the Association, who should have power in the name of the Association to apply to the Privy Council for a Charter, and then it would be open to any member of the Association to move an amendment to that. He did not think they could, unless as an amendment, take a resolution that an application should be made to the Board of Trade to incorporate the Association under the Companies Act.

Dr. HACK TUKE said he would follow the ruling of the President, and would omit the second clause from the resolution. The resolution would, therefore, simply be to authorize the Council, with the addition of certain names, to apply to the Privy Council for a Charter.

Dr. BLANDFORD seconded.

Dr. NICOLSON said he should oppose that. As informed, he felt that any application for a Royal Charter at the present time would be a mistake. He begged to move the previous question.

Dr. BONVILLE FOX said the question of a Royal Charter had been discussed before, and the application adopted by a general meeting of the Association. That of the application for incorporation under the Companies Act had not been before the Association, and was a new feature. Again, when the Charter was discussed they were in the dark as regards the cost. The amendment he was about to propose would practically reopen the whole question. As the suggestion of another scheme which would answer their purpose equally well as compared with that of the Royal Charter was one entirely fresh to the whole body of members, he thought they would be consulting the wishes of the Association, and also the dignity of the Council, if a little longer time was taken before anything was done. He proposed that the Council and those gentlemen who had been named might have power given them to apply for a Royal Charter if they thought fit, or, as an alternative, to apply for incorporation under the Companies Act; or to let the matter of the Royal Charter rest in view of the considerable cost that it would involve if obtained. As a member of the Council, before they spent any money in acquiring a title which was not adopted by the Association as a whole, he should like the Association to be consulted, and therefore wished the Committee to have a free hand. It did not do away with the possibility of following Dr. Tuke's motion, it only put other possibilities in the alternative.

Dr. MERCER suggested that the voting upon the motion should be by proxy, but this was not supported.

Mr. RICHARDS said every member of the Association ought to be apprised of the fact, and a special meeting called for that purpose, just as a special meeting had been called to consider the question of the Charter.

Dr. WHITE said the meeting of that evening was solely on the question of the Royal Charter. They did not discuss the alternative scheme at the Council meeting. It was very desirable that the vote should be taken on one point only, viz., the question of applying for a Royal Charter.

Dr. NICOLSON said that in view of the alternative schemes that had been mentioned he would propose that the whole matter be postponed until the annual meeting. It could then be dealt with in a thorough and satisfactory way, and no member of the Association would have the opportunity of complaining that he had been left out in the cold. He thought they would stultify themselves if they now took up an alternative measure in a tentative way. He moved, "That the whole matter be referred back to the Council to consider and report at the next annual meeting."

Dr. WHITE seconded the amendment.

Dr. TUKE said he would willingly withdraw his resolution. He thought under the circumstances that the proposition made by Dr. Nicolson was quite the best. He was indebted to Dr. Nicolson for having adopted his suggestion of making some private inquiry.

Dr. BONVILLE FOX—Do I understand that the question is still to be left before the Committee, who will make some report at the annual meeting?

The PRESIDENT—The whole question is to be referred back, and reported upon as a whole.

Dr. OTTERSON WOOD—We do not want any other names; simply refer it back to the Council to consider the matter, and to report to the annual meeting.

The PRESIDENT—Then I will put the amendment: "That the subject of the application for a Royal Charter be referred to the Council to report on at the next annual meeting."

The amendment was put to the meeting and carried.

SCOTCH MEETING OF THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

A Quarterly Meeting was held in the Hall of the Royal College of Physicians, Edinburgh, on Thursday, 12th November. Dr. Watson occupied the chair, and the following were present:—Drs. Bruce, Campbell Clark, Carswell, Clouston, Elkins, Howden, Ireland, Carlyle Johnstone, Keay, Keiller, McPherson, R. B. Mitchell, G. M. Robertson, Batty Tuke, junr., Turnbull, Urquhart (Secretary for Scotland), Yellowlees.

Dr. CAMPBELL CLARK reported that the authors of the handbook for the instruction of attendants on the insane had received a letter from Messrs Baillière, Tindall, and Cox, the publishers, stating that the third thousand was now being sold, and that they were in a position to pay a royalty on these copies. Dr. Clark said that the question was whether they should accept that royalty as a remuneration for writing the handbook, or whether they should hand it over to the Association.

Dr. JOHNSTONE said that the men who did the work ought to get the money, and he moved accordingly.

This was unanimously agreed to.

THE NEXT QUARTERLY MEETING.

It was decided to hold the next Quarterly Meeting in Scotland in Glasgow, on the second Thursday of March, as usual.

Dr. URQUHART reported that he had communicated with Dr. Fletcher Beach, the founder of the meeting of 12th March, 1891, relative to the Pathological Committee.

Dr. CARLYLE JOHNSTONE read a paper on "The Use of Sulphonal." (See Original Articles.)

Dr. HOWDEN said that he had very seldom listened to a paper with greater pleasure than the one they had just heard. Dr. Johnstone's paper was so exhaustive, minute, and careful, that he felt unable to criticize it without reading and studying it. It was a most valuable paper, and they might use it as a handbook on sulphonal. He could not, from his own experience, confirm everything that Dr. Johnstone said, but that was perhaps from his own less careful way of administering and studying the effects of the drug. One thing had struck him as remarkable, that its effect was increased by long use, which was opposed to our knowledge of all other hypnotics.

Dr. YELLOWLEES said he had been using sulphonal a great deal, and he could fully endorse everything that Dr. Johnstone had said. It was a very valuable addition indeed to their means of treatment. He had one patient only where sulphonal was absolutely useless, and that was a case of recurrent acute mania. It was of extreme value in the case of a woman who had been the torment of the house for six weeks. He began to use it the moment there was the least appearance of excitement. He confessed a certain fear as to the pushing of sulphonal in recoverable cases. The condition which it produced of miserable helpless prostration of body and mind was not conducive to recovery. They should use it, like other hypnotics, as little as they possibly could.

Dr. CLOUSTON said that they knew Dr. Johnstone's critical habit of mind,

and perhaps that had made him all the more exact in his observations. There were very few medicines that they would allow even an intelligent nurse to give to patients without special medical orders for each dose. Now, they could allow an intelligent nurse to give twenty-five grains of sulphonal to a patient as the case required, and in this way it differed from many drugs. At Morningside they had had an extremely acute case of general paralysis with very disagreeable, violent, and dangerous symptoms. They kept him in a darkened room for three weeks, and gave him thirty grains of sulphonal a day. They began to take him out to the garden, at the same time gradually withdrawing the sulphonal. The first stage of general paralysis was passed in three weeks, and the patient had now for three weeks been working quietly in the garden. If they had in sulphonal a drug that would terminate the first stage of general paralysis and pass the patient on quietly to the second stage within a short time, then it was without doubt extremely valuable. Another case of violent delirious mania was kept under the influence of sulphonal. He never got more than forty grains a day, and occasionally only twenty every two or three days. The man himself knew that he was better for the sulphonal. They were also trying this drug in an extremely interesting case of adolescent insanity, where it allowed the patient and those around him to have some quiet. In giving sulphonal they ought to allow an interval to pass now and then. They should stop the drug, and permit its effects to pass off. He rather thought it was a good plan to accumulate the drug very quickly, to pile it on. They could push the administration and get the patient thoroughly under its influence within 48 hours. Sulphonal strongly resembled the bromides in its motor effects. It caused a very white fur on the tongue from the beginning, and when the drug was pushed this was a very constant symptom. His experience was that sulphonal, judiciously given, resulted in a direct gain in the weight of the patient.

Dr. KEAY said that he had found that the best way was to put a patient as quickly as possible under the influence of sulphonal, and by so doing attacks had been cut short. Small doses sufficed to keep the patient under the influence of the drug.

Dr. URQUHART said that he had listened with great pleasure to Dr. Johnstone's paper, because he agreed with all that Dr. Johnstone had said about the use of sulphonal. They had used it for some time in Perth, and he had never seen any appreciable ill-effects ensue. He should like to have a discussion as to what was the best kind of sulphonal to use. Some samples were almost inert, and, after a trial of various qualities, he had come to use the kind made in Germany by Bayer. He had also prescribed, in special cases, the sulphonal capsules made by Duncan and Flockhart. If they gave capsules, the results were more immediate than if they gave powders. The powders, however, were more satisfactory for asylum purposes. The difficulties he had remarked in connection with sulphonal were the objections urged by patients the day following administration. Sometimes patients would say that they were being "drugged," and instead of getting any benefit their senses had been obscured. It was a very real objection in dealing with educated patients, who had a feeling that they were being maltreated. He had only seen one case in which the patient staggered, and only one where there had been disturbance of the gastric functions. He should like to hear something of the results of using sulphonal in epilepsy. A great advantage of sulphonal was that it could be given to people suffering from heart disease. To the best of his knowledge and belief, there had been no death recorded from the use of sulphonal. He had found it decidedly useful in recurrent cases, but he had come to the conclusion that their statistics of recovery would not be materially affected by sulphonal except in that it conserved the bodily strength in acute cases.

Dr. CLARK said that his own experience had been generally in favour of the conclusions arrived at by Dr. Johnstone. He had found sulphonal unsatisfactory only in dealing with organic disease. They were not in a position to know what

was the real pathological process going on under sulphonal; and it would be difficult to say whether sulphonal shortened the life of paralytic patients. At almost any cost, however, they must save broken bones and obviate other risks. He had seen cases of staggering in patients afflicted with general paralysis and other forms of organic disease of the brain, and it was a question with him whether he was justified in using sulphonal in these cases. He agreed with Dr. Clouston that an intelligent nurse might be trusted with sulphonal, but he would not give the nurse a box of powders and allow her to use them as she liked. Dr. Johnstone gave sulphonal rather earlier in the day than he himself did. Unless, in his own asylum, it was deferred till the house was quiet, the good effects were very much minimized.

Dr. TURNBULL said that he would not grant that sulphonal was free from risk or that it should be employed indiscriminately. It had been used with the best effect in the Fife Asylum in cases of melancholia, where it set them on the way to recovery quicker than would otherwise have occurred. In chronic mania, sulphonal in single doses was of great use in tiding them over a bad spurt. In recurrent mania the attacks had been ameliorated, and in such cases one felt that good was being done while not deteriorating the bodily health of the patient. In some cases bad results had ensued. In one there was vomiting and diarrhoea, liver derangement, and high temperature. That patient was now improved in mental condition, but he had not tried sulphonal again. He had given sulphonal in two or three cases of acute adolescent mania, but he found that the patients went in the wrong direction. In senile cases, also, one had to be very careful.

Dr. ROBERTSON gave an account of a case in Morningside Asylum, to which Dr. Clouston had referred. He said that it was impossible to describe how very troublesome and dangerous that woman was. She was homicidal and very suicidal. These attacks came on quite suddenly, and it was necessary to bring her very quickly under the influence of sulphonal. They sometimes gave 60 grains in the morning and 60 in the evening. Small doses would not have been so advantageous as large in that case. When one has tried small doses without ill-effect, then larger doses may be used. Very early in the experience of sulphonal there had been a case in Germany where a woman took half an ounce of sulphonal, and only slept for 24 hours. One death had happened where a person was under the influence of sulphonal. He had had several cases of vomiting after its use. He then described one case in which the use of the drug could not be continued, on account of its producing vomiting. With reference to the effect of sulphonal on the urinary organs, they had had a female patient whose urine became very red. He sent a specimen to Dr. Noel Paton, but he could discover nothing but pigment, and this seemed to be a result of the use of sulphonal. This patient became very much collapsed, and they called in Professor Greenfield, who could not discover anything definite. They had found slight hemiplegia, but what the exact explanation was he did not know. He believed that sulphonal had been tried in epilepsy, but that it had not been found so satisfactory as bromide. In chorea it was of distinct service. In those cases in which sulphonal acted rather severely, they were in the habit of purging the patient, under the impression that the bowels had become loaded with sulphonal.

Dr. ELKINS referred to the case of a lady who had been getting sulphonal, and who had requested her husband to ask Dr. Clouston to discontinue it, because she felt as if she was bound with chains.

Dr. KEILLER described a case in which 30 grains of sulphonal had been given to an old lady. Death had ensued at no great interval, and it had been a question with him whether it had not been hastened by this drug. He was satisfied that the discussion had shown sulphonal to be blameless in that particular case.

The CHAIRMAN said that sulphonal had now been extensively tried in asylum practice, and that they all used it more or less. Dr. Johnstone had, perhaps,

obtained better results than some of them, but his own experience was distinctly favourable to the use of sulphonal. He had used it in cases of post-epileptic excitement with good effect. He had not found it of much benefit in melancholia. In one case dangerous collapse had occurred.

Dr. JOHNSTONE, in replying on the discussion, said that he was much flattered by what had been said regarding his paper. He had never met cases in which patients had become habituated to the use of sulphonal. It was his regular practice to diminish the dose. He had had no distinct evil resulting in any case from the use of sulphonal, but he was suspicious of it, and he was very careful in giving it. In the case of a person of good bodily health he might "pile on" the sulphonal, but the physical condition of the patient should be always carefully considered. He thought that the best way of giving sulphonal to a patient was in the form of a fine powder with a little water or tea. He had not found a white fur on the tongue in the majority of cases. He had not weighed his patients systematically before and after the use of sulphonal, and had only given sulphonal to those who actually required a hypnotic or sedative, not in an experimental way. The kind of sulphonal he used was manufactured in Berlin. The disagreeable after-effects of sulphonal were very grave, and it was the more intelligent patients who so complained. He had not given sulphonal an extended trial in cases of epilepsy. He believed that one death from sulphonal had occurred, and was recorded in "The British Medical Journal." It was not from a medicinal dose.

Dr. MACPHERSON then exhibited the plans of the Stirling District Asylum, including those of the new hospital for acute cases.

An interesting discussion on the principles and details involved was shortened by the limited time at the disposal of the meeting.

Dr. G. M. ROBERTSON thereafter read part of his paper on a visit to the Hypnotic Schools in France, which will be presented by Dr. Clouston to the Committee of Hypnotism appointed by the British Medical Association.

Discussion had to be postponed, but Dr. Robertson was warmly thanked for his interesting and valuable report.

Dr. Bruce showed a ruptured heart. (See "Clinical Notes and Cases.")

The members dined at the Edinburgh Hotel in accordance with usual custom.

IRISH MEETING.

An Irish Quarterly Meeting was held at the Richmond (Dublin District) Asylum, Dublin, on June 18, 1891. The following members were present:—D. Yellowlees, M.D., LL.D., etc. (President), in the chair, Drs. Law Wade, Finnigan, Molony, Patton, Nash, Nolan, Ashe, and Conolly Norman (Secretary); and the following guests: Dr. West, of Chicago, and Drs. Mills and Shackleton.

The minutes of the preceding meeting having been read, confirmed, and signed, The PRESIDENT read a communication on "Recovery from Melancholia." After some preliminary remarks on the increase in the number of cases of melancholia which came under treatment of recent years, which, however it is to be accounted for, the speaker regarded as an indisputable clinical fact, he proceeded to describe in detail two cases to show that in melancholia one need hardly despair of the possibility of cure. The first occurred in the person of a governess, a woman of intelligence and culture, aged 32 years. She was possessed of the delusion that she was the devil, and kept continually whispering, "I'm the devil, I'm the devil, I'm the devil!" Otherwise she scarcely spoke, and took little notice of her surroundings. This condition of affairs lasted for ten years, and yet she made a good recovery. It is interesting to

observe that her improvement seemed to originate in a trivial way. One evening she was with much difficulty persuaded to join in a game of whist. At first she kept muttering her old refrain, "I'm the devil," but she soon became interested in the game, announced correctly that clubs were trumps, took a trick, and threw herself into the work in hand, talking no more than of her diabolical fancies. From that evening she grew better. The second case was even more remarkable. A woman, 44 years of age, suffering from her second attack of insanity, thought every person was conspiring to poison her. She recovered after an illness of fifteen years' duration, during eight years and eight months of which time she had to be fed with the stomach tube, in consequence of obstinate refusal of food depending upon the delusion above referred to. By a happy combination of management and accident she was induced to take food. One day with great difficulty the speaker got a spoonful of food into her mouth. There she retained it. By accident the chair she was seated on tilted over backwards. The patient gave a gasp and gulped down the mouthful of food. The spell being broken, there was no longer any difficulty about getting her to take nourishment, and she improved steadily from that time.

Dr. PATTON concurred with the President in thinking that though cases of an acute and desperate character were rarer now than formerly, there was, on the whole, a great increase in the amount of melancholia we see. In his experience patients even possessed of ineradicable delusion soon weary of the stomach tube.

Dr. FINNIGAN referred to two cases in his practice at the Mullingar Asylum. The first was a young school mistress, without hereditary taint or other easily assignable cause of illness. The case had passed into a chronic condition, and had not exhibited any sign of improvement. A somewhat anomalous symptom was observed—that the patient was jealous of the nurses, especially those who were good-looking or specially tidy in appearance. She also kept her face constantly covered, though she did not seem to have any delusion suggesting this. She exhibited an abnormal growth of hair on the chin, and a disfiguring nebula on one cornea. Dr. Finnigan, conceiving that these conditions might have indirect etiological importance, removed the beard by epilation and the nebula by tattooing. The result was extremely satisfactory, and the patient made a good recovery. In the second case very obstinate refusal of food, occurring in a young female melancholic, was overcome by simply directing that all nourishment was to be given in future per rectum, with the expected result that the patient, sooner than suffer what she conceived to be the indignity of the mode of feeding, took food voluntarily, and began rapidly to recover.

Dr. MOLONY, among other cases bearing on the subject, recounted that of an elderly lady who was insane for nine years. During all that time she suffered from delusions of a sexual character, which caused her much distress (that she was ravished by beasts, etc.), and she was apt to be blasphemous and obscene in language. For no assignable reason she suddenly improved after this great lapse of time, and rapidly became quite well.

Drs. ASHE and CONOLLY NORMAN also spoke.

Dr. NASH read a paper on a "Case of Rupture of the Heart occurring in a Melancholic." (See Clinical Cases.)

Dr. LAW WADE had seen a case in which a woman died suddenly immediately an emetic had taken effect. Necropsy revealed cardiac rupture.

The PRESIDENT mentioned two cases. One had occurred in an old man who was a patient at Gartnavel, the other in a gentleman who had previously been in good health, a member of our own profession. In neither case could a diagnosis be made ante-mortem, but the second was remarkable as being attended by a distinct sensation. The sufferer when seated at dinner got what was described as a sort of fit. When he recovered he said someone had struck him on the back. He died the same evening.

Dr. PATTON also spoke.

Dr. CONOLLY NORMAN read a "Note on Cocainism."

Dr. YELLOWLEES thought that the consumption of cocain must be very local, perhaps in part depending on the custom among medical men of prescribing it. He had not a case.

Dr. ASHE referred to the fact that coca leaves, if not cocain, were largely used in Bolivia and seemed to do no harm, though relief from weariness and a pleasant exaltation were produced. He was anxious to learn in what doses the drug had been used.

Dr. CONOLLY NORMAN, in replying, said that in China the average man consumed a little opium every day, and did not become a slave to it; in this country it was not so. However, even in South America cases did occur of chronic cocain poisoning. The nickname "coquero" was applied to the chronic cocainist, and he was recognized by his shrunken, pallid features, his tremulous extremities, his constant chattering, and his inability to work or tell the truth. As to dose, half a grain or less would produce slight intoxicating effects in the tyro. Those who used the drug habitually might consume 20 grains up to two or three drachms in the day. In bad cases it was difficult to be quite sure how much was used. Patients became confused, and were apt to be deliberately untruthful.

The SECRETARY then read a short note on a case of "Folie Communiquée." Two ladies lived close to each other in a Dublin suburb. One was an officer's widow, aged about 50, the other was a companion to a lady, and was unmarried, aged 29 years. They were acquainted, but not in any way intimate. The elder lady had lost her husband abroad some years ago. Latterly she had begun to entertain suspicions of foul play, as she said she never could get sufficiently definite accounts of the manner of his death. She became gradually convinced that Sir A. B., who had been at one time at the head of her husband's department, had poisoned him. Then she thought Sir A. B. was persecuting her by electricity, telephone, etc. To avoid this she came to the neighbourhood of Dublin, and was happy for a time. She now made the acquaintance of the younger lady. The latter was a person of good family history, and, except the disagreeable nature of her position, no cause of aberration suggests itself in her case. Very soon the widow found that Sir A. B. had settled in the next house to her (a delusion), and that he had resumed operating on her by electricity and talking to her, often very indecently, by telephone. About the same time, as well as can be made out, the younger woman began to suspect her employer of accusing her, first of dishonesty, then of unchastity. Then she thought that her employer was guilty of all sorts of monstrous crimes—murder, adultery, and worse—and had made these charges to shut the patient's mouth and screen herself. Then the Chief Secretary for Ireland was suborned by her employer; the matter was talked about (under false names) in the House of Commons, patient was watched continually by the police, and so forth. Some months ago this person was admitted to the District Asylum. The older lady remains at large. The singular part of their case is this, that they have adopted each other's delusions almost in full. Both are shrewd, sharp-tongued women, suspicious and alert even beyond the ordinary mode of paranoiacs of their class. The younger deeply resents confinement in an asylum, and makes caustic remarks on the delusions of those about her. Yet she indignantly denies the suggestion that her friend, the widow, entertains delusions. On the contrary, she *knows* that Sir A. B. lives beside her friend for the purpose of persecution. She has not heard him telephoning, but she believes it is done. (This patient has never exhibited hallucinations of hearing.) She has often seen Sir A. B. watching and walking after the widow. Both ladies are quite positive that Sir A. B. met them at a public promenade the day before the younger lady was sent to the asylum, and that he watched the widow in an insulting manner and made signals to her. From the way the story is told one makes little doubt that somebody did pass and stare at the women, attracted,

no doubt, by their suspicious glances. The well-known public man whom they name was certainly not in Ireland at the time. The younger lady never accused him of having made advances to herself or of having persecuted her, nor does she mention him in connection with her own wrongs. Similarly with the other lady. The machinery of her friend's myths is firmly believed in *quâ* her friend, but it is never transferred to her own case, which stands on a different footing. Each refers, in a general way, to the case of the other as showing that occult persecutions are possible. The case, as far as it goes, is truly one of communication. Some cases which have been so classed—insanity in twins for instance—may occasionally be rather due to a common cause than to communication. Not seldom, perhaps, imbeciles, or very weak-minded persons, may accept the delusions of relatively intelligent lunatics, but it is distinctly rare to find patients suffering from well-marked delusional insanity acquiring further delusions by direct communication.

The PRESIDENT recalled a case of one sister having communicated to another the delusion that the police were watching them and that the people in their lodgings were robbing them.

Drs. FINNIGAN and MOLONY spoke.

Dr. CONOLLY NORMAN said that as the Association had honoured his asylum by holding this meeting therein, he thought it right to show the members some samples of the work that was passing through his hands, and as alienists had been reproached of late for their supposed neglect of general medical work, he had selected exhibits, all collected in the asylum P.M. room within the last few months, of which but one was specially interesting to workers in nervous diseases. The following specimens were laid on the table and described:—*Gross*: (1) Stomach showing numerous penetrating adenomata (pendulous dendriform growths into the cavity of the organ). (2) The viscera of a lunatic who was in the habit of swallowing stones, etc. Five days before his death, being up to that time apparently in his ordinary health, he was seized with acute dyspnœa. Nothing could be found in his throat. The dyspnœa abated, but he developed right pneumonia. Post-mortem this was found to be apparently dependent upon the presence of a foreign body in the right bronchus in the shape of a piece of iron about 2½ inches long by ¼ wide, being half the "heel tip" of a shoe. A quantity of pebbles, pieces of pipe shank, etc., were found in the stomach, and an ordinary Britannia metal teaspoon lay in the colon just at the hepatic flexure. About an inch and a half of the handle of the teaspoon projected through a perforation of the gut into the peritoneal cavity, and was encysted in the sack of a limited peritonitis. Of the abdominal lesion there had been no indication during life. (3) The abdominal and thoracic viscera of a patient, who died of dysentery, exhibiting (a) characteristic lesions in large intestine, (b) multiple abscesses of liver, (c) one of which had perforated the diaphragm and opened into the right lung, (d) which contained a small *depôt* of bile-stained pus. (4) Brain of an epileptic lad showing marked microgyry of pre-frontal and occipital convolutions on left side, the motor area little less developed than on right side. During life no special symptom was noted save partial loss of power of right arm, but this was attributed to a bad burn in childhood followed by webbing about the elbow. Among the microscopic specimens were various forms of inflammation of kidney, surgical (from a case of stone), tubercular, gouty in different stages, "large white kidney," etc., adenoma ("dendroid polypus") of stomach; a case of primary cancer of the liver, cancer of liver secondary to cancer in other viscera, sections of which were also shown; cirrhoses of liver, alcoholic and biliary; a series of sections illustrating the various forms of ulceration of the intestines, carcinomatous, tubercular and typhoid, together with dysenteric lesions in several stages and in different portions of the large intestine; tubercular peritonitis which had simulated malignant tumour; ditto, ordinary types, various forms of uterine and ovarian "fibroids," inflammations of lung and pleura consecutive to influenza, etc., etc.

The PRESIDENT, in supplement to his communication on melancholia, showed the mode of feeding which he adopted, which was discussed at some length by the members.

The meeting then terminated.

The members afterwards dined at Jury's Hotel, College Green. There were present Dr. Yellowlees, President of the Association, Dr. Finny, President of the Royal College of Physicians, Ireland, Dr. Bennett, Professor of Surgery, University of Dublin, Dr. Alec Fraser, Professor of Anatomy, R.C.S.I., Dr. Stewart Woodhouse, Medical Commissioner of the Prisons Board, Dr. Law Wade, Dr. J. W. Moore, Dr. G. P. L. Nugent, Dr. Kough, Dr. Aslec, Dr. Finnigan, Dr. Cope, Dr. Molony, Dr. Nash, and Dr. Norman.

Correspondence.

A VISIT TO THE INSANE DEPARTMENT OF THE CHARITÉ HOSPITAL, BERLIN, AND THE ALLIED ASYLUM AT DALLDORF.

To the Editors of "THE JOURNAL OF MENTAL SCIENCE."

SIRS,—With your permission I propose to give here information and impressions concerning these institutions. In regard, firstly, to the psychiatric clinic of the Charité—the well-known hospital situated in the north-western quarter of Berlin. It consists of three divisions—one for insane patients, a second for those liable to convulsive seizures, and a third for delirious patients. Professor Jolly is the Director, and subordinate to him are specialist physicians, who are *Privat-Dozenten*, and are assisted by military assistant-physicians. The department is utilized for teaching purposes; in particular, certain young students, or medical men, act in a capacity somewhat similar to that of clinical clerk in our asylums. On the occasion of my visit, one of these took down the condition of patients from the physician's dictation. In cases of necessity, consultation is held with those in charge of other departments of the hospital. There is no regular out-patient system; occasionally, however, an examination is made of the mental condition of some criminal or other person (not an inmate) whose behaviour appears to demand it. The building itself (I now refer to the alienist department) is old, and but indifferently planned. Artistically viewed, the wards are unattractive. There is a deficiency of light and space; the corridors are gloomy, the day-rooms and dormitories cramped, the latter being crowded with beds in a manner highly undesirable, but, it appears, unavoidable. The resources of the department are clearly taxed to a high degree. Dr. Boedeker, who kindly conducted me, informed me that, whilst there was sleeping accommodation for about 200, from 1,000 to 1,500 (and even more) patients pass through yearly. The Charité is, in fact, an institution for acute and presumably-curable cases; patients regarded as incurable are transferred to Dalldorf. The average length of stay is, in the insane department, 22 days; in the department for epilepsy (including convulsive affections generally), 22 days for men, 34 for women. As regards the age of patients, most are between 20 and 50, as might be expected. The class resembles that seen at Bethlem (recent and acute). Between the Charité and Bethlem there is much in common. Since the patients are drawn from Berlin and its environs much diversity of occupation is met with. Amongst the inmates are mechanics, tradesmen, merchants, artists, teachers, officials, and farmers. All the patients seen wore a uniform dress—jacket and trousers, made of a light fabric like the night-costume of some people. In regard to

treatment, the measures adopted do not differ much from those in vogue in English asylums; none of a specially energetic kind are used. The forms of exercise, too, are the ordinary. As much walking in familiar courts is done as in other asylums. Sedatives are but moderately used in the Charité. Mechanical restraint is resorted to exceptionally, in comparison with past times. The number of attendants to patients I unfortunately forgot to inquire about. Padded and plain single rooms are made use of a good deal. Treatment by douche and other forms of bath is adopted in cases similar to those so treated in this country. No uncommon methods are employed in the treatment of masturbation. Hypnotism has been and is still occasionally tried. If one may judge from the dearth of reports upon the subject one would suppose that success has been very limited, but some good results are said to have been achieved. The food provided looked good. The daily cost per head in the Charité is put down at three marks.

Cases of interest in the psychiatric clinic are reported in the "Charité-Annalen," in which records the surgical, medical, and other departments of the hospital are also represented. The following figures are derived from the "Annalen," xv., 1890. At the beginning of the year of report the department for the insane contained 127 patients; the admissions in the year amounted to 1,318, the discharges to 1,305. Of these 252 were cured or improved, 911 unimproved, 68 transferred to other departments or asylums, 74 were deaths.

The department for patients with convulsive seizures and that for delirious cases received together 1,192 in the year, and discharged 1,185, of whom 666 were cured or improved.

Dalldorf Asylum—situated at some little distance from Berlin, and reached by tram—has the appearance of the average English county asylum. A long drive passes through the grounds to the central block; this is the administrative portion, but halls for theatricals and concerts are placed here also. Behind are the kitchens, laundry, and engine-houses. Stretching away on either side are five pavilions, male and female patients being accommodated on opposite sides, and separate pavilions devoted to epileptics, violent and excited (including some criminals found insane), and weak-minded patients. Criminals whose condition demands it are confined in a special pavilion with special precautions. The building is modern, handsome, and of great size, and appears to be very well planned. The pavilions are well apart. The grounds are extensive. A director administers the entire institution, and has under his special charge the insane department proper; he is assisted by a physician (Oberarzt). A second director controls the department for infirm patients. In addition, there are six assistant-physicians (one of whom, Dr. Otto, kindly conducted me), and a dispenser. The number of patients in Dalldorf at the time of the last report was 1,349; the daily average 1,329. The institution receives its patients in large measure from the Charité; they are mostly incurable. Nevertheless, many of the cases are highly interesting. The number of patients whose insanity is connected with gross lesions of the brain is exceptionally large; aphasia in different forms is met with frequently. In this connection the pathological department may be mentioned. It is well equipped, and the papers published by the medical staff in the "Archiv f. Psychiatrie," "Zeitschr. f. Psych.," and other Journals of the special kind, testify to the use made of the material at hand. Some paying patients are taken; the number may not exceed five per cent. of the total. They are only admitted when their circumstances are insufficient to meet the demands of a private asylum. They pay not less than one mark daily, and are treated just like the other patients. During the past year 72 were admitted.

The dormitories and wards—in connection with the latter are long corridors in which the patients promenade—are spacious, and well supplied with air and light. Mural decorations would not compare with those seen in many English asylums, being extremely simple; but sanitary requirements are well attended

to. About 20 men and 30 women are confined to bed daily, for the sake of quietness as well as for sickness. Many of the general paralytics lie on beds of powdered wood. This takes up the excreta, and is removed from time to time. The plan is much adopted in Germany, and originated, I was told, in Dalldorf.

The proportion of attendants to patients is 1-10. They are poorly dressed. Changes amongst them are frequent. Amongst the amusements provided for the patients are dances, concerts, and theatricals. There is a good library. Divine service is conducted by clergymen from Berlin.

Medical treatment resembles that used in England. Sedatives (chiefly sulphonal and paraldehyde) are used in much the same amount as here. Hypnotism has failed and drugs are discarded, as far as possible, in favour of food and occupation. The former is sufficient and good. Cost of patients per head per diem=1.96 mark. There are numerous and spacious side rooms; padded walls are dispensed with. Mechanical restraint is not in fashion, but strong dresses are employed for patients who destroy clothing, and seclusion is made use of upon occasion. The patients are employed on a very large scale, and in many trades. There are joiners, bootmakers, tailors, decorators, bookbinders, painters, glaziers, brush and cigar makers. In addition, during the past year the work of two healthy clerks was done in the office by patients. On the farm, in the grounds, in sewing rooms, and in wash-houses patients are daily employed. About twenty minutes' walk from the institution is a colony, consisting of two houses accommodating about 80 men who work out. The worth of the patients' labour during the year of last report is estimated at more than £1,600. As rewards for work done, beer, snuff, and tobacco are given. Many discharged patients are cared for by a sort of After-Care Association in Berlin (Hilfsverein).

Both at Dalldorf and at the Charité I received specimens of the forms in accordance with which the patient's history is taken; in thoroughness they are characteristically German. If answers are usually received to all the questions put down in these forms the reports must be of uncommon value, and the German public at once more educated and obliging than the English.

For some of the facts noted I am indebted to the official report upon the State asylums for the year ending March 31, 1890.

I am, Sirs, yours faithfully,

EDWIN GOODALL.

Wakefield Asylum.

PROVISION FOR PRIVATE PATIENTS.

To the Editors of "THE JOURNAL OF MENTAL SCIENCE."

SIRS,—On page 511 (being the President's Address) of the "Journal of Mental Science" for October, 1891, the following passage occurs: "The Lunacy Act encourages provision for such cases (meaning private patients), either attached to or separated from existing establishments; but so far as I can learn no public body has yet considered the advisability of building for them."

As the foregoing passage requires correction, and as I have not received any application for information, I hope you will allow me to state that the Committee of this asylum have not only considered the advisability of making such provision, but more than two years ago gave instructions to their architect (Mr. Geo. T. Hine) to design special blocks for private patients, 25 of each sex, in connection with the additions to, and alterations at, this asylum.

These designs were approved of and sanctioned by the Secretary of State and the Lunacy Commissioners, and the work is now in the hands of the builders.

I have reason to believe that this is the first County Asylum to provide

special accommodation for private patients under Sec. 255 of the Lunacy Act, 1890; but is it not a fact that, for many years, the County Asylum for Cornwall has had a special detached residence for private patients?

I am,

Your obedient servant,

Dorset County Asylum.

P. W. MACDONALD, M.D.

Obituary.

ISAAC ASHE, M.B., T.C.D.

We regret to have to record the death of Dr. Isaac Ashe, at the Dundrum Criminal Asylum, on the 19th December, 1891.

Though not a medical man, or a member of the Association, yet we feel that the life-long connection which Mr. Haydon had with asylums makes it fitting that his death, on November 9, 1891, at the age of 69, should be noticed. The son of a naval officer, he was an early explorer of Australia, being the first to cross (some 50 years ago) from Melbourne to Gippsland. He spent only a few years in the Colony, and soon after his return to England became Steward to the Devon Asylum, Dr. Bucknill being the superintendent, and there began a life-long friendship between the two. We believe we are right in saying that they were among the first, if not the very first, who were enrolled as volunteers when the movement started. Later, Mr. Haydon was appointed to Bethlem, and was later called to the Bar, though we believe he never had a brief. He was Steward to Bethlem for 36 years, during which time he saw a succession of superintendents—from the first, after the removal of visiting physicians, Dr., afterwards Sir Charles Hood, Drs. Helps, Williams, Savage, and Percy Smith. All who knew him respected and loved him. He had as kindly a nature as it is possible to conceive, and the personal interest he took in the comforts of the patients was fully recognized by those who worked with him. He was loyal to his superintendent, and ever ready to aid him. His fine manly presence, his tactful goodness, were greatly missed when he resigned two years ago to enjoy too shortly his well-earned pension.

CANDIDATES WHO PASSED THE EXAMINATION FOR THE CERTIFICATE OF PROFICIENCY IN NURSING, NOV., 1891.*

Royal Asylum, Morningside, Edinburgh.

MALES.

John Barrie.
Donald S. Fraser.
John Fraser.
James Grant.
John Innes.
Alexander Mackenzie.
Daniel Burgess.
John Hogg.
Charles Tough.
George Wilson (*Ayr District Asylum*).

FEMALES.

Jessie Hodge.
Christina Leith.
Mary Mather.
Christina Watt.
Jemima Watt.

* It will be seen from the Advertisement-sheet that the Handbook for instruction of Attendants may be had direct from the publishers on special terms. The third thousand is

Kirklands Asylum, Bothwell.

MALES.

FEMALES.

Marjory Mc'Intyre.

Holloway Sanatorium.

MALES.

FEMALES.

William George Sadler.
Leonard Dobbin Red.
Philip Harmer.
William Tom Osborn.

Violet Edith Ross.
M. Frances Bromley.
Mary Humphrey.
Elizabeth Jupe.
Sarah Jane Builder.

Birmingham Asylum.

MALES.

FEMALES.

Peter Devlin.
Arthur Prior.
John Willcocks.
William Hammersley.

Elizabeth Anne Hughes.
Adelina Maria Bailey.
Frances Ada Berks.

Menston Asylum.

MALES.

FEMALES.

Harry Gill.
John Burton.
William Webber Sampson.
Albert Edward Mitchell.
William Hamilton Swift.
Theodore Ross Gates.
James Graham.
Arthur Lawrence Smith.
Jonas Edward Roberts.

Harriet Allison.
Frances Mary Browne.
Annie Elgie.
Phoebe E. Allen.
Mary Marshall.
Annie Pyrah.
Fanny Hansom.

City of London Asylum.

MALES.

FEMALES.

George Taylor.
William Hewlett.
Henry House.

Harriet Bowyer.
Mabel Taylor.
Martha Driver.
Ada Bennett.
Janet Summers.
Elizabeth Lamport.
Harriet Budge.
Harriet Kendrick.
Alice Yates.

West Riding Asylum, Wakefield.

MALES.

FEMALES.

Mary Harriet Deacon.
Hannah Simpson.
Eleanor Whitehead.
Catherine Edith Sibary.
Lucy Thackray.
Martha Dyson.
Jane Copley.
Annie Atkinson.
Marian Conway.
Edith Asquith.

Wye House Asylum, Buxton.

MALES.

FEMALES.

Thomas D. Leadbeater.

now nearly exhausted—a sufficient justification for the production of such a brochure. A second and revised edition will soon be called for, and, in that event, the Association will be asked to consider how the book can be improved as an education manual for attendants.

THE ALVARENGA PRIZE IN MEDICINE.

We are glad to see that Dr. Bateman has been elected a Laureate of the Academy of Medicine of Paris, and had awarded to him the Alvarenga Prize for his well-known work on "Aphasia." For the same work Dr. Bateman was, some months ago, elected a Foreign Fellow.

Appointments.

BEAVER, A., M.B., C.M.Vict., appointed Second Assistant Medical Officer to the Berks Asylum, Moulsoford.

COOKE, J. A., M.R.C.S., L.R.C.P., appointed Junior Assistant Medical Officer to the Cheshire County Asylum, Macclesfield.

DUNCAN, J. H., M.B., C.M., appointed Clinical Assistant to the Dundee Royal Asylum.

DURHAM, A. E., M.A., M.B., B.C.Cantab., appointed Resident Clinical Assistant to the Bethlem Hospital, S.E.

EDGE, FREDK., M.D.Lond., F.R.C.S.Eng., appointed Third Resident Medical Officer to the Kent County Asylum, Barming Heath.

FORBES, A. D., M.B., C.M.Aber., appointed Assistant Medical Officer to the Grove Hall Asylum, Bow, E.

HALL, F. W., M.B., B.S., appointed Resident Medical Officer to the Eastern Counties Asylum for Idiots.

HAY, W. P., M.B., C.M., appointed Medical Assistant to the Inverness District Asylum.

LIPSCOMB, E. H., M.B., B.C.Cantab., appointed Medical Visitor to the Asylum, Harpenden.

LIPSCOMB, J. T. N., M.D., F.R.C.S.Eng., reappointed Medical Visitor to the Asylum, Harpenden.

MACKINNON, A. R., M.B., etc., appointed Fourth Resident Medical Officer to the Kent County Asylum, Barming Heath.

PIERCE, BEDFORD, M.D., M.R.C.P.Lond., appointed Resident Clinical Assistant to Bethlem Royal Hospital, S.E.

REICHARDT, E. N., M.B.Lond., appointed Assistant Medical Officer and Pathologist to the London County Asylum, Banstead, Surrey.

ROBIE, JAMES, M.D., appointed Clinical Lecturer in Mental Diseases at University College, Dundee.

WARD, T. H., M.B., C.M.Edin., appointed Junior Medical Officer to the Devon County Asylum, Exminster.

THE JOURNAL OF MENTAL SCIENCE.

[Published by Authority of the Medico-Psychological Association
of Great Britain and Ireland.]

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PART 1.—ORIGINAL ARTICLES.

The Relationship between General Paralysis of the Insane and Syphilis. By D. E. JACOBSON, M.D., Communal Hospital, Copenhagen.*

I must confess that I approach the consideration of the relationship between general paralysis of the insane and syphilis with a certain degree of diffidence, seeing that here we have to deal with a question which is constantly being made the subject matter of discussion by modern alienists, and which in itself presents points of surpassing interest.

Much, certainly, that follows will be to many of my readers but a reiteration of old ideas, but I may still indulge the hope that some interest may be evoked for my subject by reason of its practical importance.

In every country we find the question respecting the affinity between general paralysis and syphilis regarded as a prominent subject for debate among the psychological problems of the day. Each community furnishes its contributions and its views; it is a subject for discussion at all psychological congresses, and journals of mental science of diverse nationality teem with the considerations of this ætiological problem. Innumerable, too, are the works, both small and great, which have been devoted to its study. Yet, notwithstanding all this energy, its solution is still far from being an accomplished fact, nor will the ensuing remarks tend, I fear, towards this desirable end. I can but endeavour to throw some ray of light on this "the darkest Africa" of psycho-pathology.

To Esmarch and Jessen † must undoubtedly be awarded

* See the author's recent work, "Dementia Paretica hos Kiruden en Klinisk-Ætiologisk Studie," Copenhagen, 1891.

† "Allgemeine Zeitschrift für Psychiatrie," 1857, p. 20.

the honour of having been the first to suggest the theory of the syphilitic origin of general paralysis, but in spite of the labours of countless subsequent investigators we have apparently advanced no further on the road, so that an eminent authority (Kjellberg, of Upsala) at a medical meeting held in Sweden in 1888 felt bound to assert that "the relationship between general paralysis and syphilis is not even approximately established."

We may, however, review the history of the problem before us to see what manner of progress, if any, has been made in its consideration.

The seed sown by Esmarch and Jessen very soon found a fruitful soil in the Scandinavian communities, for the small size of these countries afforded a favourable facility for the frequently very difficult and delicate investigations into the previous life history of the patient. As early as 1860 Prof. Steenberg,* of Copenhagen, laid down the aphorism of "no general paralysis without syphilis," a doctrine which Kjellberg † at the same time warmly defended in Sweden, and in 1874 Jespersen ‡ maintained the same theory, based on his own exact researches into the clinical history of the cases of general paralysis which fell under his notice at the great Danish Asylum, St. Hans, between the years 1863 and 1872. He found that no less than 77·2 per cent. of these cases had had earlier syphilis, and that further more in every one indications were to be noted which led him to believe that the patient had previously been the subject of acquired syphilis. Notwithstanding these interesting results but few modern alienists have been found to give support to this "pure" doctrine of the syphilitic origin of general paralysis. And why is this? Because no one has yet been able definitely to trace the syphilitic infection to every case of general paralysis, and the frequency with which different investigators have detected it varies to an extreme degree.

In striking contrast to the above-mentioned doctrine we find that of another school who deny any connection whatever between the two diseases. Fournier,§ the chief exponent of this view, regards the coincidence as purely accidental if we are considering a case of true general

* Steenberg, "Den Syphilitiske Hjørnelidelse," Copenhagen, 1860, p. 195.

† Kjellberg, "Upsala Universitetets Aarschrift," 1863, p. 56.

‡ Jespersen, "Skyldes den Almendelige Fremskrindende Parese Syphilis?" Copenhagen, 1874.

§ Fournier, "La Syphilis du Cerveau," Paris, 1879. Treizième Leçon.

paralysis. The reason, according to him, of the attributed connection between these two maladies lies in the circumstance that in a great number of instances the cases are not samples of true general paralysis, but rather are types of a disease which simulates general paralysis to such a degree as to mislead the observer, though the two, according to him, present symptoms of wide disparity. The syphilitic form, then, he regards as a different disease altogether, which presents its own clinical, anatomical, and prognostic characteristics. For this new affection he proposes the name of "general paralysis of syphilitic origin" on account of its likeness to genuine general paralysis. This doctrine, promulgated by Fournier, has found several eminent supporters in France, notably Christian,* Voisin,† Sauret,‡ Ball,§ Baillarger,|| and Vernet,¶ and to some extent in Germany, the chief being Schüle,** who distinguishes between the "classical" and the "syphilitic general paralysis," and Spitzka,†† who seems to hold a similar view. Laségue‡‡ finally leans towards Fournier's opinion. He regards the connection between the two affections as similar to that existing between epilepsy and epileptoid states, in which there may be wanting one or more of the definite symptoms of epilepsy, differentiating thus between a genuine general paralysis and conditions which he designates "paralysoïd," among which he proposes that syphilitic general paralysis shall be included.

Protests have, however, been made against this distinctive separation of a "syphilitic pseudo-paralysis" from genuine general paralysis, because it has really been found impossible to maintain the assumed diversity of their clinical and anatomical phenomena, and because one is bound by indisputable evidence to acknowledge that in proportion to the care exercised in our investigations so the more frequently do we find syphilis posing as an antecedent in the history of true general paralysis. Even in France influential voices have of late been raised against Fournier's dictum. Thus

* Christian, "Archives de Neurologie," 1887, Septembre.

† Voisin, "Traité de la Paralyse Générale des Aliénés, Paris," 1879.

‡ Sauret, "Thèse," 1880; "Ref. Ann. Méd.-Psych.," 1880, S. 6, T. 3, p. 156.

§ Ball, "Leçons sur les Maladies Mentales," 1880-1883, p. 764.

|| Baillarger, "Ann. Méd.-Psych.," 1889, S. 7, T. 9, p. 206.

¶ Vernet, "Thèse," Nancy, 1887.

** Schüle, "Klinische Psychiatrie," 1886, p. 396.

†† "Spitzka, "The Medical Congress at Washington," 1887.

‡‡ Laségue, "Ann. Méd.-Psych.," 1879, S. 6, T. 2, p. 301.

Régis,* who up to 1885 declared himself an eager partisan of this theory, has recently (1888) † changed his opinion, declaring himself without reservation in favour of the view which regards the syphilitic form to be a true and genuine general paralysis. "One may, indeed, find," he observes, "true cerebral lesions of syphilitic origin, and for these and these only should the name of syphilitic pseudo-paralysis be preserved; and what is still more interesting and significant is the expression on this subject contained in the recent work of two of Fournier's pupils, Morrell-Lavallée and L. Bélières, ‡ who have come to the conclusion that the number of syphilitics among general paralytics appears to increase in direct proportion to the care exercised in analyzing the history of each patient.

In Germany Fournier's dual theory has on the whole been received with but scant favour, many clinical teachers, such as Mendel, § Rippling, || Goldstein, ¶ Ziehen, ** and Ziemssen, †† having given expression to statements setting forth their inability to subscribe to this assumed distinction.

At the last Congress held at Washington, Dr. Savage is reported to have said that it is impossible to establish a differential diagnosis between the general paralysis of syphilitic origin and that due to other causes, a judgment to which Dr. Kiernan †† had previously given expression in America.

The question then as to the connection between syphilis and general paralysis may thus be seen to be far from being settled; neither the "pure" or uniform theory of Steenberg, Kjellberg, and Jespersen, which formulates the doctrine of no general paralysis without antecedent syphilis, nor the dualism of Fournier, has been found to be satisfactory. The generality of scientists avoid either extreme, preferring the *media via*, though some show a strong inclination towards the syphilitic doctrine.

The theory, then, which finds the largest number of

* Régis, "Manuel de la Psychiatrie," 1885.

† Régis, "Gazette Médicale de Paris," 1888, 23-26.

‡ Morrell-Lavallée and L. Bélières, "Syphilis et Paralyse Générale," Paris, 1889.

§ Mendel, "Dementia Paralytica." Eulenberg's "Real Encyclopädie der Gesammten Heilkunde," Aufl. ii., Bd. v., 1886.

|| Rippling, "Allg. Zeitschr. f. Psych.," 1881, Bd. 37, p. 687.

¶ Goldstein, "Allg. Zeitschr. f. Psych.," 1886, Bd. 42, p. 254.

** Ziehen, "Neurol. Centralblatt," 1887, No. 9, p. 198.

†† Ziemssen, "Allg. Zeitschr. f. Psych.," 1889, Bd. 46, H. 2 and 3, p. 331.

‡‡ Kiernan (Chicago), "The Alienist and Neurologist," July, 1883.

adherents among modern alienists is that which recognizes the prominence of syphilis as a causative factor in the history of general paralysis, though the present state of our knowledge does not entitle us to regard it as a *conditio sine qua non*. In a certain proportion of cases we are still bound to assume that general paralysis can arise on a non-syphilitic base. At the Congress held at Copenhagen in 1884 this view was strongly supported by the scientific investigations of Rohmell,* of the St. Hans Asylum, Denmark.

The explanations furnished by different inquirers as to the relationship between syphilis and general paralysis vary extremely. A small minority look upon syphilis as having a direct effect on the cerebral vascular system, regarding the general paralysis, therefore, as a true syphilitic lesion of the brain, and they deduce their reasoning from the investigations of Heubner,† according to whom characteristic specific changes are to be found in the cerebral vessels in all syphilitic cases, a conclusion which later researches have, however, proved to be unfounded (Friedlander,‡ Mendel,§ Ramaer,|| Buchholz,¶ and others). The majority, on the contrary, do not take this standpoint; they regard general paralysis as a cerebral disease arising in a brain impaired by previous syphilis, the syphilitic affection, in other words, acting as a predisposing factor, preparing the cerebral soil, weakening the organism, and rendering it less capable of resistance to other more direct causes, such as alcoholic and other excesses, the climacteric, etc. The paralytic affection is thus due to nutritive changes in the cerebral vessels produced by antecedent syphilis, these changes in the case of active congestion of the brain, the result of such direct causes, permitting the plasma and formed elements of the blood to pass through the walls of the vessels into the cerebral tissues, where they finally, through imitation of the neuroglia, engender a chronic diffuse peri-encephalitis. This view to me appears on the whole the most natural and unconstrained, as it admits of the solution of those cases in which

* Rohmell, "Congrès International," etc., Copenhagen, 1884. "Compte-rendu," Tome iii., Section de Psychiatrie.

† Heubner, "Dieluetische Erkrankung der Hirnarterien," 1874.

‡ Friedlander, "Centralblatt. für die Medic. Wissenschaften," 1876, Bd. 14, p. 66.

§ Mendel, *loc. cit.*

|| Ramaer, "Congrès de Copenhague," 1884. "Compte-rendu," Tome iii., Section de Psychiatrie, p. 89.

¶ Buchholz, "Centralblatt. f. Nervenheilkunde," 1889, No. 12.

a long period has elapsed between the acquirement of the one disease and the development of the other; of those, on the other hand, in which the interval between the two affections is of short duration, but in which the paralytic affection is hastened by cerebral strain and excesses; of those cases of paralytic onset in badly treated precursory syphilis; and of those exceptional cases in which general paralysis arises on a non-syphilitic base, where the organism has in a similar manner been undermined and affected by some other slowly acting poison, such as alcohol, nicotine, lead, phosphorus, mercury, etc. This theory, moreover, explains the non-occurrence of definite syphilitic cerebral changes in general paralysis, and why even an energetic anti-syphilitic treatment, undertaken early in a case of general paralysis, has no remarkable effect on its development. Mendel's* experiments on living dogs give further support to this view, but reference to these cannot be made in this place.

Our next step must be to inquire on what grounds the supporters of the syphilitic theory of the origin of general paralysis base their doctrine. Primarily statistics teach them, so they believe, that syphilis is found far more frequently in the history of general paralysis than in the history of any other form of insanity, but the statistics either for or against the assumed frequency of syphilis anterior to general paralysis are extremely variable in value, much depending on the care with which the examiner has investigated, or has been in a position to investigate, the antecedents of his patients, and, furthermore, on the extent and quality of the material on which he bases his arguments; in some cases men and in others women only have been made the subject of inquiry, in others only the inhabitants of towns or the dwellers in country districts, and in others again the social grades have not been differentiated. The value of such computations in estimating the degree of connection between these two affections is therefore considerably lessened, and we need not deal with them any further here. Rieger,† in an able paper, has, however, given us statistical information of a more reliable character. He combines therein the classifications of ten different and trustworthy observers, and, by thus neutralizing the objections which might be urged against

* Mendel, "Ueber Paralytischen Blödsinn bei Hunden. Sitzungsbericht der Königl. Preuss. Academie der Wissenschaften. Ref. Virchow-Hirsch," 1884, i., p. 199, and ii., p. 54.

† Rieger, "Schmid's Jahrbücher," 1886, i., Bd. 210, p. 88.

them individually, strikes a mean which goes nearer the truth than any previous statistical compilation. Among 1,000 non-paralytically he finds 39 to have been syphilitic and 961 non-syphilitic subjects, while among 1,000 general paralytically 399 were syphilitic and 601 non-syphilitic, or, in other words, syphilitics have a chance of acquiring general paralysis which is 16 to 17 times greater than that of non-syphilitics. This result in my opinion establishes an undoubted connection between general paralysis and syphilis, the extent of this connection forming a subject for further study.

Apart from the statistical standpoint a further argument in favour of the syphilitic theory may be found in the close resemblance to general paralysis presented by locomotor ataxy. In the latter disease syphilis has undoubtedly been shown to be the most important causative factor (Erb* and Fournier † compute that 80 to 90 per cent. of tabetics have had syphilis), and both in their clinical and anatomical aspects locomotor ataxy and general paralysis exhibit points of marked similarity. We have in all probability merely to deal with a different localization of one and the same morbid process, according to Strümpell ‡ and Jendrassik, § while the former goes so far as to assert that "general paralysis is but a cerebral tabes."

The limitation of the disease to certain grades of nationality, its predominance in the one and its comparative infrequency in others also gives support to the theory of the syphilitic derivation of general paralysis. Thus Minor || has shown that general paralysis is very rare among Russian Jews (perhaps the only advantage of being a Russian Jew!), and we may therefore assume that the influence of heredity in the production of this disease is extremely problematical, knowing as we do the strongly marked predisposition to the hereditary transmission of nervous diseases evinced by Jews of all nationalities, while we can easily understand its rarity among them when we assume syphilis to be its cause. Minor, indeed, finds syphilis to be much more rare among the Jewish than among other Russian communities. Of his

* Erb, "Berl. Klin. Wchnschrft.," 1883, xx., No. 32, p. 481.

† Fournier, "De l'ataxie locomotrice d'origine syphilitique," Paris, 1882.

‡ Strümpell, "Neurol. Centralblatt," 1886, No. 9.

§ Jendrassik, "Deutsch. Arch. f. Klin. Med.," Bd. 43-46, p. 543. "Ref. Allg. Ztschrft. f. Psychr.," 1889, Bd. 46, H. 2 and 3, p. 329.

|| Minor, "Wjesbnik Psychiat.," 1888, vi. "Ref. Allg. Ztschrft. f. Psychr.," 1889, Bd. 46, H. 2 and 3, p. 330.

383 patients with nervous affections 260 were Jews and 123 Russians, of the former only .7 per cent., and of the latter 4.8 per cent., were the subjects of general paralysis; while 4.23 per cent. of the former and 21 per cent. of the latter presented a previous syphilitic history; in other words, we find general paralysis seven times more frequent among Russians than among Russian Jews, while the number of syphilitics was five times greater among the former than the latter.

Finally, the theory appears to gain indirect support from the incontestable fact that general paralysis is far more rare among women than among men; no other reason than that syphilis is the cause of general paralysis can be adduced to explain the fact that the latter affection almost always attacks women in the large towns and the lowest grades of society, while authors of every nationality have proved that many of their female general paralytics have in past years been the devotees of *Venus vulgaris* (among my own cases 25 per cent.). It appears to me that greater value would attach to this theory if the antecedent occurrence of syphilis among the plurality of female general paralytics could be firmly established, for such a proof would be of far greater importance than its establishment among males; but not only is the occurrence of syphilis less frequent among women, but if it is often difficult to discover whether a man has had syphilis in his earlier days, the difficulty is greatly enhanced when we have to deal with women. We frequently have before us as patients individuals whose names, having been changed on marriage (and most of the female general paralytics, 77.6 per cent. of my own cases, are married!), we are unable to trace their earlier misdeeds in the records of lock hospitals (as we frequently may do with men), while, furthermore, we often have the delicate duty thrown on us of having to penetrate into their inner lives, for it not unfrequently happens that patients are to be met with who have been infected by their husbands without being cognizant of the fact, for women often do not observe the primary syphilitic indications; and, finally, we have to deal with subjects advanced to such a stage of dementia that their earlier delinquencies have been completely forgotten.

The statistics that have been published of the paralytic affection among women are not very encouraging to a partisan of the syphilitic theory, but they furnish the best evidence of the difficulties that beset us when we endeavour

to discover an earlier syphilitic history in a female case of general paralysis.

The following data are given in chronological order, and though but scanty, are the only statistical evidences furnished by the literature of general paralysis:—

Sandberg*	...	2 syphilitics among 3 female paralytics =	66.6 per cent.
Winget†	...	4 " " 5 " " =	80 "
Siola‡	...	3 " " 12 " " =	25 "
Jung§	...	3 " " 95 " " =	3.15 "
Obersteiner||	...	4 " " 340 " " =	1.17 "
Reinhard¶	...	25 " " 87 " " =	28.7 "
Goldstein**	...	0 " " 3 " " =	0 "
Magnan††	...	{ 1 certain } 100 " " =	— "
		{ 4 uncertain }	
Régis‡‡	...	4 " " 4 " " =	100 "
Greppin§§	...	4 " " 26 " " =	15.38 "

Mickle,||| in his table of "exciting causes," attributes to "venereal diseases" a percentage of 8 as occurring in women. Ziehen¶¶ has, however, found the number of syphilitic female general paralytics in the Asylum of Jena to be between 30 and 40 per cent.

On account of the inadequacy of the statistical information supplied by the above enumerated tables, founded as many of them are on very few cases, and by reason of the importance of the question, I have thought it of some interest to examine in detail the material afforded by the large Danish Asylum, St. Hans. I venture to assert that the means at my command have been of greater value than any other that have hitherto been utilized, as they embrace all the cases of general paralysis occurring in women that have been treated during the twenty-seven years in which Professor Steenberg has held office as medical superintendent, and, further, because the limited area of our country most probably admits of a stricter investigation into the previous life history of each

* "Norsk. Magazin for Lægevidenskaben," Christiana, 1868, Bd. 22, p. 1.

† "Norsk. Magazin for Lægevidenskaben," Christiana, 1869, Bd. 23, p. 561.

‡ "Charité Annalen," Berlin, iv., p. 453.

§ "Allg. Zeitschrft. f. Psychiatr.," 1878, Bd. 35, p. 627.

|| "Wien. med. Wchnschrft.," 1883, No. 33-34.

¶ "Allg. Zeitschrft. f. Psychiatr.," 1885, Bd. 41, p. 453.

** "Allg. Zeitschrft. f. Psychiatr.," 1886, Bd. 42, p. 254.

†† "Cit. in Morrell-Lavallée and L. Bélières," *loc. cit.*, p. 116.

‡‡ "Gaz. méd. de Paris," 1888, 23 and 26.

§§ "Allg. Zeitschrft. f. Psych.," 1890, Bd. 46, p. 553.

||| Mickle, "On General Paralysis of the Insane," 2nd Ed., London, 1886, p. 263.

¶¶ "Neurol. Centralblatt," 1887, No. 9, p. 198.

patient than can possibly be furnished by larger countries with their teeming populations. I have the records of altogether 116 cases of female general paralytics. Among them I find—

Syphilis acknowledged in 37 cases=32 per cent.

Syphilis most likely in 13 cases=11 per cent.,

or a total of 43 per cent. But this result does not sum up all the facts to be obtained. In a large number of cases, as we have remarked before, we are bereft of every antecedent history, because the patients when admitted are in a very weak-minded amnesic condition. This objection refers to 16 of the above cases, and if we consider only the remaining 100 we obtain—

Syphilis acknowledged in 37 per cent.

Syphilis most likely in 13 per cent.,

and by "most likely"—I mean those in which we have found that the patients had been married to men who had suffered during cohabitation from syphilitic eruptions, etc., or those who have lived impurely, inducing "venereal diseases," and several miscarriages, or finally those who have presented several marks—the signs in all probability of earlier syphilis. According to this classification we find syphilis with fairly absolute certainty in about half the cases recorded, a result which, in my opinion, must inspire the advocates of the syphilitic theory with confidence.

A considerable proportion of the remaining fifty cases under consideration moreover present a greater or less degree of probability of earlier syphilitic infection, the patients having been prostitutes, or, at any rate, having led an immoral life; the life history of 15 of these was thus traced out, and we may consequently safely deduce from a general survey of these cases that syphilis has been found with more or less certainty in altogether 65 per cent. of the female cases of general paralysis occurring in the St. Hans Asylum.

To appreciate this result more fully we must examine the other assignable causes of general paralysis to determine their relative frequency, as compared with that of syphilis. I have taken as impartial a view of the question as possible, but I must confess that I can find no cause which can even approximately vie with syphilis in frequency as an originating factor. Thus I have found an alcoholic history only in 27 cases (or 23 per cent.), and in 11 of these there had been

previous syphilis, in three a great probability of syphilis, while only in 13 cases did the alcoholic antecedent stand alone. As to heredity, I could obtain information only in one-third of all the cases, a matter of little surprise when we reflect how difficult it is to obtain any satisfactory evidence on just this very point, for amnesia here comes as a stumbling block more than with reference to any other point of the patient's life history, while the friends are necessarily frequently ignorant of the matter. In a total of 43 cases I find—

Heredity in 12 cases=28 per cent.

No heredity in 31 cases=72 per cent.,

and of the former four had in addition had syphilis, one had an alcoholic, and one a traumatic history. Other causes do not rank with any noteworthy frequency. Emotional causes of all kinds were to be found only in 22 cases, traumatic influences only in three, heat as a cause in one, chronic phosphorus poisoning in one, and numerous pregnancies in one case. Many authors incline to the belief that the climacteric is of great ætiological importance in determining the origin of general paralysis, but I found only 40 per cent. of the women in the period of life thus designated, in 40 per cent. the disease began before 40, while in 20 per cent. it had delayed its appearance until the patients had passed their 50th year. We may from these considerations, therefore, conclude that no other cause approaches syphilis in the frequency of its occurrence, and syphilis is found with less or greater certainty in more than three-fifths of all the female instances of general paralysis which have fallen under my notice.

As I have thus been able to substantiate the frequency of antecedent syphilis in general paralysis, I have at the same time, I hope, strengthened the arguments in favour of the modified syphilitic theory of the origin of that disease, and my purpose in writing this paper has thus been obtained.

To avoid any misapprehension I may finally add the remark that I do not, of course, exclude the possible effect of all other causes than syphilis, and in some cases alcohol, lead, nicotin, etc., but I only regard the former as auxiliary causes, that is to say, that where the brain has not been previously affected by syphilis, alcohol, etc., general paralysis will not arise, induced only by one or more of them.

Genius and Insanity. By ARTHUR MACDONALD, Ph.D.,
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Mass.

In the study of genius and insanity we shall endeavour to follow the empirical rather than the polemical method. This will require the statement of many facts, gathered from different sources, but principally from the instructive works, "L'Homme de Génie," by Cesare Lombroso, and "Psychologie Morbide," by Moreau (de Tours).

The natural difficulty of obtaining facts of an abnormal or pathological nature, and in other respects unfavourable, is obvious. But authors have not only concealed such data, but have not considered them of importance. It is due to the medical men whose life brings them closest to abnormal reality, that such facts have been gathered.

If it be said that the abnormal or exceptional must be taken with some caution, because it is natural for the mind to exaggerate striking characteristics, it must be remembered that such facts, when unfavourable to reputation, are concealed. In the study of any abnormal individual, as the insane or criminal, one finds much more concealed than is known.

Insanity.

It is generally accepted by alienists that a large part of mental affections are the result of degeneracy: that is to say, it is the action of heredity upon the offspring of drunken, syphilitic, insane, and phthisical parents. Sometimes a serious wound on the head has the same effect.

The most frequent characteristics of this degeneracy are: Apathy, loss of moral sense, impulsiveness, propensity to doubt, psychical disproportion, caused by an excessive development of certain faculties or by absence of others, verbosity or exaggerated acuteness, extreme vanity or eccentricity, excessive preoccupation with one's own personality, mystical interpretation of the most simple facts, abuse of symbols or special terms, which sometimes suppress every other form of expression. Lombroso finds also these characteristics: Irregularity in teeth, excessive asymmetry of face and head, left-handedness, stuttering, rachitism, phthisis, excessive fecundity, neutralized later by abortion or complete sterility, preceded by anomalies which always grow more in the children; face and head

voluminous or very small, smallness and disproportion of body, and sexual precocity.

Some definitions of insanity are: Insanity is a disease of the person, resting upon and caused by a brain affection (Schüle).* Here mental compulsion constitutes the essence of mental derangement, which cannot be reasoned away by logic or obstructed by the will. This compulsion is grounded in the fundamental organic brain disease, which gives it control of the mental faculties; we then cease to be ourselves.

Every mental disease is a reaction of a nervous system impaired in its nutrition, and begins and ends with melancholia (Arndt).†

Insanity can be defined, from an anatomical point of view, as a diffuse disease of the brain, including the so-called nutritive changes, especially the inflammatory and degenerative. From a clinical point of view, insanity is a special kind of cerebral disease distinguished by functional disturbances of the mind; mental diseases are a special class of cerebral diseases (Krafft-Ebing).‡ Krafft-Ebing suggestively adds that brain and nervous disease are of the same species, and that the passage from one (chorea, hysteria, epilepsy) to the other is frequent in individuals of the same family.

Genius.

Holding in mind the general idea and characteristics of insanity, we may take up the consideration of genius. As an introduction, we can do no better than to listen to the testimony of genius itself.

Aristotle, the father of philosophers, remarks that, under the influence of a congestion of the head, there are persons who become poets, prophets, and sibyls; thus, Mark of Syracuse, a poet to be recommended as long as the mania endured, could not compose as soon as health returned.

Plato says, in the "Phædus," that delirium is no evil, but a great benefaction, when it emanates from the divinity. Democritus goes still further, and makes insanity an essential condition of true poetry. Cicero speaks of the *furor poeticus*; Horace of the *amabilis insania*. Diderot writes, "Oh, how close the insane and men of genius touch; they are chained, or statues are raised to them." Lamartine speaks of this mental disease called genius; Pascal, of extreme mind as akin to extreme madness.

* "Klinische Psychiatrie."

† "Psychiatrie."

‡ "Lehrbuch der Psychiatrie."

However paradoxical these sayings may seem, a serious investigation of facts will show that the resemblances between the highest mental activity and that of the diseased mind are numerous, and not a few specialists are inclined to the conclusion that genius is a neurotic phenomenon, a semi-morbid state of the brain, a veritable nervous erethism.

Physical Characteristics.

In general, men of genius are small in stature and pale in colour; this paleness is a sign of physical degeneracy, and is most frequent in those morally low. Many are rachitic, and some are known to have had cranial and cerebral lesions.

Vico, Clement VI., and Malbranche had their skulls fractured. Pericles, Romagnosi, Bichât, Kant,* and Dante had cranial asymmetry. Dante had an abnormal development of the left parietal bone, and two osteomata in the frontal bone. Kant was ultra-brachycephalic (88·5); the disproportion between the upper part of the occipital bone and the lower part is noteworthy; the same is true as to the minimum smallness of the frontal arc as compared with the parietal.

The "soudures" of the sutures in the crania of Byron, Pascal, and Humboldt are to be noted. Descartes was sub-microcephalic. Milton, Linné, Cuvier, and Gibbon were hydrocephalic (?) Dante and Gambetta had small cranial capacity. Rousseau had hydropsical ventricles. Gauss† and Bichât had a more developed left hemisphere than right.

Bischoff and Rüdinger, in a study of eighteen brains of German *savants*, have found remarkable congenital anomalies of the cerebral convolutions.

Thus, according to Lombroso, "as genius is often expiated by the inferiority of certain psychical functions, so it is also accompanied by anomalies in that organ which is the source of its glory."

General Facts.

Æsop, Virgil, Demosthenes, Alcibiades, Erasmus, Cato of Utica, Charles V., stammered.

Sterility is not uncommon in great men, as Dryden, Addison, Pope, Swift, Johnson, and Goldsmith.

Many were celibates, as Kant, Newton, Beethoven, Gassendi, Galileo, Descartes, Locke, Spinoza, Bayle, Leibnitz, Hume,

* Kupfer, "Der Schädel Kant's," 1881.

† Wagner, "Das Hirngewicht der Menschen," 1870.

Hobbes, Gibbon, Macaulay, Leonardo da Vinci, Michael Angelo, Handel, Mendelssohn, Voltaire, and others.

According to Lombroso "almost all men of genius differ as much from their fathers as from their mothers, which is a characteristic of degeneracy, and thus the physical resemblances between geniuses of different epochs and races are noticed, as in Julius Cæsar and Napoleon. They sometimes lose their national type, and it occurs in the most noble traits, as elevation of forehead, remarkable development of nose and head, and vivacity of the eyes." A parallel phenomenon exists in cretins, criminals, and the insane. Humboldt, Virchow, Bismarck, and Helmholtz do not have the German physiognomy. Byron did not have either the physiognomy or the character of the English.

Precocity is a characteristic of genius and insanity. Dante composed verses at nine; Tasso at 10; Comte and Pascal were great thinkers at 13; Niebuhr at seven; Jonathan Edwards at 12; Bossuet at 12; Voltaire at 13; Goethe before 10; Victor Hugo at 15; Pope at 12; Fénelon at 15; Mirabeau at 10; Handel and Beethoven composed at 13; Mozart gave concerts at 6; Raphael was renowned at 14. Lombroso considers this precocity unhealthy and atavistic—it is observed among all savages. The proverb that a man who has genius at five is insane at 15 is often verified in our asylums. The sons of the insane are often precocious children. But some great men were regarded as poor pupils, as for instance Pestalozzi, Wellington, Balzac, Humboldt, Boccaccio, Linné, Newton, and Walter Scott.

The unconsciousness and spontaneity of genius resemble epileptic attacks (Lombroso). Hagen makes irresistible impulse one of the characteristics of genius. Haydn attributes his "Creation" to a mysterious grace descending from on high. Some men of genius, who have observed themselves, describe their inspiration as a gentle fever, during which their thought becomes rapid and involuntary. Such is the thought of Dante, when he says :

". . . l'mi son un che, quando
Amore spira, noto ed in quel modo
Che detta dentro vo significando."*

Napoleon said that the chance of battles is the result of a moment of hidden thought. Mozart avowed that his musical inventions came involuntarily, like dreams. Montesquieu outlined "L'esprit des lois" in a carriage. Socrates says

* "I am so made that when love inspires me, I attend: and according as it speaks in me I express myself."

that poets create, not by reflection, but by natural instinct. Voltaire said, in writing to Diderot, that all manifestations of genius are effects of instinct, and that all the philosophers of the world together could not have given "Les animaux malades de la peste," which La Fontaine composed without knowing even what he did. According to Goethe, a certain cerebral irritation is necessary to poets. Klopstock declared that in dreams he had found many inspirations for his poem.

Thus, as the great thoughts of great men and the deep convictions of prophets and saints develop spontaneously, so it is with the ideas of the insane.

Boileau and Chateaubriand could not hear a person praised, even their shoemaker, without feeling a certain opposition. Schopenhauer became furious and refused to pay a bill, in which his name was written with a double "p." Such manifestations of unhealthy vanity are very similar to the ambitions of monomaniacs.

Geniuses are inclined to misinterpret the acts of others, consider themselves persecuted, and find everywhere causes of suffering and melancholy. These are well-known tendencies of the insane.

Originality is very common, both to men of genius and the insane, but in the latter case it is usually without purpose.

*Biographical Facts Bearing upon Insanity and Allied
Nervous Diseases.*

Socrates, though not positively insane, had hallucinations. He would dance and jump in the street with no apparent reason. The demon of Socrates which inspired him was without doubt a hallucination.

Lucretius was attacked with intermittent mania. Bayle says this mania left him lucid intervals, during which he composed six books: "De Rerum Naturâ." He was forty-four years of age when he committed suicide.

The mother of Charles V. was insane and deformed; his grandfather, on his mother's side, died at 62 in a state of deep melancholia. Charles himself stammered, and had epileptic attacks during his youth.* His retreat to the monastery is known, where he had the singular phantasy of celebrating his own funeral rites.

Cromwell, when young, had a hallucination in his room: suddenly the curtains opened and a woman of gigantic stature appeared to him, announcing his future greatness.† Later in

* Michelet.

† Fleury, "Histoire d'Angleterre."

life he had violent attacks of melancholic humour. His moral life was influenced by a sickly and neuropathical constitution which he had at birth. His brothers died in their infancy. One of his daughters died of chagrin.

Richelieu, the cardinal, had an elder brother who was a singular man, committing suicide because of a rebuke from his parents. The sister of Richelieu was insane; Richelieu himself had attacks of insanity; he would picture himself as a horse, but afterwards would have no remembrance of it.

Malebranche heard distinctly in him the voice of God. Descartes, after a long retirement, was followed by an invisible person, who urged him to pursue his investigations after the truth.

Goethe was sure one day of having perceived the image of himself coming to meet him. His mother died of an epileptic attack.

The pathetic insanity of Rousseau and the ecstatic hallucinations of Swedenborg are well known.

Hegel had the mania of greatness. He said: "I can say with Christ not only that I teach the truth, but I am myself the truth." Hegel's sister was insane; she drowned herself.*

Comte was attacked in 1826 with mental alienation, remaining in an insane asylum a year. He also had the mania of greatness in thinking that he was the High Priest of humanity.

Newton was subject to vertigo. In the latter years of his life he fell into a melancholia, which deprived him of all thought.† He was also for some time in a species of mental stupor. In a letter to Pepys he says that he passed some months without having his "former consistency of mind."‡

Swift died insane.

Chateaubriand attempted suicide. He says himself that his chief fault is weariness, disgust of everything, and perpetual doubt.§ His father died of apoplexy. He was subject a long time to convulsive movements of the arm. His brother was an eccentric man and partially insane, given to all vices, and dying of paralysis.

George Sand says that when about 17 years of age she became deeply melancholic, that later she was tempted to suicide; that this temptation was so vivid, sudden, and strange

* "Revue des Deux Mondes," Avril, 1850.

† Zimmerman, "De l'Experience."

‡ Newton, par P. de Rémusat, "Revue des Deux Mondes," 15 Décembre, 1856.

§ "Mémoires d'outre-tombe;" see "La Presse," 29 Octobre, 1843.

that she considered it a species of insanity. "This took the form of a fixed idea, and caused at times monomania." This idea was awakened usually by the sight of water, or a precipice, loaded firearms, or a vial containing a poisonous substance. The father of George Sand was subject to similar spells.*

Walter Scott, during his infancy, had precarious health, and before the age of two was paralyzed in his right limb. He had a stroke of apoplexy. One day he had a vision; he had just learned of the death of Byron. On coming into the dining-room he saw before him the image of his dead friend; on advancing towards it, he recognized that the vision was due to drapery extended over the screen.†

Beethoven was naturally bizarre and very irritable. He became deaf, and fell into a profound melancholia, in which he died. His death was premature.

Mohammed was epileptic. He lost his father in infancy, and his mother in childhood. He was a travelling merchant, and married a wealthy widow 15 years older than himself. He used to live alone in a cave; he had interviews with the angel Gabriel. His revelations began with visions in sleep; he persistently claimed to be a messenger from God, receiving his first revelation at the age of 42.

Raphael experienced temptations to suicide. He himself says:—"I tied the fisherman's cords, which I found in the boat, eight times around her body and mine, tightly as in a winding sheet. I raised her in my arms, which I had kept free, in order to precipitate her with me into the waves . . . at the moment I was to leap to be swallowed for ever with her. I felt her pallid head turn upon my shoulder like a dead weight, and her body sink down upon my knees."‡

Tacitus had a son who was an idiot.

Quintilian had two sons die at an early age, both of whom were very precocious.

Pascal,§ from birth till death, had general nervous suffering. At one year of age he fell into a languor, in which he could not see water without manifesting great outbursts of passion; and, still more strange, he could not bear to see his father and mother near one another. In 1627 he had paralysis from his waist down, so that he could not walk without crutches. His feet were as cold as marble. This condition continued about

* George Sand, "Histoire de ma vie."

† "Edinburgh Medical and Surgical Journal," Jan., 1843.

‡ Raphael, "Pages de la vingtième année."

§ "L'Amulette de Pascal," 1846.

three months. During his last hours he was taken with terrible convulsions, continuing for a day, when he died. The autopsy showed peculiarities: His cranium appeared to have no suture, unless perhaps the lamboid or sagittal. The substance of a large quantity of the brain was very much condensed. Opposite the ventricles there were two impressions, as of a finger in wax. These cavities were full of clotted and decayed blood, and there was, it is said, a gangrenous condition of the dura mater.

Pope was rickety. He had hallucinations; he seemed one day to see an arm come out of the wall, and he inquired of his physician what this could be.

Mozart's musical talent was manifested at three years of age; between four and six he composed with expertness.* He was subject to fainting fits before and during the composition of his famous "Requiem." He died at thirty-six of cerebral hydropsy. He had a presentiment of his approaching end; he always thought that the unknown person who presented himself to him was not an ordinary being, but surely had relations with another world, and that he was sent to him to announce his end.† Mozart was convinced that the Italians wished to poison him.

Cuvier died of an affection of the nervous centres. The autopsy showed a voluminous brain. He lost all his children by a fever called "cerebral."

Cæsar was epileptic, of feeble constitution, with pallid skin, and subject to headaches.

Molière suffered from convulsions. The least delay or disarrangement put him into a convulsion, and prevented him from waking for a fortnight. He had numerous attacks of melancholia.

Napoleon had a bent back, an involuntary movement of the right shoulder, and another movement of the mouth from left to right. When in anger, according to his own expression, he looked like a hurricane. He felt a vibration in the calf of his left leg.‡ Having a very delicate head, he did not like new hats. He feared apoplexy. General Rapp, desiring to speak with him, entered his room, but found him so preoccupied that he did not notice his arrival. The General, seeing him immobile, thought he might be sick, so made a noise on purpose. Napoleon immediately turned round, and,

* G. de Chadenil, "Le Siècle," 12 février, 1858.

† See "Vies de Haydn, de Mozart et de Métastare," Paris, 1817.

‡ See "Mémoires de Saint-Hilaire," t. iii., p. 341.

seizing Rapp by the arm, said to him: "See up there!" The General did not respond. "What," said Napoleon, "do you not discover it? It is before you, brilliant, becoming animated by degrees; it cried out that it would never abandon me. I see it on all great occasions; it orders me to advance, and it is to me a constant sign of fortune."

Some great men have believed in the existence of a genius-protector, and there is little doubt but that many of their hallucinations have aided in the execution of their plans.

Voltaire, like Cicero, Demosthenes, Newton, and Walter Scott, was born under the saddest and most alarming conditions of health. His feebleness was such that he could not be taken to church to be christened. During his first years he manifested an extraordinary mind. In his old age he was like a bent shadow.* He had an attack of apoplexy at the age of 83. His autopsy showed a slight thickness of the bony walls of the cranium. In spite of his advanced age there was an enormous development of the encephalon.†

Linné, a precocious genius, had a cranium hydrocephalic in form. He suffered from a stroke of paralysis. At the end of one attack he had forgotten even his name. He died in a state of senile dementia.

Madame de Stael died in a state of delirium, which lasted several days, and according to some authors several months. Moreau of Tours says that she had a nervous habit of rolling continually between her fingers small strips of paper, an ample provision of which was kept on her mantelpiece. She used opium immoderately. She had a singular idea during her whole life—that she should be wrapped in fur before burial, as if she was afraid of being cold in the tomb.

Henry Heine died of a chronic disease of the spinal column.

Michel Angelo,‡ while painting "The Last Judgment," fell from his scaffold, and received a painful injury in the leg. He shut himself up, and would not see anyone. Bacio Rontini, a celebrated physician, came by accident to see him. He found all the doors closed. No one responding, he went into the cellar, and came upstairs. He found Michel Angelo in his room, "resolved to let himself die." His friend, the physician, would not leave him. He brought him through the peculiar condition into which he had fallen.

* Ségur, "Mem.," t. i.

† R. Parise, "Philosophie et Hygiène," p. 296, v. i.

‡ "Histoire de la peinture en Italie," t. ii., p. 377. (Réveillé-Parise).

Conclusion.

Whether the above facts, to which many more might be added, show or not that genius and insanity belong to the same category, they indicate at least that they touch in many points. Thus the frequency of delirium, the numerous signs of degeneracy, the commonness of epilepsy, precocity, and melancholia, the tendency to suicide, and the special character of inspiration favour the idea that genius is a mental and degenerative disease.

If this conclusion is admitted, let no one suppose that what is high and noble in genius is lessened in value. Any analysis that may show the closest relation to insanity, or even crime, cannot change genius itself.*

A Note on Cocainism. By CONOLLY NORMAN, M.D., Richmond Asylum, Dublin.

The dangers to be apprehended from the abuse of cocain are probably hardly yet quite realized, at least in this country. A great deal of harm has undoubtedly been done of recent years by the use of cocain as a help to break off the morphia habit. An exaggerated estimate of the assistance to be obtained from the former drug has been formed by such writers as Freund, and although Lewin and Erlenmeyer have warned us not to fly from Scylla to Charybdis, still it is to be feared that the notion lingers that cocain may be used advantageously and safely for this purpose. Nothing can be more mistaken. Cocain is more seductive than morphia; it fastens upon its victim more rapidly, and its hold is at least as tight. Cocain solutions are probably somewhat too freely prescribed in cases of disease of the nose and naso pharynx. Patients who use the drug in this way become very soon acquainted with its agreeable effects. Several cases have been recorded by American authors of cocain habit arising thus. That cocain has not been even more extensively misused is probably due to its being still a comparatively new drug, and also in part to its costliness. Up to the present time the largest number of its victims appear, unfortunately, to have been medical men.

Cocain owes its special dangers to three causes. First, it is particularly treacherous. Secondly, it produces early mental

* The writers of signed articles are alone responsible for their statements and opinions.—Eds.

breakdown, both in the moral and intellectual spheres. Thirdly, it is intensely toxic, bringing about destructive tissue change after a comparatively short period of abuse. Taking the last first, we know that alcoholic poisoning is usually a slow process, while morphia may be taken even in very large quantities for years without producing any serious structural changes in the viscera. In fact we recognize no distinct pathological results of morphia poisoning. On the other hand the marasmus of chronic cocain poisoning, appearing early and developing with extreme rapidity, is but one indication of the serious organic changes that are produced. Convulsions, similar, as Richet points out, to those of cortical epilepsy, have been noted in a great number of cases. In at least one recorded case death occurred in an epileptiform attack. In animals poisoned with cocain remarkable rise of temperature has been observed by Mosso, Reichert, and others. Acute poisoning in animals kills by asphyxia, chronic poisoning, as Zanchevski shows, is accompanied by albuminous degeneration of the ganglionic cells in the medulla oblongata and spinal cord, as well as of the nerve cells of the heart ganglia, and of the liver cells. In other more advanced cases this author has found atrophic changes with vacuolation in the cells of the medulla and cord, fatty degeneration of the muscular fibres of the heart, and atrophy of the liver cells. Degenerative changes also occurred in the arterial coats, particularly in the spinal cord. Perhaps organic changes similar, but less in degree, account for the slowness and difficulty in recovering from the cocain habit, and the liability to dangerous collapse which exists during the process of withdrawing the drug.

The treacherous and insidious character of cocain results from the fact that when taken in small doses it produces at first apparently nothing but a slight degree of exaltation, a sense of well-being, a feeling of mental and bodily activity, of general satisfaction and good humour, that is most agreeable. There is no mental confusion which the consumer of cocain is conscious of, and the only overt symptom he betrays at this stage is more than natural talkativeness. The hypnotic effects when they appear are not overwhelming, and there is no headache, no nausea, and no confusion next day. Thus cocain is probably the most agreeable of all narcotics, therefore the most dangerous and alluring. It is to be feared that these peculiar qualities may indeed conduce to raise this drug in the future to the bad eminence of being, as Erlenmeyer says, the third great scourge of the human race (alcohol and opium being the

first and second). Like several other observers I have satisfied myself by experiments on healthy persons that the agreeable results described actually follow the ingestion of small doses of cocain, and this fact impresses one strongly with a feeling of how seductive this drug would be to the neurotic or debilitated. Of course, as is the case with all narcotics, small doses soon lose their effect, and hence a rapid increase is necessary.

The rapidity with which mental symptoms of a grave character appear is remarkable in cases in which increasing quantities of cocain are taken. Within three months marked indications of degeneration, loss of memory, hallucinations, and suspicions deepening into persecutory delusions have been found.

I have seen three cases of cocainism. For certain reasons I am unable to describe them in as much detail as I should wish. In one, cocain had been tried as a substitute for morphia, and the patient soon found he had taken unto himself seven devils worse than the first. In another cocain had been originally prescribed for a painful affection of the nose. In a third a patient sought a new stimulant after having from time to time tried to combat "neurasthenia" with alcohol and morphia. In the first and third cases there was a very bad family history. In the second there seemed to be no contributing agent, except, perhaps, overwork. In the first case the mental symptoms, which appeared about a year and a half after the use of the drug had been begun, were (1) hallucinations of hearing with persecutory ideas. Patient constantly heard voices making vile and indecent charges against him. Sometimes he accused those about him of giving utterance to these abominations, at others he fully recognized their subjective and morbid nature. (2). Sexual excitement of a depraved nature leading, though the patient was no longer young, to frequent very irregular modes of gratification. (3). Loss of the sense of the passage of time. This patient, after several efforts to break off the habit, and several relapses, went from bad to worse. The delusions became more general and more organized, and he was now confined in an asylum suffering apparently from chronic paranoia. The second patient was an elderly man engaged in an active and arduous business. After six months' use of cocain he fell into a state of such mental hebetude and weakness of memory that he was unable to attend to his work. His sleep was broken and irregular. He suffered from trance-like conditions, in which he did and said things of

which he had no subsequent recollection. He was tormented by sexual excitement, and sometimes sexual hallucinations occupied his mind in his half-dreamy state. After desperate efforts, accompanied by much depression and distressing debility, he shook off the cocain habit, and is, at least for the time, cured. The third patient was a young man with a strong neurotic taint, who had been personally addicted to every form of dissipation, and whose health had consequently suffered. He took to cocain out of a whim, or the mere desire for a fresh intoxicant. It was impossible to be sure how long exactly he was addicted to the poison, or to what doses he went, as he was wholly unreliable, but there is reason to think that he had not been taking cocain for a longer period than six months when he came under notice. He was then pale, emaciated, with dilated pupils, muscularly feeble, mentally depressed, suspicious, and restless. His memory was failing. He was furtive and shifty in manner, and he had among other things quite forgotten to tell the truth. He thought he was dying, and that everyone saw his vice in his face. He had vague notions that his relatives were against him. The immediate cause of his seeking advice was the occurrence of visual hallucinations, resembling those of delirium tremens—small animals creeping about him, particularly at night in bed. Sometimes he spoke collectedly of these as recognized hallucinations. It was satisfactorily made out that he had not been taking alcohol in excess within several months. Abstention from cocain was accompanied by a pitiable condition of querulous depression, but was, nevertheless, followed by very marked improvement. Before recovery was complete the patient changed his residence, and was lost sight of. In this case the sexual passions seem to have been always urgent, but it appeared that cocain had the effect of at first very much exciting and finally depressing their activity.

It is important to observe that undue sexual excitement, abnormal voluptuous sensations, and the like, have been noticed as symptoms by several authors. Richardson records a case occurring in a modest, married woman who exhibited violent erotic delirium after the application to the nasal cavity of a small quantity of a ten per cent. solution of cocain. In several chronic cases impotence has been found. Very probably the occurrence of these disturbances in the sexual region contribute further to the rapid mental degradation which marks this vice. Dr. Thornley Stoker, of this city, first pointed out to me the frequency of sexual troubles in the cocain habit, and my experience quite confirms that gentleman's previous

observations. Dr. Clouston, in his able article on "Cocainism," remarks upon the singular loss of the time sense. I have observed this as a very marked symptom in my cases also. I think the same condition exists, more or less, in all narcotic intoxicants. In morphinism it is generally very noticeable. In no cases, however, have I seen it so prominent a mental feature as in those of cocainism. These two symptoms, together with the early appearance of hallucinations, seem to form the most distinctive traits of the mental affection arising from the misuse of cocain, as far as it has yet been observed.

Asymmetrical Conditions met with in the Faces of the Insane ; with some Remarks on the Dissolution of Expression. By JOHN TURNER, M.B.Aberd., Senior Assistant Medical Officer, Essex Lunatic Asylum. (*Illustrated.*)

(*Concluded from p. 29.*)

In the case of Ellen D., a female general paralytic in an advanced stage of the disease, whenever she was spoken to her features would be distorted by an exaggerated grin; the eyes nearly closed by the action of the lower part of the orbicularis palpebrarum, mouth opened and its angles retracted, the upper lip excessively elevated showing the gum, the tongue lolled out between the teeth always on the left side, and enormously deep naso-labial folds produced, curving round the angles of the mouth and blending with each other on the end of the chin.

This grimace eventually became her sole form of expression, and accompanied an irritable and angry state of mind. Occasionally when she was annoyed there would be slight contraction of the corrugators, and her eyes would fill with tears; but except for these signs it was impossible to tell from her face alone what the state of her mind was.

To take another, and even more striking example, Sarah Camelia C., a general paralytic likewise in an advanced stage of the disease. She is extremely irritable and obstinate, if interfered with in any way, as, *e.g.*, by touching her hands or her nose, she flings herself into a furious passion, tries to bite and scratch, and her gestures powerfully suggest to the mind an angry monkey. Sometimes she kicks, but her mouth is her favourite weapon of defence. Her face becomes horribly distorted by exaggerated muscular action, sometimes there is

scarcely any participation of the forehead muscles, only the faintest contraction of the corrugators, or contraction of the left inner half of the occipito-frontalis, causing the left eyebrow to be more elevated than the right. Sometimes both corrugators are strongly contracted; but at all times it is the muscles in the lower part of the face which take by far the largest share in the production of the grotesque contortions of the features which accompany her rages. The mouth is either widely opened, the upper lip elevated showing teeth and gums, producing enormously deep naso-labial folds, which reach, as in the last case, right down to meet on the chin, or else it is only partly opened, its angles much retracted and elevated, so that if the upper half of the face be covered the uncovered portion has a laughing appearance. Her passions are exceedingly transient; when at rest she sits with her head bent down and forwards, her forehead frequently lined transversely, the left half of the upper lip is elevated in a snarling manner, and the upper half of the left naso-labial fold is very deep, whilst that on the right side is scarcely visible. She is very fond of biting at the upper part of her dress, and will even stuff large portions of her skirt and petticoat into her mouth. If her attention is attracted she immediately exhibits a transient condition of asymmetry in the forehead, furrows appear over the left eyebrow, which is elevated above the level of the right. In most of her seizures latterly there has been an intensification of the asymmetrical condition usually noted in her face—the mouth being strongly drawn to the left and slightly upwards, the left half of the upper lip more elevated than usual, and twitching, both the occipito-frontalis and the orbicularis palpebrarum spasmodically contracted, the former symmetrically, the latter mostly on the left side. As the fit passes away the twitching ceases in the left half of occipito-frontalis and left orbicularis, but continues in the *right* half occipito-frontalis and the left levator labii proprius (and probably the left zygomaticus). These are very noteworthy facts, suggesting that the active agent, of whatever nature, which was the cause of the seizure, produced its most marked action in those parts of the brain (cortex) where it is probable, as indicated by the previous symptoms, degenerative changes had set in, and consequently where the remaining levels were more liable to discharge, being deprived of the protecting influence of their higher centres.

These four cases will be sufficient to illustrate phases of dissolution of expression occurring in recent curable and also in

advanced incurable cases.* Brain diseases which are specially characterized by coarse degenerative changes in the pre-frontal lobes are precisely the cases where the wiping out of intellectual expression from the face, especially in its upper part, is most rapid and marked, and hence general paralysis presents to us the most striking examples of this dissolution of expression, for in this disease there is undoubtedly a preponderance of degenerative changes in the motor and pre-frontal regions of the brain.

Photographs taken at periods within a few months of each other of the same face show, when compared, most startling changes in the expression. The pleasing and intellectual rapidly become blank and stolid, or perhaps the character of the predominating ideas stamps itself on the countenance (as in the case of Ellen D.) by the production of a grimace approximating in character to an exaggerated grin, so that before long, although they may be, and probably are, capable of experiencing their former emotions, the face has forgotten how to express them, their grotesque and horrible facial contortions bearing little or no resemblance to any recognized intellectual expressions. Moreover, all that is left to them of the power of expressing their emotions centres round the more fundamental movements which act upon the mouth and lower part of the face, and even these are incapable of responding to the feelings in the normal manner.

Before referring to the forms of asymmetry met with in the face it will be as well to consider the action of some of the muscles concerned.

To take the occipito-frontalis first, it is by far the largest and most powerful of all the muscles in the upper part of the face, and although generally described as one muscle, with at most a right and left half, it must further be subdivided into an inner and outer dursun for each side, each of these divisions being capable of contracting by itself, and each playing an important part in the mechanism of expression, although it is the inner half which is the more concerned in the production of the physical signs of the higher and more idealized forms of expression; indeed, the outer halves, when they contract alone, give to the face an inane appearance, such as is frequently seen in demented. It is the inner halves which, when acting in conjunction with the corrugator supercillii, have been termed the grief muscles. As far as my experience goes amongst the female insane, asymmetry of action is more fre-

* See note at end.

quently seem in this muscle (alone or in combination with the corrugator supercillii) than in any other of the muscles of expression.

In 306 recent admissions (females) there was noted to be unilateral action of the occipito-frontalis in 75 instances.

	R.	L.	M.
Absence of contraction of <i>all one side</i> with certain expressions	32	10	42
" " " outer half alone " "	16	8	24
" " " inner half " "	8	6	9

When uncomplicated by contraction of the corrugator supercillii the eyebrows are not markedly oblique, and that on the side of the contraction is raised along its whole length, whilst a series of slightly curved furrows appear across the brow on the side of the contraction. It is often difficult to determine whether the entire half of the muscle or only one portion is contracting, as the furrows over the active side have a tendency to encroach on the paralyzed side. It is comparatively rarely that one sees this form of asymmetry without contraction of the corrugators, and it does not seem to accompany any intense emotional states. Sometimes it is more marked with depressing, at others with exhilarating emotions. Fig. 6 represents the face of a woman showing strong contraction mainly of the outer half of the right occipito-frontalis; neither corrugator is acting. She is in a state of secondary dementia, her insanity being of very many years' duration. She is intensely silly, grins, and makes foolish and irrelevant answers when spoken to. She can only be usefully employed in carrying articles, and for this simple duty requires considerable personal supervision. If left to herself she will sit unoccupied all day with her right eyebrow elevated more than an inch higher than the left. This condition gives a stupid look to her face, it assimilates to no recognized form of expression, and is not intensified with any emotional states; indeed, if her attention is attracted in any way, it generally disappears.

Some of the most striking and interesting forms of asymmetry are those where there is combined contraction of both corrugators supercillii and one occipito-frontalis only. The various degrees of this condition are invariably associated with, more or less, intense emotional states. I shall cite two examples:—

Felicia Maria L., a young woman, æt. 21 (Fig 3). Her insanity on admission two years ago was of two years' duration. She was then maniacal for a week or so, but quieted down, and ever since has been in an apathetic condition,

gradually drifting into dementia, sitting huddled up with her head bent down, speaking in a whisper, and never spontaneously, only moving when urged, fond of chewing bits of paper. When admitted she was in fair condition and health, but has within the last eighteen months developed phthisis. With the increase of degenerative brain changes asymmetrical conditions appeared first in the face, and then in the trunk. These began by slight elevation of the left eyebrow, which was more arched than the right. The elevation became more and more marked, when present, but at no time was it a fixed condition, being only assumed with certain emotional states. The pupils which on admission were equal became unequal, the right being slightly the larger; and now when standing up she droops over on the right side. At the present date she is in an advanced stage of phthisis, the left lung being the more involved. The asymmetry is described in a note recently made as follows:—She keeps elevating her left eyebrow, which is angular, causing well-marked furrows on the left side of the brow. When she frowns and brings into play the internal portions of the occipito-frontalis and the corrugators, although there is very considerable furrowing of the outer half of the left side of the brow, the right outer half is quite smooth.*

The other case is that of Annie T., æt. 32. Admitted in good health and suffering from acutely melancholic symptoms, which had appeared within the last few weeks prior to admission. She was restless, resistive, and troublesome; her face wore a mingled expression of perplexity, misery, and fear. She exhibited a most extreme condition of asymmetry—called forth when she was startled, or by a reference to some topic which was displeasing to her. The condition is depicted in Fig. 4. (*Vide Journal*, Jan., 1892.) Sometimes the occipito-frontalis on the right half of her forehead contracts, but when it does so it is as part of a symmetrical associated action in the *voluntary* elevation of both brows. This condition appears to be due to the non-action of the right half of the occipito-frontalis, whilst, at the same time, the left half and both corrugators are acting. The paralysis of the occipito-frontalis on the right side allows the unantagonized corrugator of the same side to pull down the

* Since the above was written she died. There were no very striking, naked-eye, morbid appearances in the brain. There was adhesion of the meninges to the incus on both sides, but very much more on the left, which was decidedly softer than the right, being almost diffuent. Over the prefrontal lobes the meninges were thickened in patches. The ventricles were dilated and full of fluid. Lungs extensively infiltrated with tubercle; the left lung was more disorganized than the right, but cavities were present in both.

skin on this side more forcibly, it being in a, more or less, flaccid state; the result of this is to produce the furrows running upwards from the inner end of the right eyebrow and across the middle line, where they coalesce with the transverse furrows formed by the action of the left occipito-frontalis.

This woman, after a little while, lost most of her active symptoms, became silent and mulish, her face grew fat and singularly expressionless; she wandered aimlessly about the ward, never speaking. When she looked round apprehensively, her attention having been attracted by any sudden or unexpected sound, then if she looked to the left her forehead would still assume the form of asymmetry seen in the photograph, except that when much startled, and the expression was more intense, the *outer half* of the right occipito-frontalis also participated. But when her attention was attracted from the right side there would be absolutely no action of either inner halves of the occipito-frontalis, but the *outer half* on the right would be very strongly contracted, raising the outer half of the right eyebrow very much and producing deep curved furrows over its outer end; both corrugators seemed to contract, but the action of the outer half of the right occipito-frontalis to a certain extent masked that of the right corrugator. This latter form of asymmetry became much the more common—in fact, the former was rarely observed.

In the case now to be mentioned an asymmetrical condition of the forehead furrows was only noticed after the occurrence of a gross lesion (hæmorrhagic) in the left half of the cerebrum. The patient, a young woman, aged 31, suddenly became aphasic, and at the same time there was observed also some paralysis of the right occipito-frontalis, this side of the forehead being smooth whilst there were furrows on the left. It is to be noted that this condition only appeared with certain emotions, and the forehead could be voluntarily raised symmetrically. Both corrugator muscles contracted equally, and were concerned in the expression above noted, but symmetrically. In a day or two there was an increase of the paralytic symptoms—tongue protruded to right, mouth drawn to left when smiling, etc., and the paralysis of the right half of the muscles of expression of the face became more complete. The lines over the left brow showed out markedly against the smooth right side, and the right corrugator supercillii was also paralyzed.

At the autopsy it was found that a small aneurism the size of a pea, situated at the junction between the left middle cerebral, ant. communicating and int. carotid arteries, had rup-

tured. The fissure of Sylvius was filled with a thin layer of clot, and blood had leaked through the hippocampal fissure into the lateral ventricle. The frontal lobe was very soft, and the meninges were adherent over it on the left side only. Some of the convolutions of the frontal and parietal lobe were stained throughout their depth by blood, but the only part of the brain surface which was destroyed was the upper surface of the superior temporal convolution in its anterior two inches, and possibly part of the middle.

As regards the precise action of the corrugator supercilii there is a considerable difference of opinion.

Duchenne (see "Expression of the Emotions") believed it was the corrugator, called by him the sourcilier, which raised the inner corner of the eyebrows, and was antagonistic to the upper and inner part of the orbicular muscle, as well as to the pyramidalis alis nasi. He admitted that the corrugators drew together the eyebrows, causing vertical furrows, but further believed that towards the outer two-thirds of the eyebrows they acted in conjunction with the upper orbicular in antagonism to the occipito-frontalis. Darwin, however, regarded their action as that of drawing together and *downwards* the eyebrows. And as these muscles are attached to the upper borders of the orbital arch and at their inner angles, and run *upwards* and *outwards* to be inserted into the skin of the forehead about an inch to an inch and a half from their site of origin, it seems quite impossible that they can raise the inner angles of the eyebrows when they contract.

Their action can be easily demonstrated by frowning in front of a glass. Again, the pyramidalis nasi are the antagonists of the elevators of the nostrils and upper lip, and not of the corrugator supercilii. If one puts the pyramidalis nasi into action voluntarily one feels at the same time contraction of the elevators of lips and nostril, or *vice versâ*, and the one set cannot be flung into action without the other. However strongly we like to contract the corrugator supercilii, we may by placing the finger lightly on either side of the bridge of the nose assure ourselves that the pyramidalis nasi are not contracting, but if now we raise the upper lip the pyramidalis nasi are felt to contract. When the corrugators act in conjunction with the inner portion of the occipito-frontalis, the eyebrows are pulled together by the direct action of the corrugators, whilst the direct pull of the occipito-frontalis—being the stronger—overcomes the tendency of the corrugators to lower the eyebrows, and elevates the inner angles.

I am unable to attach much importance to a slight amount of asymmetry observed in the vertical furrows between the brows in the faces of those who, more or less habitually keep the corrugators slightly contracted, and in this category would fall the majority of intellectual people. I have noticed a large number of faces in regard to this point, and, although I have not been able to reduce the results to numbers, my impression is that it is the rule for the lines on one side to be deeper than on the other, but this is not so amongst the female patients on whom these observations have been made—with them asymmetry is much more frequently due to paralysis of the occipito-frontalis. In 306 persons I only noticed unequal action of the corrugator supercillii in eighteen instances. In eight there was weakness on the right side, and in ten on the left.

One frequently meets with persons who can assume two distinct forms of asymmetry. The following I quote as an example of the most striking instance that I have met :—

Sarah T., æt. 61. A case of recent melancholia. Occasionally she would elevate the outer half of the left eyebrow, producing deep furrows on this side of the forehead, whilst the right side was unmoved. Here there seemed to be some paralysis of the right outer half of the occipito-frontalis ; neither of the corrugators was acting. In the other and more frequent condition of asymmetry the eyebrows were oblique, and a well-marked line ran from the inner end of the left eyebrow upwards and across the right side, whilst above in the centre of the forehead were several deep oblique furrows running from the left in an upward direction to the right. She complained of great pain in the *right* thigh and calf, and the veins of this leg were injected. Whenever any reference was made to her painful member or her miserable condition the last form of asymmetry described was assumed.

Some time after my attention had been directed to these asymmetrical linings in the features of the insane I saw in the "British Medical Journal" (Nov. 15th, 1890) a short notice of a paper by Ch. Féré on "Les Signes Physiques des Hallucinations." He endeavours to show that "with the various hallucinations there may be special expressions which may become organically fixed and may thus serve as aids to diagnosis," and that in some cases there are special wrinkles formed about the eyes, the mouth, and nose, in direct relation with the habit of mind induced by chronic hallucinations, and in at least one case he found that when the hallucinations were on only one side the wrinkles were also one-sided.

It seems to me highly likely that these one-sided wrinkles which he refers to, have no other relation to the one-sided hallucinations than exists in the fact that whilst disorder of some of the higher centres in one half of the brain may produce hallucination of the senses, it produces also paralysis of certain movements, accompanying certain emotional states. Thus the second form of asymmetry, which I have just described in the woman (Sarah T.), and which was associated with pain in the *right* leg, and that in the woman (Rachel C.), which I am about to describe, associated with pain in the *left* leg, both seem to me to belong to the same category as Féré's case, of one-sided hallucination producing one-sided wrinkles. In his case there is a special sense impression from one side only, and in my two cases there are painful impressions from one side only, and all these cases are associated with certain facial expressions, which are asymmetrical, because there is some paralysis of the movements which are necessary to produce the appropriate expression associated usually with the mental states called forth in the one case by impressions from special sense-organs, and in the other by impressions from the general sensory nerves of the extremities.

The following is a brief abstract of the case of Rachel C., an epileptic, who had tubercular disease of the left hip joint, from which she suffered great pain, and her face habitually wore an expression of bodily suffering, expressed by slight drawing together of the eyebrows and depression of the angle of the mouth. If her bad leg was touched, or even reference made to it, her forehead assumed at once a very marked asymmetrical condition of its wrinkles, the inner end of the right eyebrow was elevated, whilst the inner end of the left was depressed, and at the same time a number of lines appeared in the middle of the forehead, running very obliquely from the left upwards across the middle line to the right; in fact the condition of asymmetry produced was very similar to the condition already described in the woman Sarah T.

Turning our attention now to asymmetry as displayed in the lower part of the face, I would remark that, in recent cases of acquired insanity, it is met with much less frequently. In 306 recent admissions it was noted only in 21 instances; and seven out of these 21 cases ($33\cdot3\%$) were congenitally weak-minded, and one was a general paralytic. There was weakness on the right side in 17 cases, and on the left in four only. It is curious to note the frequency with which one half of the upper lip is elevated in imbeciles. This one-sided action of the

levator labii superioris gives a snarling aspect to the face when it is pronounced; but we very often see it as the commencement of a smile in this class of cases. In the woman Sarah Camelia C., whose case is referred to on p. 199, this condition of one-sided contraction of the levator labii superioris was present. In her case it was an almost constant condition.

Fig. 1 is the photograph of an imbecile woman. She had well-marked signs of weakness in the left half of the occipitofrontalis, with certain emotional states. In repose her nasolabial folds were of almost equal depth, but when she smiled she drew the mouth markedly to the right, producing a deep dimple in the right cheek. She protrudes her tongue very much to the right. Her pupils are equal.

I have just recently met with a most interesting instance of asymmetry in a weak-minded woman, aged 31, subject to epilepsy. Her left eyebrow is more elevated and oblique than the right. This condition is very frequently seen, varying in intensity, flicking the hand rapidly before her eyes increases it, and one can plainly discern the contraction of the *right* corrugator only, and of left occipitofrontalis, principally the outer half. If she is pricked on either side of the face the asymmetry is increased. She is silly, fatuous, and unemotional, so that any reference to her condition here, etc., or any subject likely to distress her, fails to have any effect on the asymmetry. Pressure on her abdomen, which, she says, is painful, causes symmetrical contraction of both corrugators only. She protrudes her tongue markedly to the *left*. She can easily be made to grin, when she seems to elevate the upper lip fairly symmetrically, but produces a series of furrows distinctly marked down the left side of the nose, due to contraction of the left levator of the nostril. There are none on the right side. Her pupils are equal.

In 306 female patients admitted recently into this asylum I have kept a record of the frequency with which asymmetrical symptoms have been noted, and I find that, including inequality in the size of the pupils and lateral deviation of the tongue when protruded, we get evidence of weakness on one side in no less than 164 cases, or 49.4%, or in nearly half the cases admitted. This is a very high percentage when we take into consideration the fact that the symptoms produced by asymmetry in the actions of the facial muscles are very fugitive in recent cases, and only seen now and again with certain emotional states, which very possibly are not called forth during the examination of the patient. In these 306 cases

there was asymmetry of the facial muscles in 99 instances, or 32.0 per cent.; but in only 21 instances out of these 99 was the asymmetry noted in the lower parts of the face.

In the 78 cases of asymmetry in the upper part of the face, the weaker action was on the right side in 55 cases, and on the left in 27, or there was some paralysis of these movements in the right half of the cerebrum in 27, and in the left half in 55; and with the 21 instances of asymmetry in the lower part of the face the right hemisphere was weakened in four and the left in 17. I have already given the particulars regarding the pupils and tongue. In both these latter cases the inequality was much more equally distributed between the two sides than in the case of the facial muscles. I don't know why there should be this difference; but we must, in the case of the pupils, recollect that we have to take into consideration possible injury or disturbance of two mechanisms, one of which presides over their dilatation and the other their contraction.

That the highest nerve centres represent movements and not muscles is brought forcibly to our minds in observing these asymmetrical appearances. In any of these cases, when the muscles on one side show evidence of weakness, whilst contracting under the influence of certain emotions, or perhaps are incapable of contracting at all, it is only necessary to ask the patient to *voluntarily* frown or elevate the brows, as the case may be, to see that all evidence of one-sided weakness disappears altogether; both sides will now contract with equal force.

So far only evidence of paralysis affecting the muscles of the face has been considered. If it is suggested that these evidences should also appear in the bilaterally associated muscles of the trunk, I would point out that they do, but, as a rule, at a very much later period in the course of the disease; and the reason of this is obvious, for although all parts of the body are represented in the higher centres, yet they are not equally represented. Some, for example, those movements which are intimately associated with emotional and intellectual actions, are more directly and more strongly represented than the more fundamental movements which govern the equilibrium of the body, etc. These former actions represent a much higher level in the scale of evolution; they are by far the most specialized, and hence, in disease affecting parts of the highest level, it is only to be expected that we should, more frequently and earlier, get evidence of paralysis in movements which result from workings of the highest level.

When, however, the seat of the dissolution is more spread out in the first place, or in the course of the malady encroaches deeper and deeper, then we either get paralysis of the bilaterally associated movements of the trunk early, or, as is more often the case, it is a later phase of the disease, and is a symptom of most unfavourable import.

Although there is no doubt in my mind that the slouching attitude and shambling gait of demented and imbeciles, etc., are the effects of paralysis, still very often they lack the necessary one-sidedness to be able to demonstrate unmistakably loss of power, so for this reason I make only a passing mention of them here. But amongst the chronic cases in all asylums no one can fail to have been struck by the frequency with which the body inclines over to one or the other side, quite apart from cases which present post-mortem evidence of gross lesion to cause paralysis. We notice this in individuals who are yet, as regards years, in the prime of life—in men or women who are able to do a hard day's work, and who appear in good health and hearty, and, as far as I have observed, in these cases where there is also asymmetry of the muscles of expression, this asymmetry coincides with the asymmetry of the body; that is, the paralysis is on the same side in both cases.

The girl, Felicia Maria L., already alluded to, exhibited asymmetry in the trunk muscles fairly early in the course of her disease, but in her case there can be no doubt that the dissolution of the nervous system was extreme.

I have not been able to record the frequency with which this asymmetry in the action of the trunk muscles appears, but it is very common in chronic cases. To quote one—E. M., a man, aged about 50, employed daily in the engineers' shop, in good health and capable of doing a fair day's work, full of talk and gesticulation; his insanity is of many years' duration; his gait is shambling and awkward; his body drops very markedly to the right side, and he also exhibits weakness of the right occipito-frontalis muscles, especially marked with certain emotional states; his left naso-labial line is deeper than the right; he can not protrude his tongue; his pupils are equal.

These evidences of paralysis we notice getting more and more pronounced with the progress of the disease. The most marked permanent examples are to be seen in chronic insanity and dementia. Lines that have become customary through the contraction of certain muscles with certain mental states will,

if these states persist, or are frequently recalled, tend to become more marked and more permanently imprinted on the countenance.

I have endeavoured in the preceding pages to explain the mechanism of asymmetry with the idea that by carefully studying these symptoms of paralysis of movement, together with the pathological appearances of the brain in certain cases, we shall perhaps be enabled to identify the localities in the cortex whose integrity is necessary for the proper accomplishment of those physical changes which accompany certain emotional states, and which are eventually expressed in the form of muscular contraction.

NOTE.

Another very interesting sign of dissolution of expression often met with in the insane, is the square mouth. Darwin, in "The Expression of the Emotions" (p. 158), refers to this peculiar shape of mouth in infants and young children when crying, and gives photographs of instances which everyone who has observed babies when crying must have noticed. Now this is a form of facial expression which is never seen in the healthy adult, but is of frequent occurrence in idiots of mature age and in insane women.

I have met with a striking instance in the case of an idiot woman, aged 35, recently admitted into this asylum. She is very easily enraged, and then opens her mouth considerably, making an almost perfect oblong of it with the long diameter from side to side, showing both her upper and lower teeth. She weeps copiously at the same time, and screams and gasps for breath—sobs just like an infant. I am acquainted also with the case of an hysterical lady, who has every few months outbursts of excitement, when she has little or no control over her actions. One of the first symptoms which her relatives notice when she is about to have an attack is a peculiar action of her lips and mouth. When talking, she mouths excessively, elevates her upper lip, and protrudes it, and when enraged—a frequent occurrence, produced by the most trifling circumstances—her mouth assumes the square shape—exactly as figured in one of Darwin's babies—and she weeps. This case also exhibits well-marked asymmetry in forehead, pupils, and tongue, pointing to a condition of paralysis of the right side (left hemisphere). There is a series of curved lines on left half of the brow (and this eyebrow is slightly raised) whilst the right half of the brow is free from lines—is quite smooth. This condition is intensified with certain emotional states. The right pupil is the smaller. The tongue is protruded markedly to the right.

ERRATA: PART I., JAN. NO., "J.M.S."

p. 25, line 8 from top, *for* 22 *read* 23. p. 25, line 10 from top, *for* side opposite *read* same side as.

Epileptic Colonies. By C. THEODORE EWART, M.B., Assistant Medical Officer, Colney Hatch Asylum.

For some time past a considerable amount of attention has been directed, not only on the Continent, but also in the United States, to the provision for epileptics in separate cottages on the same estate, and this article has been written in the hope that it may lead to the early establishment of an "epileptic colony," which shall be a home for the homeless, an industrial institution for those to whom ordinary avenues of trade are shut, a hospital where cure or some alleviation shall be possible, and an educational centre for the training of the young, thus creating a prosperous, industrious, and thriving community to serve as a model for many other such yet to be founded in this country. The word "home," or "colony," is suggested as being free from the repulsiveness which might attach to the name "asylum," which would be somewhat of a misnomer.

In discussing this matter the subject will be divided into (a) epileptic insane, acute and chronic; (b) epileptic *not* insane; and (c) epileptic children.

(a) *Epileptic Insane, Acute and Chronic.*—In the first place the founding of epileptic homes would be recommended as the best plan whereby the overcrowding of asylums may, to a great extent, be relieved. Patients are accumulating fast, and the legitimate work of an asylum is hampered by a large number of chronic cases whose care involves a great amount of work, non-professional in character. With plainer homes, familiar occupations, and greater freedom they would not only be happier, but be a less expense to the ratepayers. Could they not be equally well looked after in homes specially built, and would there not be greater probabilities of a higher recovery rate? Instead of erecting mammoth asylums, a blot on the intelligence of the age, to which year after year wings are added, creating a "wilderness of lunatics," in which no man can possibly have a just conception of the pathological condition of his patients, why not place them in simple and inexpensive cottages, where they could under medical and State supervision be well and kindly looked after? Boarding out is becoming less attainable now, as there are fewer persons willing to receive patients, and should they even come forward and be found trustworthy, and with suitable rooms, probably not a third

of the patients could be safely bestowed in this manner, neither could they be sent to the insane wards of the work-house, for this would not solve the difficulty, as it would merely mean that these, to meet the growing numbers, would have to be enlarged.

All experience goes to prove that every country should have two types of asylums for its insane; one should be distinctly a hospital, and the other distinctly a home, situated in a country district, and surrounded by ample lands. The following remarks occur in the Presidential Address delivered by Dr. Yellowlees, in July, 1890:—"The accumulation of incurable cases is perhaps the greatest defect of all, for it causes or aggravates all the others. It increases administrative worries, adds to the routine medical work, covers up from observation the new and curable cases, and tends to make the institution a place of residence instead of a place of recovery; a shelter for wrecks instead of a place where vessels are refitted for service. . . . The history and circumstances of many of our increasing counties or districts, as regards provision for their pauper insane, are unfortunately similar. An asylum is built which seems more than sufficient for all the needs of the district, and for a time it can receive patients from other districts also. Gradually, as each year adds to its quota, the incurable cases accumulate, then the out-district patients are expelled, then a wing is added here, and another there . . . until it grows to twice or thrice its original size . . . and is less efficient as a place of cure, since individual treatment has become increasingly difficult, and the new cases are easily overlooked amid a multitude of incurables." The influence of a great mass of insane persons one upon the other is baneful, and can only be overcome by their association with those of sane mind, and the more healthful influences surrounding them in detached cottages, scattered over a large acreage, whereby also a classification upon a medical basis, almost unlimited in its sub-divisions, becomes possible, thus giving to medical superintendents the long-desired opportunity—practicable only when few patients are under one and the same roof—of *individualizing* the treatment.

(b) *Epileptic, not Insane.*—For the deaf, the blind, the dumb, the crippled, the idiots, the insane, for almost every other unfortunate class something has been done; alone, however, has the sufferer from epilepsy been left to work out his salvation for himself, often an outcast from his

family, thrust out from the schools, shunned by his fellows, refused industrial employment, left to idleness and ignorance, friendless, and drifting at last most likely to the workhouse or insane asylum, they are "not so much born into this world as damned into it." What is to be done with them? The civilized world would cry out if it were proposed to place them in a lethal chamber, but after all would it not be more merciful to kill them thus, instead of allowing them to live from day to day a life of misery and despair?

"A wretched soul, bruised with adversity,
We bid be quiet when we hear it cry;
But were we burden'd with like weight of pain,
As much, or more, we should ourselves complain."

Comedy of Errors.

It would be a noble action on the part of the London County Council—the most wealthy of all such bodies—to take the first steps in the establishment of these homes.

When we remember that a good many of these unfortunates are as brightly intelligent, as capable of being educated, as well adapted for industrial pursuits as the ordinary human being, the injustice done to the epileptic, whom we lock up with the insane, becomes apparent. What they require is industrial training, combined with medical supervision.

About 24 years ago Pastor von Bodelschwingh, a Lutheran clergyman, believed it was possible to create a refuge where these sufferers might be cured if curable, where they might have a comfortable home if recovery was impossible, where they could develop their mental faculties in the highest degree by acquiring trades or taking part in whatever occupations they might select, finally developing into a community of educated, industrious, and contented citizens. Actuated by these high motives he purchased a farm near Bielefeld (Westphalia), and, with 4 epileptics as a beginning, established a colony which gradually expanded, for in 1878 it contained 250 epileptics; in 1882, 556, and at the present time considerably over 1,100. During this period 2,407 have been received, and of these 156, or 6½ per cent., were discharged recovered, and 450 improved. The colony, with its gardens, farms, and cottages, is scattered over 320 acres of beautiful woodland and meadow. The chief features in the management are the system of decentralization, the division of the patients as much as is possible into small families residing in cottages, the separation of the sexes and of the feeble-minded from those whose mental faculties

are more or less normal. To secure a sufficient number of male and female nurses training schools have been established, and the authorities not only have a supply for their own use, but are enabled to send them to distant places on their errands of mercy.

Making and repairing wearing apparel, knitting, fancy work, the laundry, etc., furnish employment for the females, who are also to be seen attending to the gardens. The men have a still greater variety of occupations—the printing establishment, book-binding, illuminating picture cards, leather work, floriculture, agriculture, fruit raising, a bakery, joinery, foundry, tailor and boot shops, dairy, brickyard; in all there are over 30 different callings. All these employ many hands. An orchestra made up from their own ranks, a museum for the collection of stamps, coins, autographs, and specimens from the animal, vegetable, and mineral kingdoms; in fact there is everything to distract the minds of the patients from their unfortunate mental condition. Every workshop has its mattress ready for use, and there are plenty of willing hands always about to help those who may happen to have an epileptic seizure. The colony is a hospital for the cure of epileptics, a school for the education of epileptic children, an industrial institute for the adults, and an asylum for those who become demented. In the "Quiver" of September the Countess of Meath, in giving an interesting account of a visit she paid to this colony, says: "Though the men do occasionally hurt themselves in falling, they do not seem to suffer more serious injuries in these workshops, where dangerous tools are about, than if they were employed in an occupation not necessitating their use. And what a blessing must employment be to these poor fellows, giving them the means of forgetting their affliction, and making them realize that they too are able to take their part in the work going on in the world." Since the successful establishment of this colony several similar institutions for epileptics have sprung into existence on the Continent. Among these are Rotenburg in Hanover, Maria-hilf, near Munster, and Olpe in Westphalia, Alexandra-Kloster at Ailla-Chapelle, and Rath, near Düsseldorf for the Rhinish Province, Neinstedt-Thale for Saxony, Tabor, near Stettin, for Pomerania and Posen, Karlshof, near Rastenburg, for East and West Prussia, Potsdam for Brandenburg, Haarlem in Holland, Zürich in Switzerland.

The rapidity with which such a number of institutions

have been founded proves without a doubt that the demand for them is great, but so far as can be gathered there is no place of this nature in Great Britain, although probably there is not a workhouse or asylum but has a few or more epileptics in its wards.

(c) *Epileptic Children*.—Counties and boroughs are compelled by law to admit cases of idiocy and imbecility into workhouses and asylums, in the same way as lunatics. It is hardly, however, necessary to say that it is highly undesirable to mix this class with the insane in county asylums, or retain them in workhouse infirmaries. The Commissioners in Lunacy remark in their report for 1865:—"It has long been our opinion, as the result of extended experience and observation, that the association of idiot children with lunatics is very objectionable and injurious to them, and upon our visits to county asylums we have frequently suggested arrangements for their separate treatment and instruction. It is always to us a painful thing to see idiot children, whose mental faculties, physical powers, and habits are capable of much development and improvement, wandering about the wards of a lunatic asylum. The benefits to be derived, even in idiot cases apparently hopeless, from a distinctive system, and from persevering endeavours to develop the dormant powers, physical and intellectual, are now so carefully established that any argument upon the subject would be superfluous."

In the London district steps have been taken to remedy this sad state of affairs, and the result has been the erection of the fine asylum at Darenth, but chaos still exists in most of the counties. It seems a fact that idiots are considerably prone to the development of epilepsy, inasmuch as epilepsy so frequently appears in conjunction with idiocy, and as the latter is a primary affection one must suppose some bond to exist between these two maladies. In the case of the unteachable and adult epileptic idiots it would be wiser to have separate custodial institutions, but for the ordinary epileptic child there should be a school, where from the earliest age he would receive a technical and elementary education.

At Gheel, in Belgium, there is a colony of the insane, but it is not exclusively confined to epileptics. The district is about seven miles square, and 30 in circumference, containing a population of 11,000 sane and 1,760 insane, 200 of the latter being epileptics. There are nine villages, Gheel itself being the centre, with a population of 5,000 sane and 700

insane. A committee, consisting of five members, exercise a general supervision, and there are five physicians, two superintendents, each with an assistant medical officer, and a resident physician in the infirmary; also six attendants whose duty it is to visit each patient daily. The assistant medical officers visit each lunatic once a month, and the superintendents visit every case half-yearly. The cottagers either own or rent their houses, no family being allowed to receive more than two patients, and these are placed according to their social position and occupation. Every inhabitant of the commune exercises a general watchfulness, and notwithstanding the great liberty allowed, very few escapes take place, and there are hardly any accidents.

The influence of the insane population on the sane is said to be harmless. This probably, however, cannot be estimated correctly by statistics, just as the evils resulting from overcrowding in asylums cannot find expression in figures, but there can be no doubt that great benefit must be derived by the insane from the sanity which exists around them. Gheel is not perfect, and many improvements might be introduced. More attendants are required, more careful supervision needed, and the dual authority should be done away with. The Belgians have been so satisfied with the success of the place that they have planted another colony near Liège, which, although cordially disliked by the inhabitants at first, is now welcomed.

Great progress is also being made in America, and the writer is greatly indebted to Dr. Frederic Peterson, of the New York Hospital for the Nervous and Epileptic, for having so kindly furnished him with information as to the steps being taken there. In the report presented by the architect to the Commission appointed by the State of Ohio to prepare plans for the accommodation of the epileptic and epileptic insane many valuable suggestions are to be found. The site finally selected was within the corporate limits of the City of Gallipolis. The problem was to provide for all grades and ages of persons afflicted with epilepsy, and to erect buildings suitable to the wants of the different classes of its inmates. That the patients might enjoy as much fresh air and sunshine as possible the buildings have been so arranged that all rooms to be occupied will receive sunlight at some time on each day, and commodious verandahs and pavilions, where they may remain in the open air, but under cover, have been provided. General and special dining-rooms have been erected,

the whole arrangements being such as to give to the institution the home-like effect which is so desirable, and it is to be fire-proof throughout. As a great number of the patients would be in comparatively good health, it is suggested that only such buildings be erected at first as would be necessary to begin the work of the colony. Any additional buildings that may be required later could be erected by the patients at very little cost, and there would be no need to expend a large sum of money.

The complete asylum would contain 1,006 patients. To start on a good working basis it is recommended as necessary to erect

Two cottages, 46 patients each	...	...	92
Four " 64 " "	...	...	256
" " 50 " "	...	...	200
" " 50 " "	...	...	200
Two " 47 each (children)	...	...	94
" " 29 " (excited cases)	...	...	58
" " 32 " (infirm wards)	...	...	64
" " 21 " (hospital ward)	...	...	42
			<hr/>
	Total	...	1,006

The kitchen, bakery, and a temporary laundry, with proper provisions to answer for heating, ventilating, sewerage, etc.; all of these would accommodate more than 200 patients. The work of the patients, who would represent all callings and trades, could be utilized and methods of construction adopted, which, in a few years, would complete all the buildings. The administration would, for a time, be accommodated in one of the employés' buildings. A system of warming would be adopted, which, at first, would not require an extensive heating plant. The cottages first erected are each to be provided with a dining-room, so that it would not be necessary to build congregate dining-rooms. Lighting could be temporarily accomplished by using gas from the neighbouring city. Thus, the establishment of the institution could be completed at less than half the cost of any other building capable of containing an equal number of patients.

To summarize the main principles to be observed in the organization of such a colony:—

(1.) Land: To consist of at least 500 acres of farm and woodland, well adapted to agricultural and horticultural

pursuits. This land should be within easy access of a large city as giving a ready market for produce.

(2.) Small buildings: These to be arranged into separate divisions for the male and female patients; each of these divisions to make provision in separate cottages for the demented, the convalescents, the school children, the workers, and private patients of the higher classes.

(3.) Every patient, without exception, should be under medical care, and there should be a medical man for every 200 patients.

(4.) An educational building for epileptic children.

(5.) Workshops for adult epileptics, farm buildings, dairy, etc.

(6.) A special laboratory for the study of epilepsy by a skilled pathologist.

Two arguments have been advanced against having two types of asylums. The first is that "there would be a sameness of occupation, a want of hope, and an absence of object," which would drive a sane man into insanity in a very short time. This argument would not be tenable if the scheme advocated was adopted, for in the epileptic colony there would neither be lack of occupation nor absence of hope.

The second argument is chiefly a financial one, viz., that by drafting off the chronic cases it would be necessary to introduce a larger number of sane workmen and workwomen. This is true, but the first duty of a committee is the welfare of the patients, not the saving of money, and the idea that the chronic are incurable must be protested against. By separating the acute from the chronic, each class has a better chance of recovering more rapidly, and the time of lodgment being shorter, there would be a much lessened cost, which would go far towards paying for the extra workpeople. Our attention should be steadily directed to the patients whose mind appears almost gone, for among this class there is a wide sphere of labour, from which results will occasionally flow that will amply reward anyone who engages in the work.

The outdoor work which has been recommended would neither be a novelty nor a hardship, and through it each patient would not only help to pay for his care and treatment, but would work out his own cure, for manual labour has long been recognized as a therapeutic agent of the highest efficiency. The want of sleep, from which so many patients suffer and which drugs fail to influence, soon yields

to healthy fatigue ; gloomy thoughts and brooding cares are dismissed by its genial working. As to the risks incidental to the above scheme, there is no great chance of any serious casualty occurring if there is a sufficient staff of trustworthy attendants specially trained for their work and under the strictest medical supervision.

It has also been said that, as those afflicted with epilepsy deteriorate so rapidly mentally, it is hardly worth while taking steps to ameliorate their condition. The frequent recurrence of epileptic fits for many years certainly tends in some degree to impair the mental faculties, and most epileptics do become demented if they live long enough, but this may be said of any form of insanity. That epilepsy is compatible with great mental power we see proved in the lives of Julius Cæsar and Mahomet, who were both said to suffer from this affliction. Epileptic fits may continue for years with scarcely any appreciable mental change, and in asylums a large number may remain for very many years with the intellect but little impaired, and then only at those periods when they have epileptic attacks ; in the interval they are rational, coherent, intelligent, bright, and cheerful. Dr. Bevan Lewis, medical superintendent of the West Riding Asylum, Wakefield, says :—“No emotional or intellectual disturbance can be traced by the strictest scrutiny, and their conduct, consistent in every respect, enables them to take up any employment for which they are fitted and carry on responsible functions in various departments. Why are they then inmates of an asylum ? Because their epileptic seizures are preceded or followed by such transient mental aberration, or by such reductions as render them at these times a risk to themselves or others. . . . It is a well recognized fact, which the student must bear carefully in mind, that certain forms of epilepsy, with frequent fits, may last for many years, and yet the mental faculties remain, in the interval between the successive seizures, intact.” It must be confessed that some do deteriorate rapidly mentally, causing enfeebled intellectual operations, with an increase of the lower animal instincts, while there are others who are violent, passionate, and uncontrollable. This impulsive temperament produces a large crop of criminals ; the individual, at the moment of the evil impulse, being incapable of bringing into action the contrary impulse with sufficient force to neutralize the anterior one, the antagonistic states of consciousness are developed *successively* instead of simultaneously.

During recent years the close connection between epilepsy and crime has frequently been shown, and, in dealing with this criminality, we have to remember that, so long as the conditions of life render the prison a desirable and welcome shelter, so long shall we have criminals. Many an epileptic is on the borders of vagabondage, and the vagabond is on the borders of crime.

The school of the colony should be founded on the type of our public schools, Harrow, for instance. A main building containing the class-rooms, around this different houses tenanted by the masters and their pupils, with wide stretches of ground for tennis, cricket, football, etc., the boys having their meals with the master and the female members of his family, thus finding, to some extent, that home-life, the value of which is so inestimable that Renan says:—"The professor cannot teach that purity and refinement of conscience which is the basis of all solid morality, that bloom of sentiment which some day will be the great charm of the man, that mental subtlety with its almost imperceptible shades—where, then, can the child and young man learn all these? In books, in lessons, if due attention be paid to them, in texts learned by heart? Not at all. These things are learned in the atmosphere in which we live, from our social environment; they are learned in domestic life and nowhere else." By this method, I believe we should get much better results than by the boarding system of massing together in one building a number of children, a plan unhealthy alike for mind and body. M. Sainte-Claire Deville, in calling the attention of the Académie des Sciences Morales et Politiques, shows that whenever you bring into domestic restraint animals of the same sex, especially the male, there is a great perversion of the reproductive instincts; when, however, they are kept in separate flocks, the normal characteristics of the animal dominate. What happens in a flock happens also in a collection of male epileptic children. I cannot believe in the theory that education is powerless to modify the character of the individual; rather do I believe that, by showing a child how to live a good life, you will persuade him that he not only *can*, but that he *ought*. Education, although it would not prevent some epileptic children from becoming criminals, would, if it was an education as much physical and moral as intellectual, give them a better chance of taking a good part in social life. "The proportion of criminals who are acquainted with any

trade still remains very small ; the proportion of criminals engaged in their trade at the time of their crime is smaller still. We seem to be approaching a point at which it will become obvious that every citizen must be educated to perform some useful social function. In the interests of society, he must be able to earn his living by that function" (Havelock Ellis). If man sometimes has the instincts of a tiger, he has also those of the dog and the sheep, and all this makes a mixture which is not fundamentally bad, and if he is kept thoroughly well-nourished, not only in his framework and muscles, but also in his nervous system, the result will be a well-balanced organism. Dr. Dolan eloquently says :— "If we grasp the central truth that the child is father to the man, we are masters of the future. The impressions and surroundings of childhood mould character. The slums, the alleys, the evil example of parents, the surroundings of dirt, sloth, idleness, and dissipation, the absence of restraint, the want of religious and educational influences, are responsible for crime and criminals. Collectively and individually, the responsibility rests upon man ; he cannot shelve it by throwing the blame on heredity or upon the Creator. It is for us to cast our ægis over childhood and boyhood, it is for us to fully accept the debt and responsibility we owe to epileptic children," and by doing this we shall, by raising the souls of the citizens, rather than the roofs of asylums, render the greatest service to the State.

*A Visit to some Foreign Asylums.** By FREDERICK NEEDHAM, M.D.

I feel that an apology is due from me for the introduction of this paper, which is really unworthy of the name, and only purports to be a collection of rough notes put together at the times and in the places mentioned. As such I venture to offer them to you.

Being in Venice in the year 1884, I took a gondola one sunny morning to the Island of San Servilio, in the Adriatic, and visited the asylum for insane men, which occupies that island.

I found the doctor in charge in the person of a courteous

* Paper read at the Psychology Section of the British Medical Association, Bournemouth, 1st August, 1891.

monk, who gave me a pleasant welcome, and readily agreed to show me whatever I wished to see in the asylum.

We started from his office, which contained various implements of his craft, such as instruments for taking measurements of heads, photographic apparatuses, and photographs in great profusion. He showed me his well-kept case books, which seemed to contain an accurate record of each case, and which did contain a photograph of each patient on admission and discharge. I also saw his excellent dispensary, and a well-fitted pathological laboratory.

The building, which is solidly built and whitewashed throughout, is situated in a good space of walled ground, which contains airing courts and a kitchen garden, wherein are grown all the vegetables for the use of the establishment, the labour being chiefly that of the patients. It contains day-rooms, dormitories, and single rooms, an infirmary block, and a bakehouse, a laundry, with the usual drying closet, and other machinery of a simple kind, and workshops for mattress-making, blacksmiths, and carpenters.

The day-rooms, which were spacious and airy, were most of them devoid of more than the simplest furniture and of all attempt at decoration, and were crowded with patients, many of whom were restless, turbulent, and exceedingly noisy. At least 60 of them were restrained by means of leather hand-cuffs, attached by chains to leather waist-belts. In the convalescent wards were a few maps and small pictures, but there were no books or periodicals, or other means of amusement.

The dormitories were of ample size, and afforded 1,400 cubic feet of space to each bed. The bedsteads were of iron, and the comfortable beds of straw and wool. The bedding was clean and sufficient. There were about 600 patients, and their clothing was ragged and untidy. Sinks were provided for washing purposes. There were no basins or other toilet requisites. All the water was supplied from an artesian well, and that for drinking purposes was filtered. The water closets were latrines on the usual Italian principle, and they were neither more nor less offensive than those which are provided for the public outside. There was no provision for bathing, and soap and water generally appeared to be in little use throughout the establishment. The infirmary block was particularly odorous of urine and other strong-smelling human products.

In one room I saw three patients in a state of acute mania,

strapped in beds close together, swearing at each other with great vehemence. There were numerous broken limbs and black eyes among the patients, and while there was a free circulation of air, and no great want of cleanliness or neatness in the rooms, there were, so far as I could judge, no organized efforts made at classification or the cure of mental disease by modern scientific methods.

In the year 1887, being in Spain, I took the opportunity of visiting the asylum for insane persons of both sexes, situated at Granada, in a large building erected by Ferdinand and Isabella, wherein are also located a foundling hospital and a poor relief office, from whence doles of food and money were being handed, as I passed, to a most ragged and abject crowd of mendicants.

I was pleasantly received and taken round by the resident clerical director, but there was really not much to see. There was no resident doctor, and the director told me that very little effort was made to cure the patients. "The good God was their best friend," he said.

The only obvious means of treatment which presented itself was in the form of a newly-erected bath-house, which consisted of a chamber lined with zinc, and containing a low wooden platform, on to which could be made to play, by means of an ordinary fire hose, with great force a *douche* and shower of water. To the newness and apparent want of use of this apparatus I attributed, to some extent, the fact that the eighty patients whom I saw seemed generally happy and contented, and upon good terms with their attendants. Most of them were enjoying the sunshine out of doors in the small walled airing courts, each of which had in it a small streamlet of running water. They seemed happy enough, and their only solicitation was for money wherewith to purchase cigarettes, the very meat and drink of a Spaniard.

None of them were restrained, and none seemed to be in cellular confinement. They were generally quiet and free from excitement.

The day rooms and dormitories were simple, plain, and undecorated. Two of the dormitories contained about 30 beds each, and there were a number of very small single rooms, not more than six feet square, which contained a small bedstead and mattress, and in some cases a chair. Everything was fairly clean. I saw no appliances for ablution, but the patients were as well clothed and as clean

as most sane persons of their class in Spain, which is not saying much, for they are not a cleanly people.

I noticed that the male attendants had keys, which admitted them equally to their own wards and to those of the female patients.

The means of amusement were conspicuous by their entire absence. There was no single picture, or book, or paper, or game of any kind to be seen anywhere, and the only means of occupation were comprised in a garden about 30 feet square, and an extremely diminutive whitesmith's shop. I must say, however, that no one seemed to be regretting the absence of employment. The Spaniard is an admirable idler, and to lie on the ground in the sun, with simple food at intervals, an occasional cigarette, and nothing to do, was probably no unhappy life from their point of view—climatic and constitutional.

Before leaving Spain I took the opportunity of paying a passing visit to the asylum at Gibraltar, as to which there is less to be said than of that at Granada. The building is handsome, quite modern, and stands on a height overlooking the bay. It is managed by a lay superintendent under the control of the magistrates and Governor General. All the rooms were bright, cheerful, and well furnished. There were some pictures and books, and the furniture was substantial and comfortable.

The whole place was scrupulously clean. All the patients were out of doors, but there were only twenty of them altogether, most of them imbecile or demented.

There was no case in which restraint or seclusion could properly have been used; as a matter of fact, no one was either restrained or secluded, but I found that the camisole was used upon occasions. The whole place was well kept, and, I thought, creditable to those in authority.

The last foreign asylum which I visited was that of San Spirito at Rome. I was there in April of the present year, and spent a long Sunday afternoon in the company of a very pleasant and intelligent Benedictine monk, who acted as my conductor round the establishment. To reach it you cross the Tiber and enter that part of the city which is called the Lungara. Here stands an enormous hospital, with accommodation for nearly 2,000 beds, built by Pope Pius IX., and occupying a part of the space is the asylum, with its 600 inmates of all ranks, classes, and conditions.

The situation of its grounds, which are many acres in

extent, and of some of its buildings, is most lovely, overlooking Rome and the Campagna, and as high as the roof of the nave of St. Peter's.

The patients are distributed over a main building, which is reached by a series of ascending corridors, and six or seven detached houses in different parts of the grounds.

Before making this ascent I was received in the waiting-room, just off the street, where numbers of the poorer patients were being visited by their friends.

Fruit and nut dealers seemed also to be allowed free access to vend their wares, and to be doing quite a brisk business. All the proceedings here seemed to be free and easy, and gave one a good impression as to the kindly *régime* of the establishment generally.

The buildings are well constructed and arranged to suit various classes of patients, who are accommodated according to their mental conditions and rates of payment.

Some who pay largely are provided with suites of handsome rooms in detached villas, well furnished, and with attempts at decoration. Then there is a building for quiet paupers, another for epileptics, a third for idiot children, and one for noisy, excitable, and destructive patients. Very few patients were in the house, for it was a bright, hot, sunny day. Most of them were either in the general grounds or in pleasant, but comparatively small, airing courts. Some of them were being visited by their friends, who were sitting about in the grounds with them. No one was at work, of course, but I saw carpenters', basket and mat-makers' and upholsterers' shops, and a school for the idiot children. The day-rooms and dormitories were large and airy, and the whole place exceedingly clean and free from smell. There were very few single rooms. There was a colour room, into the skylight of which slides of red and blue glass were able to be inserted, which I understood had been used with benefit. There seemed to be scarcely any bath-rooms. There were inspection openings in all the bedroom doors.

The beds and bedding were ample and comfortable. The attendants sleep in rooms open to the dormitories. They did not seem to be numerous in proportion to the number of patients.

I saw no books or papers about anywhere, and very few pictures. There was a general air of quiet contentment and kind usage. I saw no black eyes or other marks of

injury. The airing grounds for the noisy and excited were crowded, and the brother assured me that there was much noise and excitement indoors in wet weather, when the patients could not get out.

Restraint and seclusion are evidently in free use. In one dormitory I saw thirteen excited patients tied in bed with linen bandages. They were not specially noisy, nor did there appear to be any sufficient reason for their restraint and enforced segregation. In an adjoining room one patient was tied on to a night commode, which was surmounted by a large waterproof cushion, with a hole in the centre; and there were, in the same room, four more of the same appliances, which, however, were then vacant.

It seemed to be, in the opinion of my guide, a quite unobjectionable and certainly efficacious way of getting rid of some of the inconveniences of faulty habits. There were a few men in the airing grounds who were restrained by means of waist and wrist straps.

I saw some of the suppers laid. The food seemed excellent, and to each patient was allotted a small tin of good red wine.

The whole place was managed by two resident physicians and a colony of sisters and brethren of a religious order, and I was much struck during my visit by the numerous signs everywhere of the kindness and general intelligence with which the institution was conducted. It presented a remarkable and a very pleasing contrast to the rough-and-ready system which I saw in operation in Venice seven years before, and which I should be glad to learn had participated in the tide of improvement which has of late years been sweeping over the asylums of all civilized countries.

Observations upon "Katatonia." By EDWIN GOODALL, M.D.
Lond., B.S., M.R.C.P., Pathologist and Assistant
Medical Officer, West Riding Asylum, Wakefield.

Eighteen years have passed since Kahlbaum published his memoir* upon this subject, yet it may be said that the claims of katatonia to be regarded as a distinct disorder are still unsettled. This prolonged period has not, however, been marked by phases of belief, such as are often exhibited subsequent to the publication of accounts of new disorders,

* "Klinische Abhandlungen ueber Psychische Krankheiten," von Dr. Karl Kahlbaum. 1 Heft, Die Katatonie. Berlin, 1874.

or follow proposals to rename and reclassify disorders already known; at first enthusiastically believed in and subscribed to, these fall, at a later stage, upon evil days of neglect, and even oblivion. But with katatonia it has been otherwise. At no time does there appear to have been any widespread enthusiasm in alienist circles about this affection; at most it seems to have appealed to individuals, who have expressed merely isolated views, the statement of which has led to nothing more than limited controversy. Probably it may be said with justice that katatonia, for the majority of medical men in asylums in this country (at any rate), was but a name up to quite recent times; having a doubtful significance for some, for many quite without meaning. Granting that this remark is true, the truth brings with it no surprise, for the disorder referred to meets with scant notice in English text-books. This may be said without casting any reflection upon these works, which, of course, are not bound to treat of disorders not universally recognized.

Of late years, however, a full account of katatonia has appeared in English guise,* and we may hope that it will stimulate inquiry in this country into the claims put forward on behalf of an affection hitherto but little studied. For enlightenment upon the subject, one looks especially to those connected with institutions for the insane of the upper and upper-middle classes, amongst whom melancholia attonita and anergic stupor with cataleptic conditions seem chiefly to occur. The same remark applies to these conditions when cyclic or accompanied by spasmodic states. Kahlbaum records that, amongst his cases, were many teachers and theologians.

In considering the ætiology of the disorder, he remarks that katatonia is probably to be found in all countries, just as *M. attonita* is. One is inclined to doubt whether its frequency of occurrence in this country is equal to that in continental countries, such as France, Austria-Hungary, and Germany, for hysteria—probably far less common here than there—seems to form a prominent feature of the disorder as described by Kahlbaum. This, at any rate, is the impression left upon the writer after perusal of the accounts; and evidently MM. Séglas and Chaslin have come to much the

* "Katatonia," by MM. T. Séglas and Ph. Chaslin; "Brain," Vol. xii. (apparently a translation of an article by these authors, originally published in "Archiv. de Neurolog.," 1888, Num. 44-46). The same volume contains a paper by Dr. Julius Mickle, with case. In the article first-named the views of Kahlbaum are stated at some length. For a later German memoir than Kahlbaum's, see C. Neisser, "Ueber die Katatonie," 1887.

same opinion. Hammond (quoted by these writers) says that one of the first cases of katatonia is recorded in the reports of Bethlem Hospital; one would like very much to know whether or not this is the name actually employed by the reporter? We should rather doubt it. The statement probably originated in the circumstance that Dr. Hack Tuke reported several cases of mental stupor occurring in this hospital to the International Congress of 1881, and stated that Kahlbaum approached such cases from the motor side, and spoke of them as "katatonia." However this may be, it is certain that not more than two and a half years ago the student at Bethlem heard nothing of the affection under consideration, although he was perfectly familiar with numerous cases closely resembling and apparently identical with those claimed in certain quarters as instances of katatonia. The simple fact is that the cases were described under other names (as mental stupor), and it did not seem necessary to coin a generic term to cover them all. A Greek name is often a mere cloak for the love of novelty.

In one respect, however, the cases first-mentioned differed notably from those of Kahlbaum—the symptom known by the term "verbigeration"* was not observed. Now this, according to the authority mentioned, is peculiar to katatonia, and, therefore, its presence or absence is important from a diagnostic point of view. Personally (with an experience of about three years), I can profess no acquaintance with verbigeration as described by Kahlbaum, and later by his pupil Neisser, and should be glad to learn what, if any, value is attached to this symptom by those who have had larger experience. At present I find it difficult to believe that it is met with at all commonly in this country; yet cases which—it seems probable—would be unhesitatingly included under katatonia by its advocates are common enough here, especially in certain classes of insane society. Granting that some of these are instances in which the disorder is not marked by the presence of this particular symptom of verbigeration, many still remain over, of which it is necessary to give an account. If these are not examples of katatonia, that term comes to have a restricted use only, with which it is impossible to suppose, after reading his description, that its proposer would be satisfied. If, on the other hand, they are, then verbigeration is not the characteristic symptom it is said to be, or, at most, is a

* Probably the best account of verbigeration is that by Clemens Neisser, "Allgem. Zeitschr. f. Psychiatrie." 46 Band, 2 and 3 Heft, 1889.

peculiarity of continental katatonia. Indeed, it might be even more precisely localized, for we find French writers denying that verbigeration is characteristic of any affection whatsoever.

It is not my intention to go into the symptomatology of katatonia, seeing that there exists already a fund of information upon the subject, which, furthermore, is far too comprehensive to be dealt with in a short paper. For katatonia includes the chief forms assumed by diseases of the mind, and, in addition, a motley group of alleged "spasmodic" conditions. The systematic disturbances underlying these clinical manifestations are comprehensive, if we may judge from the statements of writers. One may be allowed to remark upon the singularly vague nature of the former. Dr. Mickle,* in the early part of his article on katatonia, speaks of a "large, loosely-formed" group of cases (amongst which occur the katatonic), in which there exists "not only a vaso-motor neurosis, with its 'fluxions,' vaso-pareses, and cardiac disturbance, but a motor-tension neurosis, or muscular status attonitus. . . ." The cardiac disturbance and the muscular status attonitus would, doubtless, be open to observation, but might not the vaso-motor neurosis, the "fluxions" and the vaso-pareses easily escape detection? It seems probable that instances might occur in which one would experience hesitation in diagnosing these conditions. But it is, doubtless, possible to have a clear enough conception of katatonia, although one's belief in the existence of the physical states associated with it is unsettled.

After bringing to notice the complex of symptoms which he proposes to designate by a special name, Kahlbaum devotes a chapter to the ætiology of katatonia, and therein deals with its "epidemic and endemic occurrence." The "convulsionnaires" of St. Médard, whom we have been taught to regard as examples of hysteria, catalepsy, epilepsy, and chorea in turn, are now claimed—many of them, at least—as cases of katatonia; it is admitted that amongst them were instances of other disorders such as those specified. The preaching epidemic of Sweden is especially referred to as illustrating katatonia on a large scale, preaching being, in this instance (according to Kahlbaum), synonymous with verbigeration. But mere expressions of opinion of this kind in regard to past events are not calculated to strengthen the case for katatonia.

* *Op. cit.*

A long chapter is devoted by Kahlbaum to the consideration of the pathological anatomy of the disorder named by him. The author made, he tells us, a large number of post-mortem examinations, but the pathological appearances of seven cases only are recorded. I can find no reference to the other cases, although it would appear important that we should know in how many of them and in what degree these appearances (described as characteristic) occurred. With such information, we should be enabled to form a more correct estimate of the significance of the diseased conditions described in the seven cases. Even if these are to be considered as average ones—and there is no statement to this effect—we are still without adequate means for arriving at definite conclusions.

I may now specify the morbid conditions of the brain and its membranes, given by Kahlbaum as characteristic of katatonia, making a general comparison—after the manner of the text—between them and the morbid states of the same parts in general paralysis of the insane. In katatonia the appearances indicative of congestion (*Stauungerscheinungen*) are transient and of slight degree, and the “hyperplasia of the first phase of the process is insignificant.” The atrophy or retraction of tissue, marking the second phase, appears late, and the dilatation of the ventricles, associated with this, is not considerable. In general paralysis, hyperæmia and exudation are very prominent; atrophy is not long delayed, and is frequently accompanied by notable dilatation of the ventricles. Again, in katatonia the arachnoid is more particularly affected at the base of the brain, opacity and thickening of the membrane being very evident there, especially in the portions of it extending from the pons to the chiasma and frontal lobes, and from the temporo-sphenoidal to the frontal lobes. In association with the slight affection of the arachnoid over the upper surface of the hemispheres is the insignificant development of the Pacchionian bodies and epithelium granulations of Meyer (outer surface of arachnoid). In general paralysis, on the contrary, the arachnoid is affected principally over the convexity of the hemispheres. Pacchionian bodies and Meyer’s granulations, if not individually much enlarged (the former are often of great size), are at any rate extensively developed; the latter may be seen over the whole of the convex surface.

With a view to establishing what he believes to be a specially-characteristic pathological feature of katatonia—

the state of the basal arachnoid—Kahlbaum gives the post-mortem appearances in three cases of general paralysis for comparison with the katatonic cases. So far as it goes, the comparison is in favour of his belief. But I think we may fairly expect more evidence in support of a contention of this kind; at present we are left with the record of seven cases of katatonia, three of general paralysis, and a general impression concerning the post-mortem appearances in the latter disease (to the effect that the arachnoid is principally affected on the upper aspect of the brain in general paralysis). That this is very likely correct I do not gainsay, but it is scarcely worth while treating of probabilities when facts are forthcoming.

A question of some interest is the following: Do opportunities often occur in this country for making post-mortem examinations in cases which might fairly be classed under so-called katatonia? Do the cases, in fact, often die? Kahlbaum says that the prognosis in this disorder is "not bad;" this applies both to recovery and maintenance of life. The inference seems to be that not a few cases terminate fatally. My own impression is to the effect that here we rarely see a fatal issue in cases of this kind; but a more important question is that relating to the cause of death. According to Kahlbaum, katatonia is an affection which often causes death without the interposition of other disorders; we need not even fall back upon exhaustion from refusal of food, or an extreme degree of excitement (two possibilities mentioned by the author quoted) to account for death; it is simply the final stage—as it were, "the most extreme development"—of the condition of stupor, the outcome, in short, of the disease. It would be instructive to hear the experience of English observers in regard to this matter. Amongst the cases of melancholia attonita, of stupor with catalepsy, of mania, alternating with a confusional state, stupor, and depression, of "cyclic" disorders, more or less perfect in type; of, in short, complex-mental disturbance coming under the head "katatonia"—amongst these cases, what proportion terminates fatally directly, without intervention of complications? The proportion, I am strongly disposed to believe, will be found to be a very small one, and it will be surprising if inquiry does not show that a large majority of such cases succumb to intercurrent ~~maradical~~ ^{maradical}, especially pulmonary phthisis. It may be noted that Kahlbaum himself speaks of the "extraordinarily close

relationship of tuberculosis to katatonia," and in five out of seven of the cases chosen for record by him the lungs were in different stages of tubercular disease, for the most part very advanced. Clearly, these cases cannot be cited as instances in which katatonia directly caused death, nor do I mean to convey that the author brings them forward as such; but, at any rate, in view of the statement quoted above—as to the relationship between tuberculosis and katatonia—and the fact that five out of seven recorded cases had phthisis, one is justified in entertaining some doubt as to the actual cause of death in the many unrecorded fatal cases, which include those in which death was ascribed directly to katatonia.

Amongst the numerous points in the pathological anatomy of cases coming under the name "katatonia," for the determination of which further experience is necessary, there is one point deserving particular attention, to wit, the state of the cerebral area concerned with speech (outgoing language); with this the condition of the superjacent membranes would, of course, be investigated. This point is of special interest in connection with the symptoms of verberation and dumbness. Kahlbaum has drawn attention to the diseased state of the arachnoid in the neighbourhood of the Sylvian fissure, and of the second and third frontal gyri, and has suggested a connection between this pathological appearance and the symptoms referred to.*

The microscopical examination of the cortex cerebri in cases of katatonia did not furnish Kahlbaum with definite results, but at the date of the memoir under consideration (1874) he had no doubt that the distinctive character of the disease would be established, even histologically, at a later period. I am not aware that any results, based upon microscopical examination, have been obtained since. But this is not the direction in which one is disposed, at the present time, to look for evidence of the distinctive nature of this disorder; the evidence still required is of a clinical kind—such, at least, is my opinion. It is, I think, desirable that the claims put forward on behalf of katatonia should be examined and settled, in order that the term may either be abolished or included in our nosology.

* In a recent number of "Brain"—not at present in my possession—Dr. Mickle gives very fully the pathological appearances in his case, described in Vol. xii. of the same Journal.

CLINICAL NOTES AND CASES.

The Clinical History of Two Cases of Ataxic Paraplegia. By F. ST. JOHN BULLEN, Assistant Medical Officer, West Riding Asylum, Wakefield.

H. P. B., formerly manager of printing works, æt. 60. Admitted (transfer) 31st July, 1891.

Mentally, slight chronic melancholia, without delusions. When first sent to an asylum, three years ago, had symptoms of mania.

Family history.—Father was a fast liver; gouty. A brother died of apoplexy. Denies neuroses in other members of his family.

Personal history.—Was in the habit of drinking wine and spirits too often and too freely for many years. Has had four attacks of gout in the hands. Six months before his symptoms showed themselves, he was accustomed to take a morning plunge in one of the Hampstead ponds, and often had to walk bare-footed through snow to the water's edge, and to break the ice before bathing. Also has suffered business losses and domestic troubles. Denies syphilis. He first noticed symptoms of his disorder eight years ago. When rising from a chair he felt propelled forwards, and would find himself perhaps half-way across the room before recovering his balance; at times, too, he was as if intoxicated. Going upstairs or getting into an omnibus became difficult, not because of want of power in his legs, but from uncertainty in placing them; and he got tired very easily. The symptoms belonging to the lower extremities reached in two years' time about their present intensity, progressing very gradually during that period.

Within the last two years has experienced occasionally "drawing-up" sensations in the right hand; there is, however, no actual contraction. This member, too, gets very soon tired, and his writing has deteriorated. The ordinary movements are yet fairly performed. Has, and has had for an indefinite period, tingling and numbness in feet; he knows that sensation there is not so good as formerly. The bare floor-boards feel rather soft and carpet-like, and the difference between standing on carpet and floor is poorly perceived.

Sight in the right eye began to fail seven years ago, and in a little over a year he had become practically blind in that eye. It would appear that he had iritis preceding the vision-changes. Had worn spectacles, however, for some years previously, probably for myopia.

Bladder troubles came on as the earliest symptoms showed themselves. Now he needs to micturate frequently, or his urine would escape from him. There has been recently some laxity of the anal sphincter.

Physical condition.—Is fairly nourished; musculature, moderately developed, retains tone in the upper limbs, rather lax in the lower. There is, however, a tendency to rigidity in the legs which somewhat conceals this. The muscular power is diminished. In the lower extremities the muscles of the hip seem weakest, and there

is very little power of resistance to either flexion or extension, especially the former. This resistance is relatively greater in the knee, and greatest in the ankle. No noticeable difference is found between the two legs. When the lower limbs are stretched out in bed any attempted movement throws them into a spastic condition; thus one ankle-clonus is tried for, the foot becomes rigidly fixed in a position of nearly complete extension, and with the patellar-tap the whole lower extremity becomes stiff. Slight clonic contractions in the recti and vasti externi muscles are elicited by traction on the patella, which action also produces pain in the muscles. No direct or reflected contraction obtained by tapping the muscles, nor are these tender when squeezed. There is slight tenderness along the shins.

When the feet are dependent in position, an exaggerated knee-jerk is obtained, and two or three to-and-fro movements of the limb follow. The ankle becomes rigid, just as it did when patient was recumbent. The plantar reflex is acute when evoked by sharp points; tickling with the finger-tips fails to produce it. No cremasteric, abdominal, or intercostal reflexes. Integument of feet rather bluish, and the feet are cold. On the dorsal surfaces of these he cannot distinguish two points 4 c.m. apart; the same with the plantar surfaces; on the toes at less than 2 c.m. He has even to reflect some time before deciding that two contiguous toes are being touched. When one toe only is touched he can name this correctly. Two points, one sharp, the other blunt, applied to dorsum of foot are not distinguished as having different qualities. No apparent delay in sensory transmissions. No analgesia and no loss of temperature-sensibility. When asked to place his legs in various positions without the aid of vision succeeds fairly well, any slight failure being probably due to his want of control over the muscles.

Patient finds it almost impossible to get into the erect posture without some support, nor can he walk except with the aid of a stick. Once upright a certain amount of rigidity sets in, and maintains his legs straight. In walking he bends slightly forward, advances a leg sharply, jerkily, and stiffly, keeping the foot at right angles to the leg, and tending to plant the heel rather forcibly down. The other foot is not taken from the ground until the first is securely placed. Without a stick he sways immediately the one leg becomes the basis of support, and would fall. He totters when stood with feet approximated and eyelids closed; also when rising from and sitting down on a chair under like conditions. During progression there is neither "kick-out" of the legs nor scraping along the ground.

There is no obvious inco-ordination in the movements of the upper extremities. Muscular power is much diminished. Dynamometer gives the following:—

Right hand, 45, with swing, 58.

Left hand, 30.

There is no defect in speech, and movements of tongue, lips and

face are normally executed. No tremors. Patient says that his taste is not affected. As regards smell, fails to recognize asafœtida (although he is sensible of its unpleasant odour) and snuff. Common sensibility of nasal mucous membrane seems intact. Hearing is acute.

External ocular muscles act well. The condition of the pupils is now:—Right pupil, 1·5 m.m.; left ditto, 2·5 m.m. in the shade. Both contract very readily in the light (and in diffuse sunlight have recently been noted as pin-hole), but neither dilate when yet more shaded. The left pupil is circular, and remains so, whatever be its size; the right is irregular, and when dilated by atropine assumes an elliptical shape, with the lower and outer part dragged slightly downwards and outwards. Here, too, the free edge of the iris appears a little thickened, discoloured, and turned in.

The sight of the right eye is nearly completely gone; he is unconscious of the glare from the ophthalmoscopic mirror; cannot distinguish anything but a dim shadow when approached by a person. Vision in the left eye is failing. He can read with only moderate ease 16 Jaeger type, and with difficulty makes out No. 14. Smaller than this he cannot decipher. Atropine dropped into the eyes produces fair dilatation of left pupil, though far from complete. In the right eye the pupil hardly dilates at all; pin-hole contraction with a bright light is, however, prevented.

My friend, Dr. E. Goodall, makes the following report after ophthalmoscopic examination:—

“Right fundus presents irregular masses of black pigment of considerable size, united by threads of the same, a reticular appearance resulting. The pigment overlies the greater part of the disc, only a small portion of which—above the lower edge—is visible. This showed no signs of recent inflammation, nor could atrophy be diagnosed with certainty, owing to the obscuration of the disc. No recent hæmorrhage. No white patches.”

Left eye appears normal.

H. S., æt. 54, carter. Admitted to Wakefield Asylum September 26th, 1891.

Mentally, a case of depression with delusions of suspicion. Some dementia also.

Family history.—Patient's brother had an attack of acute mania; his father drank (towards the latter part of his life only).

Personal history.—Has not had any venereal disease. Of very intemperate habits for some twenty years. No sexual excess. About six months before admission he began to notice that on getting up in the morning he felt unsteady, and as if inebriated, or, as he expresses it, “his legs wouldn't work regularly,” and two months after this he found them so weak that he fancied he must have had a stroke during the night, especially as his hands also felt weak. With the development of ataxy in the lower limbs he experienced pains in the calves of the legs and about the

knees, which came on suddenly and lasted for a few seconds, were not severe, and accompanied by a feeling as if the knees were giving way. Denies that he has lost sensation. About a fortnight before admission had numbness and "pins and needles" in both legs for three days. He cannot read, but is sure his sight is quite good. There has been no interference with the normal functions of the bladder and rectum.

Physical condition.—Fairly nourished. Forehead low, and aspect indicative of low average of intelligence. External ocular muscles act well. All pupillary reactions normal, and the pupils equal. No apparent loss of vision; no achromatopsia. Tongue is protruded straight, but with some effort, and facial twitchings and jerky movements of lower jaw accompany the act. He tends to close his lips on the tongue to steady it. No fine tremor.

Knee-jerks are exaggerated, and the patellar tap is followed by several to-and-fro movements of the leg. Plantar reflexes are excessive. Ankle-clonus readily evoked and prolonged on both sides. No direct nor reflex muscle contraction obtained on percussion of the muscle itself anywhere. Patient walks on a rather broad base, but swings one foot across the other, in order to try and preserve his balance, which sways from side to side as each leg in succession forms the pedestal of support. Both soles are scraped along the ground, the feet are held stiffly at right angles to legs, and there is distinct heel walk, a plumb-line during progression falling well behind buttocks when suspended from occiput. Each leg is advanced sharply, and for a short distance there is no flexion at the knees to speak of, and the lower limbs are held altogether rather stiffly. He can walk unassisted, but in turning round or standing with closed eyes he shows much unsteadiness; can stoop to pick up an article from the floor, keeping his back straight, and bending well at the hips and knees. There does not seem to be any loss of power in the lower extremities, nor in the back muscles. There is no wasting, and the tonicity of the musculature is fairly good. The relative amount of power displayed is, however, less at the hip than the knee. With closed eyes he has some difficulty in opposing his finger tips or touching his nose with the index finger. When vision is allowed no inco-ordination is obvious, and he can button and unbutton his coat, pick a needle off the table, etc., very fairly well. Dynamometer:—Right hand, 70; left ditto, 50. No analgesia or loss of temperature-sensation. Sensation seems defective in lower extremities. He is often unable to feel his feet being touched by the finger-tips, and even when two fingers are, at a distance of four inches, applied to the dorsum of his foot he is unable to recognize more than one sensation, this even when they are placed consecutively. Sharp points are more accurately diagnosed both as to number and position, but occasionally he is unaware that he has been touched, and often is not able to name the toe or part of the foot to which stimulation is applied. If his signal is given as soon as he experiences a sensation, then sensory-

transmission would appear slightly delayed. He affirms that the difference between carpet and bare boards is naturally perceived. No cremasteric nor abdominal reflexes obtained; no tenderness in muscles when squeezed. Smell is defective; he fails to perceive any odour in musk, snuff, and asafoetida. Taste is fairly good. No loss of sphincteric powers.

The fundi of both eyes appear normal.

Cases of Insanity in General Practice. By A. H. NEWTH, M.D.

(Continued from p. 85.)

I think much may be done as regards the treatment of insanity by studying the various delusions and endeavouring to trace a physical cause for them. It is a well-known fact that persons may be caused to dream of particular things if certain parts of the body are irritated, and delusions are often only persistent dreams.

In connection with these cases I would like to mention one that was brought under my notice.

She was a young woman with chronic mania, quiet in manner, but full of delusions. When admitted to the asylum she was thought to be pregnant, her abdomen being considerably enlarged. She was in the asylum for some years, and this enlargement continued. She was constantly "dirty," and this was considered as part of her mental state. On examination I found that the rectum was loaded with fæces, and it took me some hours to remove it all. As the ordinary scoop was of no use I had to employ the blade of a midwifery forceps. The removal of this mass of fæces relieved the dirty habits, though a daily enema was necessary on account of the atony of the muscular walls of the intestines. The patient improved mentally, but she was phthisical, and died some three years afterwards. It is a question whether if this state of the bowels had been noticed before, the patient might not have had a better chance of recovery; at any rate she might have been discharged from the asylum to the care of her friends.

A lady residing at Burgess Hill was brought to me by her husband for the purpose of being placed in an asylum. She was in an excited, nervous state, with delusions, but was not dangerous to herself or others. Had been in several asylums. Complained of pain in her head, with inability to collect or control her thoughts. Suffering from bilious derangement, flatulence, loss of appetite, foul tongue, clammy skin, pale, flabby countenance, irregular compressible pulse. She had been taking bromides and other sedatives. It was with great difficulty I persuaded her friends not to send her to an asylum, and to discontinue all sedative medicines. I pointed out that her nervous state was due to her physical condition, and that if this were improved she would

be better. I prescribed a mixture containing bicarbonate of sodium, salvolatile, arsenic, and gentian. As she begged for a sedative I ordered her some bromide of ammonia and morphia in small doses to be given not oftener than every six hours. She rapidly improved under this treatment, which was subsequently combined with galvanism, and in a short time was an entirely different person, so that I failed to recognize her when calling to see her after a few weeks.

This was one of those cases in which I think asylum treatment might have done harm, by giving her a feeling of helplessness, and the association with others might have been prejudicial. As it was, I strongly impressed on her the necessity for self-restraint, giving her a few rules for guidance, and pointing out to her husband that firmness with kindness, and absolute rest and quietude, and, above all, not allowing the officious interference of well-meaning friends, must be maintained. She was a lady with strong, but not excessive, religious feelings. She has continued in good health for over six years.

Some time ago I was consulted about a young man whose manner had become very strange. He had been a most dutiful and obedient son, but lately had been squandering his mother's slender income, running into debt, stealing all he could lay his hands on, buying useless things, wandering aimlessly about the country, etc. Was strange in manner, absent-minded, morose, and disinclined for society. He conversed rationally, but constantly committed himself by telling the most outrageous lies. His father and his grandfather died insane; one of his brothers is partially idiotic, his sisters are strange in manner, and his mother is of a neurotic disposition.

At one time, after having been placed under the care of some one who had special orders to keep him in sight, he ran away for three days and two nights, and was found wandering in a wood some distance off. He was brought back straight to me; he then appeared quite changed from what he was, did not seem to recognize me, would answer no questions, in fact did not comprehend what was said to him. He ate ravenously some food that was given to him, and then fell fast asleep for several hours. The mother was very anxious to have her son placed under care, and made inquiries for this purpose; she was also strongly advised to do so by several medical men, including a leading alienist physician.

I, on the contrary, advised her to wait, to have him placed for a time with a friend who had promised his father to look after him. This gentleman interested himself in his behalf, took him into his own house, gave him abundant interesting occupation as an artist, plenty of good wholesome food, etc. I prescribed simple tonic

mixtures. He improved considerably after a time. His mother then had him home again to assist in teaching drawing and painting in her school, and also in Brighton. He relapsed again somewhat, and being a volunteer and fond of a soldier's life, he was persuaded to enlist, and was sent to India. The discipline no doubt did him good, for he has served his time and has become a changed man. I cannot help thinking that if this young man had been sent to an asylum, the result would have been very different.

I will now refer to a young man who has been under my care for over twelve years.

He comes of a high family; his father was a medical man in large practice. One of the brothers died of phthisis; the family are not very strong intellectually, and are intensely selfish and proud.

He was a student at one of the London Colleges, where he entered with the object of becoming a medical man. In 1871 he became insane, showed a want of coherence in conversation, had an obstinate disregard to cleanliness and his personal appearance, saying that frequent washing was an expensive luxury. He did foolish and thoughtless acts.

It was said that over-study had affected his mind. He was placed in an asylum in London in 1872, but was discharged relieved after a few years' residence; he, however, relapsed, and was returned there in 1877, where he remained till 1879, when he was placed under my care. When he came to reside with me his clothes were in a filthy condition, and had to be destroyed. He was in a poor state of health, in fact it was feared he would go into a decline. Mentally he was apathetic and strange in manner, sitting for hours in one position doing nothing, gazing at objects in a queer way, grinning and laughing to himself idiotically. Fancied he was Prince Bismarck, that he had a perfect right to do what he pleased, such as help himself to my things, wind up the clocks frequently, alter the time of them to suit his purpose, and do many other strange things. When remonstrated with he became violent. He was very dirty in his habits at times. By the exercise of great firmness and extreme vigilance, with the threat to send him back to the asylum if he misbehaved himself, and also by teaching him self-restraint, and showing him every kindness when he behaved well, he has considerably improved. He has not had a day's real illness, and his physical health is now most robust.

He is intelligent in conversation, able to make himself useful in various ways; in this I am constantly devising simple exercises. He is now most particular in his personal appearance and the decencies of life, never misbehaves himself, and has perfect liberty.

I feel confident if this young man had been treated properly and individually in the early stages of his malady, he would have been much better mentally than he is. There is now no hope of his being entirely well; his mind is permanently weakened, and, if removed from my care, I feel sure he would relapse.

I was called to see a young man in consultation with a medical man. He was then in a violent state of sub-acute mania, but after a time lapsed into a comatose state. I could find no cause for his illness, but as the father subsequently committed suicide, it is possible there was heredity. He was the son of an inn-keeper in a large way of business, but he did not drink to excess, in fact was most abstemious. His physical health was robust, and he had had no serious illness. He persistently refused food, or could not be got to take it, and he had to be fed on my plan of artificial feeding. I gave him very little sedatives, but relied chiefly on tonics and stimulants. He got better, but for a long time he was childish and apathetic in manner; everything had to be done for him. I employed galvanism, which did him a great deal of good; he roused up under each application, and recognized the benefit of it himself. This, combined with phosphorus and iron, completely restored him to health, and he has continued well for some years.

It would be difficult in this case to say that asylum treatment would have not done him good, but I am inclined to think he would not have recovered so soon in an asylum.

A young lady, who for some time had been melancholic from disappointment in a love affair, suddenly became maniacal, incoherent in her conversation, violent in her manner, biting herself and her attendants, destroying all she could lay her hands on. She was placed under my care, and owing to her extreme violence to herself and others, and her determined suicidal propensity, I felt that the asylum was the only place for her. However, as her friends dreaded this step, and begged me to do what I could for her, promising to give her every attention, I determined to see whether it was possible to treat her at home. After a most trying time of about two months, she has quite recovered. I found in her case that sedatives of any kind did more harm than good, and relied chiefly on good food, tonics, powerful aperients, etc. Once during her illness she swallowed a portion of a liniment which her mother was using that contained belladonna, and had all the symptoms of belladonna poisoning. I administered an emetic and a dose of croton oil, and though she lay some time in an unconscious state with loss of sensation in the lower extremities,

on recovering consciousness she completely recovered. In fact her mental health improved so rapidly after the poisoning that I am under the impression that the effects of the belladonna were of some consequence in her restoration to health, possibly relieving the congestion of the brain by dilatation of the capillaries. Though I have seen belladonna used in cases of insanity it has never seemed to do any good, on the contrary maniacal excitement is apparently increased by it.

Mrs. E.—Case of recurrent mania. She was, in her calm moments, a most quiet, inoffensive person, very pleasant to talk to, retiring in disposition, with deep religious impressions. When she was insane, which occurred about once in two or three months, sometimes longer, she was a perfect demon, full of blasphemous language, exceedingly violent, and homicidal. I noticed that before these attacks she was morose in her manner, face flushed and sallow, conjunctiva yellowish, tongue furred. She suffered when well from indigestion and bilious headaches. A good stiff dose of calomel, if given when she appeared to be relapsing, I found had the beneficial effect of preventing these relapses, so that for some years before she left the neighbourhood she had had no relapse. I have not heard of her since.

Many more cases of mental disease have come under my care which have been successfully treated by means directed to various disorders of the bodily organs. It is only fair to state that in several other instances, owing to want of proper nursing, the impossibility of isolating the patient from disturbing surroundings, and the worries of well-meaning persons, the treatment has failed, and it has been necessary to send the patient to an asylum. In one case where I saw the necessity of asylum care from the first and insisted on it, but failed to persuade the friends to send her, the patient in an unguarded moment hung herself.

I made arrangements to send a patient with mania of lactation and a strong hereditary tendency to an asylum, but the friends were persuaded by another medical man, who was asked to certify, not to do so. She hung herself to the bell pull, but was rescued in time, and eventually recovered. I feel certain, however, that she would have done better in an asylum, and the husband would have been saved much worry and anxiety.

Some time ago I was called in consultation to see a lady suffering from brain softening. She was a perfect nuisance to her friends and neighbours, and her husband's life was

most unenviable. I advised her removal to an asylum. Her medical attendant declined to certify, from fear of the consequences; in conjunction with Dr. Maudsley, I did so. Shortly after I had a visit from the solicitor who managed her affairs; he was indignant at my having sent her to an asylum, and used some threats of an action. But I showed him that whether she was in an asylum or not, so long as she was insane she could not properly sign documents, etc., and heard no more of it. She was perfectly happy in the asylum, fancied it was an hotel, and lived there till her death, some three years afterwards.

T. I., a young man 22 years of age, in good health, came under my care, whom I anticipated treating successfully without sending him to an asylum, but was obliged to do so at last. He had been ailing mentally for two years. "Childish in his ways, will not dress himself or attend to the calls of nature, sometimes takes all his clothes off in the sitting-room. Is averse to society, will not talk or read, nor employ himself in any way. Is lethargic in his movements, and his hands and feet are cold and congested. Talks strangely at times. Everything appears to him to be spinning round at times and he waits for it "to get clear;" complains of giddiness and cannot stoop. There is a history of insanity in the family, and his parents and brother are rather feeble-minded." (*Case Book*).

He was ordered iodides, citrate of potassium, iron, and aperients, plenty of outdoor exercise and good food. I wanted to use galvanism in this case, feeling sure it would have done good, but could not do so. Under this treatment he improved considerably, but in consequence of not being properly looked after, and indulged by his parents, he subsequently became irritable and violent to his mother. He was removed to the asylum, where he was induced to work and was compelled to take proper exercise; he is now quite well.

The conclusions I wish to draw from these cases are the possibility of treating insanity outside the asylum if proper means are used; that instead of treating mental disease by so-called neurotics or sedatives, such as bromides, etc., if a careful investigation is made as to whether the disease may not be a reflex irritation from some organic affection, a more successful result may be anticipated. At the same time it cannot be too strongly insisted that where the exciting cause is due to the patient's surroundings, and when there are not proper means at hand for satisfactory

treatment, and if the patient is suicidal or homicidal and cannot be properly looked after, then no reasonable delay ought to be allowed to interfere with the patient's removal to an asylum.

OCCASIONAL NOTES OF THE QUARTER.

Drunkenness and Crime.

The correspondence between Sir Henry James and Sir Lyon Playfair published in the *Times* of January 5th, 1892, has once more fixed the attention of the public on the vexed and still unsettled problem of the criminal responsibility of the inebriate. It would be obviously unfair, and we do not propose, to criticize Sir Henry James's letter as if it were a draft Parliamentary Bill declaring and formally defining the law of England as to drunkenness and crime. We shall deal with the opinions expressed in the letter, and not with the language in which they are conveyed. Sir Henry James states his views in the following terms:—"In determining the legal character of the offence committed, drunkenness may be taken into account—(1) Where it has established a condition of positive and well-defined insanity; (2) if it produces a sudden outbreak of passion occasioning the commission of crime under circumstances which, in the case of a sober person, would reduce the offence of murder to manslaughter; (3) in the case of minor assaults and acts of violence it never can form any legal answer to the charge preferred, but it may either aggravate or mitigate the act committed—probably the former; (4) as to the effect that should be given to drunkenness when determining the amount of punishment to be inflicted no general rule can be laid down—its existence may be considered, and may tend either in the direction of increasing or diminishing the punishment imposed." This analysis of the juridical character of inebriety is, we venture to think, obnoxious to very serious criticism. In the first place, Sir Henry James would seem to hold that the only cases in which intoxication can diminish the criminality of an act are cases of murder and aggravated assault. We know of no logical or practical justi-

fication for this opinion. The *mens rea* is a necessary element in every crime; inebriety is logically as admissible to negative its existence in a case of horse-whipping as in a case of homicide, and, if public policy is to be considered, the plea of inebriety may surely be allowed with greater safety in the former case than in the latter. Again, Sir Henry James would revive the old, and, as we had hoped, exploded fallacy of the "external standard." A. in a fit of passion produced by drink stabs B. Is the crime murder or manslaughter? How shall we answer the question? Take, says Sir Henry, the ordinary "sober person," C. Assume that under the influence of the same outburst of anger—not induced, however, by alcoholic excesses—he had committed the same act. Would you call his crime murder or manslaughter? Then judge A. by the same standard. This test is liable to two grave objections. It is practically incapable of being applied at all, and even if it were applicable it would work great injustice. The doctrine of the "external standard" was never meant to govern the responsibility of lunatics or inebriates. In the pages of the "Journal of Mental Science" it is hardly necessary to point out that Sir Henry James's proposed criterion is simply the old mischievous test of exculpatory delusion propounded by the House of Lords in *McNaghten's* case. Assume that the delusions were really facts. Would they form a legal justification for what the prisoner has done? In other words, first admit that a man is subject to delusions and then expect him to reason sanely upon them. In the third place, Sir Henry James reasserts the historic doctrine that drunkenness is or may be an aggravation of a crime committed under its influence. It is true that Lord Coke expressed the same opinion. It is equally true that Sir Matthew Hale treated it as being simply the dictum of "some civilians," and declared that the inebriate should "have the same judgment as if he were in his right senses"—nothing less and nothing more. Drunkenness is perfectly different in character from what are usually called "circumstances of aggravation," and should be punished, if at all, as a separate offence. Finally, Sir Henry James's exposition of the law is incomplete. It takes no account of the principle—now judicially recognized—that a plea of inebriety is relevant and admissible, not only to alter the character of a criminal act, but to negative the existence of criminal intent. It

contains no reference to the famous "alloys" which even Sir Matthew Hale annexed to the *voluntarius daemon* theory of Coke; and it is absolutely silent as to, if not, indeed, inconsistent with, the later *nisi prius* developments of the law of "drunkenness and crime." Some of our bolder judicial spirits have treated Coke and Hale with the same scant reverence that Cockburn displayed towards the *wild beast* theory of Mr. Justice Tracy, and the *right and wrong in the abstract* theory of Lord Mansfield. Sir Henry James says that inebriety is an *exculpatory* plea only when it has established "a condition of positive and well-defined insanity." In 1886 Mr. Justice Day told a Lancaster jury that "if a man was in such a state of intoxication that he did not know the nature of his act, or that it was wrongful," he was insane in the eye of the law, and that it was perfectly immaterial whether the mental derangement resulting from such intoxication was permanent or temporary. Sir Henry James would limit the reception of a plea of inebriety by way of extenuation to cases of homicide or aggravated assault. Lord Deas, the modern Braxfield, received it in a case of theft. In 1887 Chief Baron Palles still further relaxed the old legal theory. "If a person," said his lordship, "from any cause, say, long watching, want of sleep, or deprivation of blood, was reduced to such a condition that a smaller quantity of stimulants would make him drunk than would produce such a state if he were in health, then neither law nor common sense could hold him responsible for his acts, inasmuch as they were not voluntary, but produced by disease." And in 1888 Baron Pollock held that the law was the same where insane predisposition and not physical weakness was the proximate cause of the intoxication. With great respect to Sir Henry James, we venture to think that when the criminal law of England is codified, as it ought to be, and will be, the criminal responsibility of the inebriate will be defined in something like the following terms: 1. Every man is to be presumed to be sober and responsible unless and until the contrary is proved. 2. In any criminal case a plea of inebriety shall be admissible either (a) to negative the existence of criminal intent, or (b) to reduce an offence from one grade of criminality to another. 3. Intoxication, whether voluntary or involuntary, which does *in fact* prevent a man from knowing the nature and quality of his acts, is entitled to the same privilege that

the law allows to insanity, and is a valid exculpatory and not merely extenuating plea. It is immaterial whether the diseased condition of mind produced by such intoxication is permanent or temporary, continuous or intermittent. Of course, drunkenness voluntarily induced with a view to nerve a man for the perpetration of an offence is not privileged.

Insane Criminals in Belgium.

Upon representations made by the Minister of Justice last year there has been established in Belgium by Royal decree a service of mental medicine connected with the prisons. It appears from the report made by the Minister that the number of prisoners who in the course of their detention show signs, real or simulated, of intellectual derangement is relatively on the increase. While on the one hand disciplinary requirements demand that prisoners who show insanity should be made to undergo their punishment, it is on the other hand necessary that the authorities should be informed distinctly and promptly of the mental condition of prisoners whose behaviour is evidently due to mental derangement. Humanity demands the removal without delay from prison of those whose mental condition needs the attention which they can get only in a lunatic asylum. The instructions in force prescribe that prisoners who show signs of insanity should immediately be placed under observation; but the appreciation of these signs, and the speedy and certain detection of imposture or disease, usually demand an extensive experience of mental medicine, and frequently a consultation among experts. Upon such considerations the Minister, with a view to the efficient working of the prison medical service, thought it advisable to recommend that alienist physicians should be attached to that service on a permanent footing.

With the view of carrying out this scheme the Belgian prisons have been divided into three districts, each of which will be in charge of a medical expert in insanity, the central administration being generally responsible for the management. The expert examines the cases of prisoners whose anomalous behaviour causes their mental condition to be suspected, and he reports to the central authority, and, if neces-

sary, gives a certificate of insanity. Over the first district Dr. Jules Morel, of the Hospice Guislain, Ghent, presides. Dr. Masoni, Professor in the University of Louvain, and Dr. Semal, Medical Director of the Asylum at Mons, have charge of the other two districts.

We are glad to find that Belgian enlightenment has resulted in such a decided step of advance towards realizing the ideal method of at once safeguarding the proper interests of the insane, and securing the disciplinary correction of criminal impostors. We have always felt that the insanity of the criminal ought to be duly regarded and attended to, just as the insanity of the non-criminal. Cerebral pathology and medical experience are not bounded by social proscription; and wherever disease, mental or otherwise, manifests itself, the physician must proclaim his presence and declare his authority. In officially recognizing this authority, the Belgian Government have done excellent service to the cause of mental medicine, and at the same time to the best interests of humanity. No doubt there must ever be difficulties in carrying out such a scheme as that which has been inaugurated by the Belgians; but a well-placed experience in this direction cannot fail to result in a gain of knowledge which must ultimately be of much practical benefit, both psychologically and socially. The district commissioners who have been appointed to carry out this scheme are physicians of acknowledged eminence and repute, and we are quite sure that in their hands the new service will be most judiciously and successfully administered.

Pensions and Pension Scales.

The following are instances of the inequality and uncertainty of pensions granted to Medical Superintendents both under the old and the new régime. The Table appended cannot fail to be useful.

I. Under the Old Régime of County Magistrates.

(1.) North Riding of Yorks.—Dr. Hill, 56 years of age, with 20 years' service, received in 1868 two-thirds of salary only (excluding allowances which were not considered in the calculation), or under one-half of the total value of office.

(2.) Oxfordshire.—Dr. Ley, in 1868, at 61 years of age, for 23 years' service, only received one-third of total value of office, a larger amount having been recommended by the Committee, but reduced by Quarter Sessions.

(3.) Lancashire.—Dr. Broadhurst, 63 years of age, with an excellent record of $33\frac{1}{2}$ years' service, received in 1876 a pension of less than one-half; whilst Dr. Holland, 65 years of age, with 28 years' service, being $5\frac{1}{2}$ years less than Dr. Broadhurst, received in 1878 the maximum pension of two-thirds.

(4.) Lincolnshire.—Dr. Palmer, in February, 1888, at 70 years of age, with the lengthened and champion record of 39 years' service, received one-half of total value of office, the amount, £600 (nearly two-thirds), recommended by the Committee having been reduced by Quarter Sessions to £500.

(5.) Dorset.—Dr. J. G. Symes, 61 years of age, with a lengthened and excellent record of 32 years' service, received in 1887 a pension of one-half the total value of office, the amount of £600 (two-thirds) recommended by the Committee having been reduced to £500 by Quarter Sessions.

II. *Under the New Régime of County Councils.*

(1.) Lancashire.—Dr. T. L. Rogers, 60 years of age, with a long and exemplary record of $30\frac{1}{2}$ years' service, received in 1889 a pension of one-half the total value of office, the amount, £800 (two-thirds), recommended by the Committee having been reduced to £600.

(2.) London County Council.—Dr. W. G. Marshall's pension of two-thirds, recommended by Colney Hatch Asylum Committee, was opposed and objected to by the County Council in March, 1890, but was, after discussion, ultimately granted; whilst a similar pension of two-thirds (well earned and deserved), which was recommended by Hanwell Asylum Committee, was granted by the same County Council in November, 1891, without a word of objection or a murmur, to Mr. J. Peeke Richards, who is 20 years younger and has put in 15 years less service.

(3.) Yorkshire (South Yorkshire Asylum, Wadsley).—A pension of two-thirds recommended by the Committee to the Male Head Attendant for 33 years' service, was referred back to the Committee for reduction, being considered excessive, but returned to the Finance Committee as originally proposed, and ultimately passed by the County Council on 14th January, 1892.

West Riding.—A report of the West Riding General Asylums Committee on the question of pensions or superannuation allowances to asylum officers, signed by W. Spencer Stanhope, chairman, and dated 24th September, 1891, recommending a scale of

pensions, was submitted to the West Riding County Council and rejected by a very narrow majority.

The scale suggested in this report is almost the same as that adopted by the West Riding Standing Joint Committee for Ordinary Pensions to Police Constables, that "pensions to officers, attendants, nurses, and servants hereafter to be engaged be calculated on the basis of one-fiftieth of their annual salary and emoluments on the average of the last three years, for every completed year of service."

It was also recommended—"That a scale be prepared showing what sum shall be deemed to be the value of the emoluments of each person, for the purpose of calculating pensions."

The report further recommends that asylum officials be divided into two classes, the first class, including those who are brought more immediately in contact with the insane, to be entitled to pensions; the second class, including those officers and servants not directly engaged in the medical and moral treatment of the insane, such as clerk and steward, storekeeper, clerk of works, gardeners, artisans, and labourers, "shall not receive pensions on retirement unless owing to being injured by a patient whilst in the actual execution of duty, or to such other inevitable accident of similar character as shall in the opinion of the Committee render it just that a pension be granted."

The report contains, in Appendix A, a "memorandum of the West Riding solicitors as to the power of the County Council to grant or withhold pensions or superannuation allowances to asylum officers," prepared by Williams and Edwards, West Riding solicitors, dated 26th March, 1891.

Appendix B contains a summary of replies to questions asked of all county asylum authorities in England and Wales respecting pensions to asylum officers.

Appendix C contains three tables showing the number of officers, attendants, etc., with length of service, the number of retirements, and particulars of pensions granted.

This is the most detailed and probably one of the best reports yet issued on the question of pensions to asylum officers.

(4.) Staffordshire.—A pension of £26 a year recommended by the Asylum Committee to an old man, Noah Wigley, 71 years of age, who after 31 years' service was unable to work owing to bodily infirmity, met with opposition at the County Council meeting in February, 1892, but, after discussion, it was eventually granted.

(5.) Northamptonshire County Asylum, Berry Wood.—An ably drawn-up and liberal pension scheme, signed by Earl Spencer (chairman), was approved by the County Council on 30th January, 1890.

It divides asylum officials into two classes (Schedule A and Schedule B) as in the West Riding scheme.

The chief rules are the following:—

- 1st. "That any official of 50 years of age, named in Schedule A, may retire after 15 years' service on a pension not less than one-third, and not more than one-half of his salary and allowance."
- 2nd. "That any official eligible as above who shall remain in the service shall receive an addition to the pension at the rate of not less than one-fiftieth and not more than one-twenty-fifth of his salary and allowance for every year of service after the age of 50 years and not less than 15 years' service at that age. No pension can exceed two-thirds of salary and allowances."
- 3rd. "That resignation shall be optional at the age of 50."
- 4th. "That it shall be compulsory at 55."

(6.) Middlesex. County Council Asylum, near Tooting.—The superannuation allowances scale (as per "Extract from Standing Orders") of this County Council divides asylum officers and servants into two classes:—

1. "Those in whose favour emoluments may be taken into consideration in the calculation of the allowance, one-fortieth of the salary or wages and net emoluments for every year served, the minimum of service being 15 years, and the maximum of allowance twenty-six-fortieths of the salary or wages and net emoluments."
2. "Officers and servants in whose favour emoluments may not be taken into consideration in the calculation of the allowances, one-thirtieth of the salary or wages for every year served, the minimum being 10 years, and the maximum allowances twenty-thirtieths of the salary or wages."

The question of framing a fixed and uniform pension scale for County Council officials might well engage the attention of the County Councils Association.*

* We are indebted to Dr. Murray Lindsay for these particulars and for the Tabular Statement which follows.—[Eds.]

LIST OF PENSIONS granted to MEDICAL SUPERINTENDENTS

Asylums.	Name of Medical Supt.	Age on Retirement.	Length of Service.	Total Value of Office, including Allowances.			Amount of Pension granted.		
				£	s.	d.	£	s.	d.
1. Kent, Barming Heath	Dr. Poynder	Over 50	13	400	0	0	150	0	0
2. Chester	Dr. Le Jones	63	25	300	0	0	200	0	0
3. Gloucester	Dr. W. Williams	60	17	800	0	0	300	0	0
4. Kent, Barming Heath	Dr. Huxley	Over 50	17	500	0	0	350	0	0
5. Cambridge	Dr. Lawrence	37	7	—	—	—	50	0	0
6. Oxfordshire	Dr. Ley	61	23	750	0	0	250	0	0
7. North Riding, Yorks	Dr. Hill	56	20	1200	0	0	533	6	8
8. Somerset	Dr. R. Boyd	59	21	800	0	0	450	0	0
9. Derby County	Dr. Hitchman	60	21	800	0	0	400	0	0
10. Hanwell, Middlesex	Dr. Begley	71	34	700	0	0	466	13	4
11. Three Counties, Beds, Herts, and Hunts	Dr. Denne	67	20½	750	0	0	500	0	0
12. North Wales, Denbigh	Dr. G. Turner Jones	54	27	500	0	0	330	0	0
13. Suffolk	Dr. J. Kirkman	81	45	1000	0	0	600	0	0
14. Lancaster	Dr. Broadhurst	63	33½	800	0	0	300	0	0
15. Kent, Barming Heath	Dr. W. Kirkman	Under 50	12	900	0	0	400	0	0
16. Lanc., Prestwich and Whittingham	Dr. Holland	65	28	1125	0	0	750	0	0
17. Staffordshire, Burntwood	Dr. Davis	46	22	750	0	0	250	0	0
18. Colney Hatch, Middlesex	Dr. Sheppard	63	20	900	0	0	450	0	0
19. Surrey, Brookwood	Dr. Brushfield	54	16	1300	0	0	700	0	0
20. Gloucester	Dr. E. Toller	52	19	1028	0	0	550	0	0
21. Joint Counties, Monmouth, &c.	Dr. McCullough	54	25½	1100	0	0	730	0	0
22. Hants, Fareham	Dr. Manley	60	30½	1250	0	0	800	0	0
23. Berkshire, Moulsoford	Dr. Gilland	48	18½	800	0	0	400	0	0
24. Norfolk, Thorpe	Dr. Hills	58	25	900	0	0	600	0	0
25. Staffordshire, Stafford	Dr. W. T. Pater	52	Nearly 13	950	0	0	300	0	0
26. Dorset, Dorchester	Dr. J. G. Symes	61	32	900	0	0	450	0	0
27. Sussex, Haywards Heath	Dr. S. W. D. Williams	48	22	1200	0	0	500	0	0
28. Lincolnshire, Braaebridge	Dr. Palmer	70	39	1000	0	0	500	0	0
29. S. Riding, Yorks, Wadley	Dr. S. Mitchell	50	21	1200	0	0	500	0	0
30. Hanwell, Middlesex	Dr. Rayner	46	16	950	0	0	300	0	0
31. Bristol, Borough	Dr. Stephens	65	10	500	0	0	250	0	0
32. City of London, Dartford	Dr. Jepson	55	23	1200	0	0	800	0	0
33. Royal India Asylum, Ealing	Dr. Christie	About 60	22	1150	0	0	520	0	0
34. Surrey, Wandsworth	Dr. Biggs	60½	30	1450	0	0	974	0	0
35. Lancashire, Rainhill	Dr. T. L. Rogers	60	30½	1200	0	0	600	0	0
36. Colney Hatch, London Cty. Council	Dr. W. G. Marshall	71	38	950	0	0	633	6	8
37. Hanwell, London County Council	Dr. J. P. Richards	51	23	1000	0	0	633	6	8
38. Kent, Chartham	Dr. Spencer	57	31	1050	0	0	633	6	8

Average age on retirement, 57 years.

Average length of service, 23 years.

Average amount of pension nearly £500 (£476 8s. 5d.).

Of the total number, 38, pensioned, 16, being nearly one-half, received the maximum one-third or under, for short services of under 15 years, and under 50

It is worthy of note that of the last 5 Superintendents pensioned by County in addition to the above-named 38 Supts., three have received pensions, viz., Dr.

kindly gave particulars of their Pensions, but "not for publication," and—

Ipswich Borough Asylum ...	Dr. Long	37	7	500	0	0	100	0	0
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of COUNTY and BOROUGH ASYLUMS in ENGLAND and WALES.

Proportion of Pension to Total Value of Office.	By whom and when granted.	Remarks.
Little over a third Maximum two-thirds	Committee of Visitors, 1851 " " 1854	Dr. Poynder was the first Supt. Was non-resident, only visiting asylum once a week; also had a large private practice in Chester.
Little over a third Maximum two-thirds	Quarter Sessions, 1864 " " 1867	Retired in ill health. " Granted for 12 years should he live so long." Died in about 18 months or 2 years.
A third	" " 1868	Larger amount recommended by Committee but reduced at Qr. Sessions. Two-thirds of salary only.
Nearly one-half	" " 1868	
Little over one-half	" " 1870	
One-half	" " 1871	
Maximum two-thirds	" " 1872	
Maximum two-thirds	" " 1874	
Maximum two-thirds	" " Oct. 1874	
Under two-thirds, = three-fifths	" " 1876	
Less than half	" " 1876	
Under one-half	" " 1876	
Maximum two-thirds	" " 1878	
A third	" " 1880	
One-half	" " 1881	
Nearly two-thirds of £1100	" " 1882	
Over half, = fifty-three per cent.	" " 1882	
Maximum two-thirds	" " 1883	
Maximum two-thirds	" " 1885	
One-half	" Jan. 1887	
Maximum two-thirds	" " 1887	
Nearly a third	" Ap. 1887	
One-half	" Ap. 1887	£600 recommended, reduced by Quarter Sessions to £450.
Under one-half	" " 1888	
One-half	" Feb. 1888	£600 recommended, reduced by Quarter Sessions to £500.
5-12ths, = nearly one-half	" Oct. 1888	16½ years as Supt., 4½ years as A.M.O. Pension calculated at the rate of 1-50th of salary and emoluments for each year's service.
Under half of salary only	Mid. Quarter Sessions, Nov., 1888	Granted according to no rule or scale.
One-half	Town Council	
Maximum two-thirds	City of London Corpn., 1887	
About one-half	Dec., 1891	
Maximum two-thirds	Mid. Cty. Council, Jan., 1889	
One-half	Lanc. Cty. Council, 27 Mch., 1889	Amount of £200 (4) recommended by Committee was reduced by County Council to £600.
Maximum two-thirds	London Cty. Council, Mch., 1890	
Maximum two-thirds	10 Nov., 1891	19 years as Supt., 4 years as A.M.O.
Maximum two-thirds	County Council, 17 Feb., 1892	17 years as Supt., 14 years as A.M.O. Pension calculated on salary of £200 (and allowances) prior to increase of salary to £200 a few months previously

num of two-thirds, 16 received one-half, or nearly one-half; and the remaining 6 years of age, having retired in ill health.

Councils, 4 received the maximum of two-thirds, and 1 received one-half.

Wickham, Newcastle Borough Asylum, and Dr. Orange, Broadmoor Asylum, who

One-fifth.

Town Council, 1877

Pension granted for 10 years should he survive. Only lived one year.

PART II.—REVIEWS.

Memoir of the Life of Lawrence Oliphant. By MARGARET O. W. OLIPHANT. In two volumes, seventh edition. Blackwood. 1891.

The fact that a man has, towards the end of his life, fallen into some dismal error, leads us to reconsider all his qualities in order to find out something which might account for his failure. We thus approach the life of Lawrence Oliphant with a species of prejudice against him. It is a popular book, written by an author who knows well how to write for the public; but in reviewing it in this Journal, we are naturally inclined to look upon the work as a psychological study. This is, assuredly, not taking it at its best side. The picture presented to us is that of the only child of a fond father and mother, brought up in Ceylon amongst a soft and yielding race. He received a desultory education, but being naturally clever and sympathetic, he acquired a good deal of knowledge and many accomplishments. Favoured by circumstances, he travelled widely, saw many countries, and became familiar with the ways of men of different creeds and nations. He visits Jung Bahadur at Nepal, then goes to study law in London, and passes as an advocate in Edinburgh after a very slight preparation. As private secretary to Lord Elgin, he accompanied that gifted ambassador to the United States, Japan, and China, and finally got into Parliament. He wrote a book of travels in Nepal and several novels dealing with fashionable life in London, and enlivened the dulness of Blackwood's magazine with some satirical sketches. Lawrence Oliphant thus appears as a man of great natural powers, of unusually versatile mind, and though somewhat vain and fond of pleasure, yet a good deal higher than an ordinary voluptuary. We think that Mrs. Oliphant, who is in no way related to the subject of the biography, somewhat spoils the effect of her portraiture by painting without shade. Sir Anthony, Lady Oliphant, Lawrence, and his wife Alice are held up as archetypes of wisdom and virtue, but we do not know human beings unless we know their faults. Lawrence appears to have been brought up in a religious manner; but mixing much with people of various creeds, he fell into a state of scepticism, which was confirmed by what he had observed of the bad life of professing

Christians, and the callousness and selfishness of the clergy. He seems to have favoured a system of philosophical theism like that of Theodore Parker, but this, apparently, did not satisfy the yearnings of his heart. People who have rejected the recognized forms of religion are liable to take to some doctrines of a novel character. We see in the present day attempts to construe a new faith, based upon experiments and scientific analogies, with the help of the clairvoyants and spirit rappers. These persons number among their converts men who have lived in avowed atheism, like Robert Owen and others who might be named.

Lawrence Oliphant had tasted all the pleasures of life and found that they did not satisfy. He had deep experience of the selfishness and hollowness of the fashionable world, and the tiresome character of their affectations and their amusements. It is in no way surprising that he should have at last turned away with a longing for something better. Schopenhauer has observed that it has often happened that men who have led a very restless life in the full strain of the passions, kings, heroes, and adventurers, are apt suddenly to change and to betake themselves to resignation and penance, and become hermits, and that it is amongst the French, the most cheerful, gay, sensuous, and frivolous people in Europe, that the strictest of all monastic orders, the Trappists, has arisen. If Lawrence Oliphant had left his uneasy scepticism to take refuge in the bosom of the Infallible Church, no one experienced in life would have wondered. What makes the antithesis so striking is that the accomplished diplomatist took for his spiritual guide an obscure preacher from the United States. This was a man called Thomas Lake Harris, whom he met in London about the year 1860. Lawrence Oliphant, now thirty-one years of age, and accustomed to deal with the deceitfulness of the world, accepted this man for his spiritual director with the blindest trust. Harris got Lawrence Oliphant to give up his money for the benefit of a community which he founded at Brocton, in the States, by Lake Erie. He forbade his convert, recently elected for the Stirling Burghs, to speak in Parliament; he kept him from marrying a young lady of fortune until at last an ungracious consent was obtained. At Harris's command, Oliphant left his luxurious life in London to work like a farm labourer at the settlement in America, which was mainly purchased with the Oliphants' money. His widowed mother, Lady Oliphant, also became a convert, and went to wash and mend the clothes of the faithful, and his wife was separated

from him and sent, by Harris's command, to California to earn money for the new Utopia, by trying to teach her accomplishments and graces to the colonists of the West. Thus Harris succeeded in conquering the most powerful passions of the human heart, the taste for ease and pleasure, the love a man bears to his mother, to his wife, and to his own reputation amongst men, in exchange for the hope of a nearer union with God and the regeneration of the world.

Here we naturally look for a portrait of Harris, which, unhappily, is wanting in the book. We read in the *Standard* the complaints of one of Harris's admirers that Mrs. Oliphant had neglected to take advantage of promised information about the conduct of the saint, and though the biographer gave a satisfactory explanation why this offer had not reached her, one might have hoped that it might have been made useful for subsequent editions. However this may be, Harris looks in her book a more mythical person than Sankya Muni.

Mrs. Oliphant assures us that she has done her best, but has failed to get sufficient information about this man. She is inclined to think that the sketch of a character in Oliphant's novel, "Masellam," is really descriptive of the American preacher. Since the publication of the biography Mr. Harris has himself condescended to appear in a less shadowy character. We have been favoured with a pamphlet* in which he states his claims as a regenerator of society. Mr. Harris possesses a powerful, though somewhat turgid style, and an ineffable faith in his own merits. He assures us that he discovered in early manhood the key to the harmonic law of Pythagoras, which is one in essence and effect with the law expressed in the sayings of Christ. He has received the gift of the Holy Ghost, a new respiration and vitality, which is shared by his followers all over the world, who, to obtain the gift, must first accept the common burden and sorrow and service of mankind. He claims to have "for co-labourers and co-discoverers eminent divines of the Church of England, and of the orthodox and liberal denominations, authors and professional men of well-known distinction, and learned Oriental scholars." As the prophet is now old, it is fortunate that he has already begun to turn younger. "I have passed through December," he writes, "and am now in the May-time; conscious that I hold in quickened mind and flesh the final secret and method and

* "Brotherhood of the New Life: Its Fact, Law, Method, and Purpose. Letter from Thomas Lake Harris." London: E. W. Allen. 1891.

law and power for the resuscitation, the rehabilitment, the organic restoration of the nobler multitudes of earth's aged and almost exhausted race. No more an old man of nigh seventy, but now renewed in more than the physical and mental prowess of the early prime." In the appendix to his letter he tells us that his "natural person is divested of the obsolete remains, the failing passions of old age, and the tendencies that result in final decease." He seems to expect that death has no power over his body. Mr. Harris admits that he still wears the appearance of old age upon the surface; but, of course, this does not matter much with one who has no desire to return to the vanities of youth, if he ever gave way to them, while "for practical purposes, the frame is vivified and penetrated by a divine, natural youthfulness and radiance."

Mr. Harris proclaims his intention of giving his works, already privately circulated, to the profane public, as is thought desirable, at prices that will defray their mechanical cost. Though we are curious, for the cold purposes of psychological analysis, to have further revelations from Mr. Lake Harris, we feel bound in conscience to repeat to him the advice of Burns to one eager to try his fate in guid black prent: "I red you, honest man; tak' tent. Ye'll show your folly."

The criticisms indulged in by a certain class of newspapers growing out of the misrepresentations in the recent memoirs of Mr. Lawrence Oliphant, are treated with lofty disdain: "Men do not," the saint remarks, "bandy words with carrion. For the function of the respectable publicist no person has a higher esteem. For the nasal purveyors of the sensational Press, who prowl about the kitchen middens, and who from the smell of the waste-pipes, presume to sit in judgment on the aromas of the *salon*, I hold no more than a kindly contempt."

Claiming direct communication with Christ, Harris exacted from his followers a more unhesitating obedience than the General of the Jesuits. The Communistic system which he tried to found was agreeable to Oliphant's social and political aspirations, for he had a horror of our modern fashion of competition. He remained two years working as a carter at Brocton, then he was sent to speculate as a stockbroker at New York to gain money for the community. In time, through processes which are not explained to us, Oliphant's faith in the prophet began to dwindle away. His doubts were increased by Harris's heartless treatment of Lady Oliphant

during an illness which ended in her death. His mother herself helped to open his eyes by pointing out some little weakness in the prophet's behaviour. Oliphant's wife, who had returned to England, was the last to lose her faith in the saint. Harris tried to take advantage of this by recommending Mrs. Oliphant to make an application to get her husband committed to an asylum, because he was anxious to get back his money. This proposal was sufficiently simple to make us believe that Mr. Harris, at least, was a steadfast believer in his own pretensions, though we should have thought that a regenerator of the world of his stamp would have been the last to appeal to the physicians of our specialty for aid in his pious undertakings. After a lengthened lawsuit, Lawrence Oliphant recovered some of the money which he had invested in the Brocton community. His mind, however, kept the deep, religious hue with which it had become imbued. With his wife he went to found a new community at Haifa, in Syria. Together they wrote a mystical book called "Sympneumata."

To the end of his life he retained some fantastic notions, such as spiritual communion between the dead and living, founded upon very insufficient evidence. After the death of his first wife, he married Rosamund Owen, daughter of Robert Dale Owen, and granddaughter of Robert Owen, the socialist, assigning as a reason that her faculty of internal insight was so intense that "we felt, after an hour's interview, that we must combine," so they embarked to go to Haifa together. On the passage she was brought into very close relations with Alice (the late Mrs. Oliphant), and at the same time "felt that Alice wanted me to give her the protection of my name."

Lawrence died in England a short time after this marriage, towards the close of the year 1888, leaving his memory as the subject of an interesting biography, which is likely to survive his own writings. He seems to have been a man of great sympathies, inwardly deeply religious, kindly, and honest, outwardly brilliant and accomplished; but unfortunately destitute of a scientific training, and not possessed of a very correct judgment. We say this independently of his dreadful mistake about Harris; for example, he seems to have been most unfortunate in his political forecasts. He said that Jung Bahadur would lose his head, that after the French war of 1870 there would soon be a republic in Germany, and that France was ruined without any hope of revival. We cannot see any adequate grounds for hazarding the last two predictions, and all three were falsified by the events.

Though he could write very sensibly on the visionary claims of Esoteric Buddhism, Mr. Oliphant, in his gropings after the unseen world, showed a credulity which might well arouse doubts of his sanity. In his anxiety to believe what he wanted, he attributed nervous changes of sensation and new thoughts arising in his mind to the influx of spirits, and especially to the agency of his dead wife. People, however, have not yet come to regard such vagaries in belief as forming any sufficient reason for denying the responsibility of those affected, and depriving them of their civil rights. It would, therefore, serve no useful purpose to discuss the speculative question whether Lawrence Oliphant's credulity in religious matters ever passed from the stage of foolishness into that of lunacy.

We have been deeply interested in these volumes, and commend them warmly to our readers. After all, Mr. Oliphant was a man to be loved and pitied, and with regard to the authoress, her style, her impartiality and graphic descriptions have produced not only a readable but a charming work.

La Grippe et l'Aliénation Mentale. PAR ALBERT LELEDY, M.D.
Paris : Baillièrre et Fils. 1891.

Literally influenza is in the air, and we hardly know whether it is not likely to establish a permanent residence with us. Each of us finds something interesting in its symptoms, which are so general that every specialty has a share.

Recent epidemics have been supposed to have presented more frequent affection of the nervous system than former ones, but we think this is probably because they have been more looked for. In epidemics of the last century there are records of hysteria, hypochondria, and nervous prostration, and in all probability there is little difference between the recent and the more distant affection. It is certain, however, that the three recent occurrences, or recurrences, of the malady have each been characterized by special peculiarities, in one the coryzal symptoms being the more marked, while in another the rheumatic or gastro-intestinal ones have predominated. In our experience the nervous symptoms have followed the various forms of onset in very equal proportion.

Dr. Leledy, as well as Dr. Ladame, have collected cases of insanity and other neuroses as seen following influenza, and

more recently Dr. Savage read a paper on the same subject before the Medical Society of London.

Some sceptics were inclined to scoff, and to say that the insanity followed the influenza, but had no real connection with it. We will refer such doubters to the book of Dr. Leledy, and we think they will be satisfied.

The book under consideration is of nearly 200 pages, and gives a very carefully-arranged clinical history of the experiences of the author. An index, as usual in French books, is wanting, but a very copious bibliography is appended, and the summary, which we shall proceed to quote and comment upon, is excellent.

Conclusions.

1. "Like other infectious disorders, such as small-pox, typhoid, and diphtheria, influenza may give rise to nervous disorders." We do not think there is any special relationship between the febrile process and the nervous disorder. We are inclined to think the post-influenzal neuroses resemble the post-diphtheric and syphilitic more than those following typhoid or small-pox.

2. "Insanity may follow at any time after the influenza." This, too, we have found to be the case, so that in many cases the insanity developed at once, there being a direct passage from delirium to delirious mania, or from simple depression and weakness into melancholia; while in other cases the mental symptoms did not arise for some weeks after the influenza, and were not always easily connected with the acute symptoms.

3. "Every form of insanity may arise as a result of influenza." In our experience of the earlier cases we are inclined to think by far the larger number of patients were affected with melancholic symptoms, but we are now meeting with many in whom other forms of disorder, such as delusional insanity, is well marked. Various forms of recurrent insanity are started by the influenza in unstable subjects, and in some, degeneration progresses very rapidly after influenza has occurred.

4. "There is no special symptomatology of post-influenzal neurosis."

5. "The role played by the influenza varies greatly, being in some cases the essential cause, but much more frequently only the exciting one." It acts on the unstable by inheritance, or by acquisition, as an exciting cause. Thus patients who have had previous attacks have frequently broken down as a result

of a slight attack of influenza, and persons who have been alcoholics, and women about the menopause, have become insane for the first time after influenza.

6. Thus "the influenza may be the predisposing or exciting cause."

7. "Probably in all cases there is some other predisposing cause," or the influenza would not have been enough to upset the nervous balance.

8. "Probably the mental disorders depend on nutritional changes in the brain, which may depend on some special toxic principle" or organism. Dr. Althaus suggests that there may be a grippotoxine which chiefly affects the bulb. This has certainly not been established.

9. "The onset of the mental symptoms may be sudden, and may have no relationship to the severity of the influenza," though in our experience the recurrence of the latter has distinctly a serious effect in producing mental breakdowns.

10. "The duration is shorter, and the curability is greater, the less the predisposing cause;" that is, the more the disorder depends on simple influenza. We are not quite at one with our author on this matter. We believe the instability of the individual may render him more liable to break down, and more easily re-established on his old basis. "The insanity may pass into chronicity or incurability."

11. "Among the insane few cases of influenza were at first reported," but this has changed during the more recent epidemic in England, at least. It has been pointed out by Dr. Sisley that prisons as well as asylums were very free from influenza, and he considers this to depend on the isolation of the patients, and makes it a strong piece of evidence in favour of the contagion of the disease. Recently we have seen hospitals for the insane with almost as many patients as attendants suffering; so the neurotic do not escape.

12. "Rarely the acute disorder cures the insanity." We should say very rarely, though remission and temporary relief is not uncommon.

13. So that the patients who are more reasonable during the influenza fall back when they recover their general health.

14. "There is nothing of special import in the treatment of such cases." One must treat the influenza first, and condition the surroundings for the insanity.

15. "Medico-legal questions may arise directly or indirectly from post-influenzal neuroses."

By thus taking the conclusions of our author we have laid

before our reader all that is noteworthy in the book, and we feel that there is ample ground for the superintendents of asylums to fill in the sketch thus placed before them.

Herndon's Lincoln: The True Story of a Great Life. By W. H. HERNDON and J. W. WEIK. Three Vols. Chicago: Belford and Co. 1891.

This work, recently published in America, has at present attracted little attention in England, but it is of great interest, and perhaps of especial interest to the student of morbid psychology. Mr. Herndon is a lawyer, and for over twenty years he was Lincoln's partner. Since the President's murder in 1865 he has been diligently accumulating the written and oral evidence of those who knew Lincoln personally, in order to supplement his own reminiscences. He has genuine reverence for his hero, but he believes also that there is now no need for reticence. The formal and official life of Lincoln has been written by Nicolay and Hay, but Herndon's "Lincoln" is probably a work of deeper and more abiding human interest.

Abraham Lincoln was born on the 12th February, 1809. His mother, Nancy Hanks, from whom he chiefly inherited, was the illegitimate daughter of a Virginia farmer or planter. Lincoln's theory was that illegitimate children are brighter and sturdier than those born in lawful wedlock, and he believed that all his own best qualities could be traced to this illegitimate union. Mrs. Lincoln is described as of feeble physical development. "Her skin was dark, hair dark brown, eyes grey and small, forehead prominent, face sharp and angular, with a marked expression of melancholy, which fixed itself on the memory of everyone who ever saw or knew her." Thomas Lincoln, the father, "was not only devoid of energy and shiftless, but dull." After marriage his wife taught him to write his name and to spell his way through the Bible. He was unsuccessful in everything he undertook; the only skill he possessed was as a hunter, but he never brought it into play except at the urgent demand of his stomach.

At the age of eleven began Lincoln's extraordinary increase in stature; at seventeen he was 6ft. 2in. in height, and at the same time his strength was equal to that of three men. While still a child his mother died, and the widower

shortly afterwards married a widow, whom he had known since childhood. "Her newly-adopted children, for the first time, perhaps, realized the benign influence of a mother's love." With this marriage young Lincoln's education began. His originality and tastes appeared at an early age. Although with a marked dislike for manual labour, he was mentally energetic in a very high degree, and his memory was very retentive. He also wrote much verse, especially lampoons rather coarse in character. While during much of his youth and early manhood Mr. Herndon thinks he may be described as a "loafer," he also did much rough manual work. Once, when engaged with an old mare in working a mill of primitive construction, he struck the mare, and in the midst of exclaiming "Get up, you old hussey!" she suddenly elevated her shoeless hoof, and, striking him on the forehead, sent him bleeding and senseless to the earth. He was thought dead, but became conscious the next day. As cerebral action again began he automatically completed the interrupted sentence, "you old hussey."

The extreme melancholy which Lincoln inherited in a more intense form from his mother was marked in him throughout life. In 1835 the girl to whom he was engaged, the first and probably the only woman whom he really loved, died. This had a very serious effect upon his mind. "If, when we read what the many credible persons who knew him at the time tell us, we do not conclude that he was deranged, we must admit that he walked on that sharp and narrow line which divides sanity from insanity." He was carefully watched, as it was thought he would kill himself, and his recovery did not take place until many weeks after. "There is no question that from this time forward Mr. Lincoln's spells of melancholy became more intense than ever." About two years later he declared to a friend that "although he seemed to others to enjoy life rapturously, yet when alone he was so overcome by mental depression he never dared to carry a pocket-knife." Very soon after the death of the girl whom he loved, however, he proposed to marry another young lady, for whom he appears to have had no serious affection, and who refused him.

The history of his marriage some years later is characteristic. A very few months after having proposed to a girl of sixteen, by whom he was rejected, he became engaged to Mary Todd, a brilliant young lady, belonging to an old and distinguished family. There appears to have been little

love on either side; it was a matter partly of promises, partly of ambitions. The marriage was to take place on the 1st of January, 1841. All was ready, but no bridegroom appeared, and the guests at last quietly dispersed, leaving the wedding supper untouched. At daybreak Lincoln was at last found, "restless, gloomy, miserable, desperate." His friends, "fearing a tragic termination, watched him closely in their rooms day and night." In a few weeks he began to improve, and he wrote to a friend: "I am now the most miserable man living. If what I feel were equally distributed to the whole human family, there would not be one cheerful face on earth. Whether I shall ever be better I cannot tell—I awfully forbode I shall not. To remain as I am is impossible. I must die, or be better, as it appears to me." At this time he wrote and published a paper on suicide. The marriage would never have taken place if it had not been for the intervention of a diplomatic lady who brought the couple together again, and two years later, "as pale and trembling as if being driven to slaughter," Lincoln was at last married to Mary Todd. When dressing for the wedding an innocent little boy asked him where he was going. "To hell, I suppose," he replied. However unhappy the marriage may have been, Mr. Herndon holds that much of Lincoln's success was due to his wife, as well because of her acuteness and ambition as because her conduct drove him from the house and induced him to take a greater interest in politics. After his death she developed many eccentricities, and appears to have died insane.

Much interesting information is given concerning Lincoln's personal appearance, showing that he was physically of a distinctly low type of organization, such as is usually associated with some degree of hereditary degeneration. "His feet and hands were large, arms and legs long and in striking contrast with his slender trunk and small head." His height was 6ft. 4in., and he could throw a cannon ball farther than anyone in New Salem. He attributed this to the great length of his arms. He was lean, and remarkably ungainly in figure and movement—"the ungodliest figure I ever saw," as someone described him. He was thin through the chest and stooped slightly. Apart from the sad, pained look of his wrinkled face, there was no fixed or characteristic expression. His complexion was a dark yellow, his eyes were small and grey, with a sad, dreamy expression; his hair was almost black, nose asymmetrical,

cheekbones high and prominent; ears large and standing out from the head almost at right angles. The head ran backwards, the forehead rising at a low angle; diameter of head (measured apparently from hat) from ear to ear, $6\frac{1}{2}$ ins.; antero-posteriorly, 8 ins.; the jaws were long. His voice, especially when he began a speech, was shrill, piping, and unpleasant. He suffered much from his liver and constipation. His most prominent characteristic was melancholy. It was said of him: "I thought then, and think now, that I never saw so gloomy and melancholy a face in my life."

Although Lincoln's mind was keenly analytical, and he was (as Mr. Herndon for the first time conclusively shows) a thorough-going free-thinker, he was at the same time very superstitious and fetichistic. When his son was bitten by a mad dog he took him to a mad-stone. He attached great importance to dreams. After his election in 1860 he saw a double image of himself in a mirror. He always said, "I am sure I shall meet with some terrible end." The end came on the 14th April, 1865.

Differences in the Nervous Organisation of Man and Woman: Physiological and Pathological. By HARRY CAMPBELL, M.D., B.S.(Lond.). London: H. K. Lewis, 1891 (pp. 383).

This interesting essay is written in Dr. Campbell's usual thoughtful and suggestive, though not always very conclusive, manner. It covers a considerably larger field than the title indicates, for the writer found as he went on that the subject broadened out in many directions. The early chapters (dealing with the evolution of sex and containing a critical account of the views of Weissmann, Geddes and Thomson, etc.) and the concluding chapters (dealing with the intellect, emotions, and will) are, indeed, of a speculative character, and have a rather remote connection with the subject. Dr. Campbell urges, however, that "it is impossible to study any question from too many points of view, and that the wider our survey the more thorough our knowledge and the deeper our insight are likely to be in the end." He criticizes with an open mind, and his conclusions, so far as he arrives at any, have an independent value. A guarded adhesion is given to Weissmann's doctrine of the non-inheritance of acquired characters, and it is asserted that we shall eventually have to accept "the view

that it is essentially by natural selection, and by natural selection alone, that mental evolution has proceeded.”

Among the points of nervous difference dealt with are the comparative liability of man and woman to gross lesions of the nervous system, the resemblances between women and children, the comparative intellectual capacity of the sexes, the egoism of man, the faculty of perception in man and woman, the sexual instinct, the influence of sex on suicide, the comparative nervous plasticity of the sexes, and the relative clannishness of men and women.

Dr. Campbell has not been altogether fortunate in dealing with the relative frequency of insanity in the sexes. There have been no recent investigations into this interesting field, but the statistics here brought forward are, for the most part, over a quarter of a century old, and Dr. Campbell has altogether missed the important fact that, as the result of a gradual change in the sexual incidence, women in this country are now as liable to insanity as men, indeed, slightly more so.

There are some interesting chapters on the monthly rhythm, which, with varying success, Dr. Campbell endeavours to trace before puberty, after the climacteric, and in men. He does not, however, appear to be quite on the right track in seeking this periodicity in pathological manifestations. If there is a menstrual rhythm apart from menstruation, it must be sought in phenomena which, like menstruation, are physiological, not pathological. Unless Dr. Campbell can bring forward careful observations, carried on over a long period, of the pulse, temperature, etc. (and this is not difficult to do), he will scarcely be able to prove a monthly physiological rhythm in men. It is remarkable that no reference is made to the most important contribution brought to our knowledge of this subject in recent years, viz., Prof. Nelson's observations on himself (published in the "American Journal of Psychology"), showing a monthly rhythm in dreams and in seminal emissions during sleep. Nor is any reference made to Gaëtan Delauney, one of the chief of Dr. Campbell's predecessors in the general study of secondary sexual differences in men and women.

The book covers a large field in a very incomplete manner, but it is the contribution of a thoughtful writer of varied culture, and brings many new facts and suggestions to those who are engaged in the study of a difficult subject.

Die Psychopathischen Minderwertigkeiten. Von Dr. J. L. A. Koch. Erste Abtheilung. Ravensburg: Otto Maier. 1891.

The author of the well-known *Leitfaden der Psychiatrie* here presents us with the first part of a work on the borderland of insanity which promises to be of some importance. The not very translatable term which Dr. Koch uses here (as in former works) to denote this borderland, does not seem very happily chosen, but it is explained that "nervosity," "neurasthenia," and similar terms were found to be not sufficiently comprehensive. It is desired to include all the psychic abnormalities, congenital or acquired, which influence the personal lives of men. These conditions are carefully distinguished from insanity, though they may sometimes pass over into insanity; and while he finds them widely spread, Dr. Koch tells us that he is not among those who find psychic abnormality everywhere. This volume deals only with permanent congenital conditions, including various forms of psychic eccentricity and perversity, more especially the numerous forms of obsession, their relation to insanity, and their treatment. The persons thus afflicted may rank intellectually far above the average of humanity, but the cause of their abnormalities lies beyond the physiological limit in pathological regions, and the study of them may, as Dr. Koch holds, be of far-reaching significance as regards both practical and theoretical psychiatry.

Dealing with the medico-legal aspects of the matter, Dr. Koch is in favour of admitting "diminished responsibility," being at the same time opposed to "extenuating circumstances." In dealing with those who possess contrary sexual tendencies, he believes that we have to recognize that such persons cannot be punished for actions which in normal individuals are unnatural, but which, from pathological causes, are in these abnormal persons natural. At the same time they should not remain absolutely unpunished when they adopt criminal means (such as the seduction of young boys) to gratify their sexual instincts.

The book is written with perhaps too strenuous an attempt at condensation, and it may be that scarcely sufficient recognition is given to other workers; the classification and distinctions introduced are also sometimes open to the charge of being over-subtle. Numerous interesting cases are given in

detail, and Dr. Koch lays due stress on physical abnormalities. The book cannot be neglected by those who concern themselves with the extensive frontier provinces of insanity.

Nouvelles Recherches de Psychiatrie et d'Anthropologie Criminelle. Par C. LOMBROSO. Paris: Alcan. 1892.

In this little volume of the well-known Bibliothèque de Philosophie Contemporaine, Prof. Lombroso brings together a summary of the chief investigations in scientific psychiatry having reference to criminal anthropology, which have been made during the last eighteen months. That is the period which has elapsed since Prof. Lombroso published a similar volume in the same series under the title of *L'Anthropologie Criminelle et ses recents Progrès* which was noticed in this Journal at the time. The first chapter deals with observations and statistics as to morphological abnormalities, and gives a summary (with illustrations) of the observations on Charlotte Corday's skull. The second chapter deals with studies on the living (criminals, prostitutes, and normal persons), as to hands, feet, teeth, ears, sexual organs, etc. Chapter III. is concerned with physiognomy. Chapter IV. describes certain new varieties of criminal, more especially Brouardel's feminine type, and Benedikt's congenital vagabond. Chapter V. summarizes Bergk's observations as to tattooing among Danish prostitutes, and Guerrieri's on young Bolognese criminals. Chapter VI. deals with functional abnormalities, such as those of touch, left-handedness, and the remarkable observations of Ottolenghi on the limitations of the visual field. Chapter VII., on etiology, deals with morbid heredity, the town of congenital criminals (Artena, in the province of Rome), described by Sighele, and the causes of revolutions and of prostitution. Chapter VIII. is occupied with the investigations of Semal, Ardù, Morselli, Garnier, etc., into criminal insanity; while the last chapter deals with the latest observations into the relationship between criminality and epilepsy.

It will be seen that this little book is of great interest. It is somewhat marred by occasional slight mistranslation of the investigations summarized, and by the misspelling of proper names, but it is certainly a book to be read by all those who are interested in the modern developments of mental science, and who are not able to follow the international ramifications of periodical literature.

Lehrbuch der Psychiatrie für Studierende und Aerzte. Dr. THEODOR KIRCHOFF, Arzt an der Irrenanstalt zu Schleswig und Privat Docent an der Universität Kiel. Leipzig and Wien. 1891.

This volume of over 500 pages is one of a series of handbooks similar to those published by Cassell and Co. in England. The author in his preface apologises for sending another book on insanity upon the book world, but being requested to provide a handbook for students and doctors, he has given his experience, and has also produced a book which represents the teaching in Germany of the psychological medicine of to-day. He points out that psychology is so indefinite a science as yet, and is making such rapid progress along certain lines, that fresh arrangements of new experience will be frequently required. Our author does not pretend to give his authorities or his references, and though he accepts and adopts many classical descriptions of cases, yet for students he thinks it unnecessary to burden his book with foot-notes.

We quite accept this, and are inclined to welcome the digested material without for ever being told the source of the mental food. General reference is made to authors, and there is a list of them as well as a fair index. Considerable importance is attached to twelve pages of illustrations, which give types of insanity, microscopical sections, and maps of localization of functions, besides othœmatomata and pulse tracings.

The photographic reproductions are good, but not very numerous, and Dr. Kirchoff points out the real social and legal difficulties of reproducing likenesses of patients in their insane and in their sane moods.

The psychological basis of the work is Wundt, and it is interesting to see the turning in the tide of mental medicine. In the darker ages the metaphysical was the one basis for study of mind; then came the purely materialistic—one might say without materialistic knowledge, and now we come to materialism with some knowledge. In England men like Bevan Lewis and Mercier write from the evolutionary standpoint, and in Germany Kirchoff writes from the results of the psychical research laboratories.

We have not reached any very firm ground, but we are impressed with the vigorous cross-examining of brain and

mind which is going on. The book is divided into a general and a special part; only ten pages are occupied with the anatomical basis and seats of mental disorders.

The tables of causation of insanity follow, and are very similar to those adopted by Griesinger; thus we have general causes or conditions, such as civilization, sex, etc.; special causes, first bodily, such as meningitis, then mental, such as grief. The next part is full and interesting, and gives the symptoms of mental disorder, divided as to whether they affect the consciousness, perception, feeling, will, conduct, and bodily states; the course run by mental disorder, including general points of prognosis, comes next, to be followed by the investigation of our knowledge of mental disorder and its divisions; the principles of treatment are next considered. The history of psychiatry is placed at the end of the general division of the book, and is interesting, especially in reference to the reforms of the last one hundred years.

The second part contains the more clinical study and description of forms of insanity. It begins with a short chapter on classification, and there is little new or noteworthy here. Next are arranged the so-called simple disorders of mind, divided into melancholia, mania, periodic disorders, paranoia. In this last group we have several sub-divisions under the heads of "Wahnsinn," "Verrücktheit," and "Verwirrtheit," which may be translated by affective insanity, delusional insanity, and crankiness following other forms of mental disorders.

The next part includes the numerous forms of insanity depending on bodily and brain diseases. Dementia—primary, senile, and paralytic, is considered apart; then special forms of weak-mindedness, such as that depending on brain syphilis, metastasis, and general sclerosis.

Epileptic, hysterical, and neurasthenic disorders are considered, and one very special character of this book is the importance given to neurasthenia and its diagnosis. We have not space to enlarge on this point, or, in fact, on many which we have noted for reference, but we are sure that those of our readers who read German will find the volume of Dr. Kirchoff full of interest and of experience, and quite worthy of careful perusal.

Hospitals and Asylums of the World: Their Origin, History, Construction, Management, and Legislation. With Plans. By HENRY C. BURDETT, Esq. 4 Vols. London: J. A. Churchill, New Burlington Street. 1891.

The first volume contains the history and administration of asylums. The author gives a sketch of lunacy in ancient times, Pre-historic, Assyrian, Egyptian, Greek, and Roman, and also as it appears in sacred history.

As interesting a chapter as any is that which presents the period of demoniacal possession, witchcraft, and autos-da-Fé, namely, from A.D. 600 to 1750. It is a fearful history—a disgrace to animals supposed to be in the possession of reason and moral sense. These qualities are, however, useless if associated with ignorance. As the author observes: "No nation can claim exemption from the discredit due to the belief in demoniacal possession and witchcraft, and we are forced to conclude that these lamentable proceedings must be regarded as unimpeachable evidence of the views which pervaded every section of the people throughout the civilized world during many centuries."

During the succeeding period, 1750 to 1850, Mr. Burdett traces the brutal treatment of the insane which prevailed, almost without exception, until the torch of humanity, borne aloft in Paris and at York, threw light upon the scene, and was gradually followed by practical reforms. Much information is given with regard to the early history of asylum treatment in many countries. The information collected with pains and trouble must be always of great use for purposes of reference.

"The present condition of lunatic asylums" is given in succeeding chapters. The asylum in Jersey is described, but the writer does not appear to be aware of the interesting circumstances connected with its origin.

Chapter VII. is especially valuable as giving an account of the lunatic asylums of India, as it is not easy to obtain information in regard to them. The particulars supplied with regard to lunacy in the colonies are also welcome, but the striking history of the condition of certain asylums in Canada, the exposure which took place in 1884, and the legislation which followed in consequence, are passed over in a few sentences which read very tamely. It seems to us that the mass of material contained in this work has the effect of almost obliterating salient points which might

have been brought out into relief with excellent effect. The very important landmarks in the history of the insane are in danger of being lost in the details, and there seems to require, at several epochs, a red letter mark, which is conspicuous by its absence.

A very useful chapter is the fourteenth, containing, as it does, a summary of the Lunacy Laws in Great Britain and Ireland, Austria, Belgium, Denmark, France, Germany, Italy, the Netherlands, Portugal, Russia, Spain, Sweden, Norway, Switzerland, and the United States. The information given in the last-mentioned country might have been advantageously fuller.

It is hardly necessary to say that the remaining chapter of this volume, devoted, as it is, to "asylum nursing and the training of attendants," does credit to Mr. Burdett, who is here thoroughly in his element.

The second of these volumes is devoted to "asylum construction, with plans and bibliography." A very large amount of labour has been expended upon this work. Mr. Burdett has left no means neglected in order to render it complete. It is and must continue to be a valuable work of reference.

Asylums are classified under four heads:—(1) The irregular or conglomerate; (2) The corridor; (3) The pavilion; (4) The corridor-pavilion.

The first class includes a number of asylums not intended for the object to which they are assigned, and, as a rule, they are not by any means well-suited for the purpose. Some were, at one time, ordinary workhouses. Mr. Burdett gives a very long list of conglomerate asylums in almost all countries.

The corridor type of asylum is familiar enough, and includes the greater number of county asylums in England and Wales.

Under pavilion asylums we have the general hospital type. The connecting corridors are disposed, for the most part, in four ways:—(a.) The linear form, the blocks being arranged on one or both sides of a perfectly straight line. (b.) The broad arrow form, in which the blocks project from a V-shaped corridor, the limbs being more extended than in the letter. (c.) The letter H form, the blocks being attached endways to the perpendicular parts of the letter. (d.) The crescentic or horse-shoe shape. The inconveniences of the pavilion type of asylums are pointed out by the author. The

advantages are not mentioned, and ought, we think, to be more fully considered. It should be borne in mind that, although the system of isolated pavilions is not adapted for some classes of patients, it may answer a good purpose for certain forms of insanity; and, at the same asylum, it may be desirable to have a combination of connected and disconnected pavilions.

The last division of type referred to, namely, the corridor-pavilion asylums, includes some asylums known to be of an excellent character, *e.g.*, the county asylums at Whittingham, Northampton, Hull, Derby, and the asylum at Norristown, Pennsylvania. The asylum construction in Scotland occupies a large space. That of France follows, and then Germany.

A very large portion of the book is taken up with the Report of the Committee of the London County Council on the proposed hospital for the insane, and, we think, a disproportionate part. Perhaps this was only fair, considering that Mr. Greene's paper, read before the Hospitals Association in 1890, on hospitals for the insane, is inserted at length, and evidently represents Mr. Burdett's own opinion. We therefore quote Mr. Greene's remarks:—"The above extracts are amply sufficient to show the estimation in which this extraordinary proposal is held by those best able to form an opinion on it, and I doubt whether it would be possible to find three English medical superintendents who have any real faith in the scheme. In fact, these hospitals are impossible in rural districts, and in large towns the difficulties in the way of construction would be almost insurmountable. A word as to clinical teaching in these new abodes of learning. . . . I assume there are about 800 senior medical students in London, and supposing that each student visited the hospital even once a week, it would mean that something like 130 students would be daily in the wards. I would ask those present, who are conversant with the treatment of insanity, whether it would be justifiable to subject cases of acute mania or acute melancholia to such an ordeal during six days of every week of their illness? There can be only one answer to this question. Some limit would have to be placed to the attendance of students, and I think it will have to be admitted that once more the hospital for recent cases would fail, at least partially, in its object. The consensus of opinion is almost wholly against it. It will be gathered that I have no faith in this hospital nostrum—this Morrison's Pill—for hastening the advent of the lunacy

millennium—I look upon it as one of those things which has not within it the elements of success, which has already been tried in other lands and has failed. . . . To properly try the experiment in the Metropolis, it would be essential to construct a hospital large enough to contain all the cases occurring within the Metropolitan area for six months. This would need a building, or buildings, large enough to hold 1,000 patients. An average residence of six months would enable a hospital to have 2,000 cases under treatment during the year; that is about the number admitted to the County of London Asylums. Nothing short of this would prove anything definite” (p. 257).

Mr. Greene advises those who agitate for the repetition of “a discredited experiment,” the name given to it by Dr. Urquhart, to endeavour to put down drink and other causes of insanity, and so prevent its occurrence.

His remedies for the defective knowledge of students and practitioners in regard to mental disorders are threefold. Students from the hospitals should visit regularly the asylums situated near London and large towns. There are very large asylums near the Metropolis, and the medical schools should have allotted to them one of these asylums, as may be most convenient. Secondly, students should be permitted to take three months’ asylum practice in lieu of the same amount of the hospital practice now required. Thirdly, clinical clerks should be more frequently appointed in asylums than is at present the case.

The work is enriched by a considerable number of plans of asylums. We should have expected to see one of Alt. Scherbitz, and to have had the increasingly-adopted principle of segregation, of which this asylum is the type, more prominently brought forward. In so large a work there must necessarily be some defects. Thus, having occasion to refer to the asylums in Norfolk, we examined the index, but failed to find them. In the list of illustrations we find “Plan of Norwich Lunatic Asylum, Hellesdon,” which is to be found at page 109, but we have been disappointed not to find any account of it, or, indeed, any further mention of its locality. At the end of this volume there is an asylum “bibliography,” which is of great use, and must have involved much labour. There are, however, some omissions—a fact which is not surprising.

The work will, no doubt, be added to all our public libraries, and we would fain say every asylum library, were

it not unfortunately true that very few asylums have a collection of books bearing on asylums or psychological medicine. It might have been supposed that if the small expense involved in such a collection ought not to be paid for out of the rates, some spirited member of the Asylum Committee would present it to the asylum.

Vols. III. and IV. have not yet been published.

Induction and Deduction. By CONSTANCE C. W. NADEN.
Edited by R. Lewins, M.D. Bickers and Son.

Constance Naden: Further Reliques. Bickers and Son.

Constance Naden and Hylo-Idealism: A Critical Study. By
E. COBHAM BREWER, LL.D. Bickers and Son.

A New Philosophy.

It is a good deal to say of any philosophy that it is new, and though originality be not the chief question in weighing the merit of any system of human thought, it is, at least, in this sense important that it evidences, where it really exists, a rare amount of character and intellectual force, such as may well command the attention of the thoughtful student. That Miss Constance Naden, whose philosophical essays lie before us, was a woman of rare force of intellectual character, no one will deny. That she died untimely, before her work was well begun, is one of those sad incidents of the world's course which we can only regret. But whatever the ultimate value of her philosophical scheme may prove to be, it is well worth the student's while to pause for a moment and examine it with that interest which must always attach to fresh thought.

Her career is sufficiently remembered. The daughter of parents in a narrow way of life at Birmingham, she studied ultimately at Mason College, and advanced to attainments of no mean order in scientific work. She was a personal force in debating clubs and similar fields, and she wrote poems, which became somewhat famous because they attracted the praise of Mr. Gladstone in one of the first numbers of "The Speaker." Her health broke down after a visit to the East, just as she was taking up her life in London, and she died at the close of 1889.

Her main interest, as these volumes abundantly testify, was in the discovery and working out of a philosophical

scheme of the world of knowledge, which should combine for her mind the merits of the English and the Neokantian systems of thought, and avoid the difficulties of both. It is alleged in Dr. Dale's notice of his friend that the influence of Dr. Lewins upon her mind was a decisive factor in the formation of her system. Dr. Lewins, it is only fair to say, repudiates this theory; but it is not necessary to discuss the steps by which Miss Naden came to her belief. It is evident that she was much influenced at one time by Mr. Herbert Spencer, and that she was by no means unacquainted with the thought of the English Neokantian school, whose chief exponent was the late Professor T. H. Green. But when once the new scheme of the universe had laid hold upon her, she was delightfully dogmatic. "Hylo-Idealism: The Creed of the Coming Day," was her title for an article in "Our Corner," in which she expresses much scorn of all the orthodoxies and rejoices to think that the merit of the "new creed" is "its complete reversal of the theologic standpoint." Yet, after all, it must be confessed that her mastery of style is not what it might be, and that, for lucidity of statement, her essays leave much to be desired. The English philosopher seldom shines in his terminology. From Bacon and Locke until now, everyone has deemed it needful to invent a new diction, which comprises both new-coined words, by no means happily chosen, and old familiar phrases used in a sense whose logical precision and exactness is doubtful. It is not fair to judge Miss Naden by these essays, for she did not live to put her thoughts into any final form, such as she doubtless would have desired to be known by in another age. But the statement, as it stands, is often unsatisfactory enough: and against such terms as "asselfment," we would humbly, but energetically, protest.

The essence of the theory appears to be capable of being stated as an inverted variant of the teaching of Berkeley and Hume. To them Locke's theory of knowledge and his philosophy of "impressions" and "ideas" led straight on to the denial of any knowable matter outside and beyond our consciousness. Since Berkeley had to find a basis to assert the reality of the "outer world," he took refuge in the theory that God might well produce the conscious types, and that, as He would not deceive us, they must be substantially true. Hume, having no scruples, called himself, absurdly enough, a sceptic, and supposed himself to doubt

whether there were any reality corresponding to these "fictions of the mind" at all.

Miss Naden, on the other hand, is possessed by two currents of thought, which she conceives her theory to reconcile. She is very clear that to us there is no outside world—that every "thing" is a "think," as Dr. Lewins strangely states it—and that, in fact, each man makes his own universe. *Quot mentes, tot mundi*, is her motto. She even goes so far as to affirm, somewhat crudely, that the only creation and the only God are to be looked for in one's own cerebral hemispheres. But she is at the same time equally assured of the effective materiality of the universe. She is quite satisfied of the existence of other things and other beings, and she is prepared to reason about them, not only for intellectual, but for ethical purposes. She supposes, indeed, that the results of the sciences are frankly destructive of all theories of creation or causation which have to do with anything but matter. She takes it as obvious that life and consciousness are themselves only the upshot of "hylic" energies, working themselves out on Spencerian lines. It seems to us that this position involves the same paralogism which Mr. T. H. Green pointed out ten years ago, in his criticisms of Mr. Herbert Spencer. But the first question is, how did Miss Naden reconcile her two cardinal lines of thought? How, if the world is a vision—possibly a mirage or a drunken dream—how can I posit any difference between the real and the unreal, the true and the false? How, in a word, can I *know* anything about it? Are we not referred back to that "scepticism" of Hume, which, however absurd it be in effect, was the necessary outcome of the Lockian system, until Kant made it clear that it was the original misconception as to the nature of knowledge itself which was the *fons et origo mali*?

Like most English thinkers, Miss Naden, though she knew the Kantians, seems to have missed the fundamental import of their criticism on the English school, and we fancy they would apply to her assertions much the same polemic as that by which, in the view of many of us, they have destroyed the philosophic stability of the schools of Mill and Spencer. Miss Naden's answer to the difficulty seems to be a rough and ready sort of Cartesian argument. No man, she says, can be a sceptic about "hylic" reality without thereby affirming the possibility of argument, and he who affirms any argument, even a sceptical one, affirms

reason and certainty. "If we can show that *some* reality is presupposed by the sceptic, we have laid afresh the foundations of philosophy." So far the reasoning is sound, and is, in fact, our old friend, the *cogito ergo sum*, in a new dress. But Miss Naden now makes a *salto mortale*, as, indeed, did Descartes himself. Having compelled her Pyrrhonist to affirm the reality of his argument, she interprets that to mean "a course of reasoning in which every step is dependent on the preceding step, while the origin of the whole is some observed group of facts." Obviously, the last item, the observed "facts," is superadded without leave of the Pyrrhonist. So we are obliged, she goes on, "to assume the existence of some active basis of thought, that is, of something which thinks." So much as this the Pyrrhonist might possibly admit, but he would assuredly revolt at what follows. "What we assume of the individual self, we extend analogically to other men, *who are to us other selves*." This is a sudden plunge into a very ordinary and trivial realism; but there is a deeper plunge yet, "Having seen that sensation and motion follow upon excitation of the brain, and are suspended or destroyed by paralysis of the brain, we are justified in restoring our thought cells to their proud creative eminence, and in proclaiming that *they constitute* this 'active basis of thought,' that they think and, therefore, exist." To assume all that this simple-minded argument assumes, one must be already satisfied that the phenomena are real. If, for the sake of argument, you suppose that our cosmic panorama is unreal, that all I have seemed to see and hear, including laboratory experiments, is an interesting dream, in which my professors and my fellow students are merely ghosts in the dream themselves, then I *know* nothing whatever about the relation of sensations and thought-cells. I may amuse myself with fancying a correlation, but certitude or basis for action there is none. Besides, why should we extend "analogically" any fundamental reasoning at all. Analogy is nothing but a guess at best, and a confession of the scepticism against which it is invoked. But Miss Naden is not afraid to use it for a final bridge, by which to reach again the solid foothold of the common world. "From the material proplasm of consciousness," she goes calmly on, "we argue *by analogy* to a material proplasm of the objects of consciousness, and, therefore, to a *real world* which existed before man was and may exist when he is no more."

This is, to us, a very odd basis for philosophy. If she

were content with saying, as Dr. Brewer puts it, "that every individual is bounded by his own egoity," or as Dr. Lewins boldly says, "*L'Univers c'est moi*," then one could, at least, understand it. But such a theory is condemned to sterility. It rotates on its own axis, in the midst of an eternal void. Ethics cannot exist for it, since there are no others to be regarded, except the shadows of its own creating. Truth and error, reality and unreality, right and wrong, beauty and hideousness, are nothing but the fancies of the hour. If the universe that is the ego, or the ego that is the universe, should happen or choose to change the tastes of its "solipsismal" life, they will be changed, and no good nor harm will come of it. The believers in this creed may assert that they do not change. But if the ways of their dream-life be stable, that is their affair. Mine are very changeable, and I claim the right to have drunken dreams as well as sober ones, when the fit is on.

The truth is, surely, that the test and basis of the whole matter is what test of *reality* one's scheme of philosophy can provide. That our universe is made up of phenomena, all thinking persons will agree. That in some sense it is nevertheless real, is obvious to all who are not in a lunatic asylum, and to many who are. But the explanation of the meaning of that reality is the crux of the philosopher, as the discernment of it is often the test of the lunatic. We will not, here and now, pretend to solve the riddle, though we cannot see that the gifted and forceful girl whose books we have been considering has succeeded. In any case, she was a strong and interesting personality, and her essays contain many fresh and vigorous things which will repay perusal. They are not all concerned with the explanation of the fundamental notions of her system. She discusses the nature of religion and the evolution of the sense of beauty. She discourses on the principles of sociology and of evolutionary ethics, and she defends the Utilitarians against Mr W. S. Lilly. But all her arguments are, on the whole, less interesting than herself.

Psycho-Therapeutics or Treatment by Hypnotism and Suggestion.

By C. LLOYD TUCKEY, M.D. Third Edition, revised and enlarged. London: Baillière, Tindal, and Cox. 1891.

That a third edition of Dr. Tuckey's book should have been called for in less than three years shows that some little interest is being taken in England in treatment by

hypnotism and suggestion, and that the book should be so much revised and enlarged as it is in this third edition is evidence that the author is taking pains to keep abreast with the rapid growth of knowledge on the subject, and, further, it is a satisfactory sign to anyone who wishes to see the subject seriously treated, that Dr. Tuckey is now able to relate a good deal more personal experience of hypnotic treatment of disease; for, in the discussion of a method which has to some the appearance of being altogether fantastical or even absurd, it is important to be able to appeal to hard facts. "Hypnotism," Dr. Tuckey admits, "affords especial scope for quackery" (p. 281), and its honest use is still prejudiced no doubt in the eyes of the world, by the recollections of some charlatanism that has called itself by the same name, and some mysticism that has declined all reasonable investigation. He is anxious to disavow any claim that hypnotization is useful to all patients; he does not suppose that it can cure grave organic changes, or cut short acute pain, but he relates how he has "treated, during the last three years, about forty persons for drunkenness, and success has resulted from hypnotic suggestion in about half of these. Among the successful cases are certainly two of real dipsomania. In nearly all cases I have seen partial or temporary success, and in one instance—probably as bad a case as could be met with—the freedom from alcoholism lasted for eight months. I have never seen hypnotism weaken the character where it has been properly used, and in treating drunkenness it is interesting to note the almost invariable improvement in disposition which takes place under the influence of moral suggestions" (p. 175). In the case of a gentleman, in which more details are given (p. 267), we see the patient after a chronic state of dipsomania for more than three years, with fits of uncontrollable craving for spirits every two or three weeks, himself very susceptible to hypnotism, and hypnotized twice daily with the repeated suggestion that he should look on alcohol with dislike. This is a view he gradually adopts; his appetite improves, his good sleep returns, and after four weeks he has no inclination to taste alcohol. In another case (p. 271) of a man, æt. 37, who had been a heavy drinker for about ten years, it was thought desirable, and found possible, to establish by suggestion in a hypnotic state such a disgust for alcohol as to cause vomiting when it was taken in the normal state, although the patient

had then no recollection of the suggestion, and so to lead him to habits of abstinence. Dr. Tuckey is candid enough to report another case of a woman, *æt.* 40, a confirmed drunkard for seven or eight years, in which there was marked success at first, continuing during the two months that he treated her. But after this, when she was no longer under hypnotic treatment, she relapsed. More experience would have led him to insist on longer treatment. Still, the results of these forty cases are noteworthy when taken as a whole, and have a more reassuring look than the monotonous perfection of a patent medicine. The importance of hypnotism in alcoholism is strongly supported by the wide experience of van Renterghem and van Eeden, of Amsterdam, and also by Prof. Forel, of Zurich. It has been comparatively little tried in these cases by Bernheim, Charcot, or Pitres, though of morphinomania Bernheim records some good cures by its help. Dr. Tuckey has the decided cure by hypnotism of many of the lesser inconveniences or rather habitual discomforts of ill-health to report—headache, diarrhœa, constipation, insomnia, etc. But he has not the opportunity of showing what Bernheim has so well shown during the last ten years among some 15,000 patients at the Hôpital Civil at Nancy, *viz.*, the great relief that hypnotic sleep may give in the advanced stages of chronic organic disease, when it may be almost the only method of refreshment to those who cannot take opiates. It requires special patience and determination to apply hypnotism to insanity, and Dr. Tuckey has not given up his time to following Auguste Voisin's lead in that direction. That something may be done in that province there is little doubt, but that it will require much time and tact and trouble is equally plain. Forel and Krafft-Ebing and W. von Speyr have done a little that confirms Auguste Voisin's conclusions, but Bernheim, Liébeault, Pitres, Wetterstrand, of Stockholm, and the other leaders in hypnotic practice have left the matter almost untouched.

A considerable part of the additions to this new edition consists of a discussion, or rather collection, of the physiological and pathological theories that have been invented to explain the phenomena of hypnotism. It is as well, perhaps, at some time or other to go over the many attempts that have been made in this most difficult field. The method of producing hypnotism which Braid used, *viz.*, the keeping the eyes fixed on some near object, led up to the hypothesis

that the exhaustion of the eyes by a strain put on them, along with the mental conditions of expectant attention, was the key to the situation. But with wider experience it was found that the conditions of the induction of hypnotism were exceedingly various; there need not necessarily be any strain, any monotonous repetition of stimulation, anything, indeed, perhaps, beyond that its advent should be "suggested" and not opposed. And with this widening experience the physiological hypotheses of inhibition of the highest centres, etc., are growing inadequate as explanations, and in the convenient word "suggestion" itself there is no theory either of the origin or mechanism of hypnotism, for no physiologist can put forward as an explanatory theory that a certain state of body will be induced for the reason that he says it will be. In the psychological side of the matter Dr. Tuckey is a little apt to lose his way in words. "Psychical processes," he says, "such as auto or verbal suggestion, may be supposed to cause hypnosis by originating a nerve impulse starting from the ideational centres, composed of waves of such a character that they tend to cause interference with the waves of other currents traversing the inter-communicating fibres, and to alter the conditions under which, in the normal relationship, the centres stand towards one another, so as to affect consciousness and function" (p. 192). That hardly seems to us to leave the matter clear. But though the deeper parts of physiological psychology may be obscure to all of us, there can be no doubt that there is much sound and profitable knowledge of the possibilities in the practical treatment of disease to be gathered from the volume before us.

The Supernatural. By LIONEL A. WEATHERLY, M.D. With Chapter on Oriental Magic, Spiritualism, and Theosophy. By J. N. MASKELYNE. Simpkin, Marshall, Hamilton, Kent, and Co. London, 1891.

The intention of this little book, the object of which is laudable, is to expose the folly of modern spiritualism. It is a feature of the present day that the remarkable phenomena of this class should be paralleled by equally astonishing phenomena produced by confessedly non-supernatural causes. Mr. Maskelyne has devoted his energies to this praiseworthy end. One is consequently reminded of the

rivalry between Moses and the Egyptian conjurers. There can be no doubt, it must be confessed, that a large number of persons not spiritualists feel keen disappointment when they witness the alleged explanations of so-called supernatural events. It is said that the conjurer requires for his success complex mechanical arrangements before he can effectually copy the remarkable performances which from time to time excite public interest. The conditions are stated by Lockhart Robertson to be altogether different. Mr. Maskelyne would not for a moment agree to this. Dr. Weatherly brings in array the various scientific reasons why there should be a large measure of apparent success, *i.e.*, not only from downright and interested trickery, but from the psychological laws brought into play under certain conditions.

With one exception the chapters are contributed by Dr. Weatherly. They include remarks on sense-deceptions generally, sleep and dreams, somnambulism, ghosts, phantasms of the living as well as the dead, telepathy, Joan of Arc, Shelley, Swedenborg, analogy between dreams and insanity, complicated hallucinations and illusions, and, lastly, sense deceptions, caused by fever and by drugs.

The subjects treated of by Mr. Maskelyne are Oriental jugglery, the basket trick, the mango tree and the burial trick; spiritualism, Davis, Home, the Davenport Brothers, Dr. Slade, Eglington, table-turning, spirit photography, theosophy, Madame Blavatsky, the Coulomb's confession, Mr. Hodgson's report, etc.

Since the first edition of this book was published there has been an additional chapter written in regard to the public performances of Miss Abbott. Any pretence to magnetism or psychic force as the cause of the phenomena is satisfactorily disposed of. Anyone who lays claim to the possession of occult powers while knowing well that there is another explanation must be regarded as a trickster. The explanation of a surprising performance, based as it is in the present instance upon certain mechanical laws, is by no means unimportant, and the remark has been not unnaturally made by the public that it is surprising Mr. Maskelyne himself should have waited until the advent of Miss Abbott before discoursing upon so interesting a power, and that so successful and attractive a performance had not been long ago exhibited in the Egyptian Hall.

The Human Mind: A Text Book in Psychology. By JAMES SULLY, M.A., LL.D. Longmans, Green, and Co., London. 1892. Two Vols.

Handbook of Psychology: Feeling and Will. By JAMES MARK BALDWIN, M.A., Ph.D., Professor in the University of Toronto; author of "Handbook of Psychology: Senses and Intellect." Macmillan and Co., London. 1891.

We draw attention to the publication of this work, and are glad to be able to congratulate the author on its completion. We must, however, postpone to a future issue a review of its pages. We can, however, in the meantime cordially commend Mr. Sully's Treatise to the readers of the "Journal of Mental Science."

With regard to Professor Baldwin's volume, it should be stated that it is the completion of and supplementary to the author's "Senses and Intellect." The aim of this publication would be best expressed in the writer's own words: "In method and scope my plan has remained the same. The treatment of this volume, however, is somewhat fuller; since I have wished to remove in some degree the reproach so often and so justly cast upon the general works in psychology that they give feeling and will, summary and inadequate discussion. . . . This volume, it may be said, puts to a better test the claim upon which the handbook is written, *i.e.*, the possibility of a psychology which is not a metaphysics nor even a philosophy. For the phenomena of the emotional and volitional life have not been worked over for purposes of philosophical system as an intellectual phenomena have; and for this reason, the psychologist has in this field greater freedom of treatment and a larger scientific opportunity. Hence—while not laying a claim to originality, which only the opinion of competent readers could make of any force—I feel that, apart from the general arrangement and division, certain chapters of this volume are more independent. In other words, the book not only aims to be useful for purposes of university instructions, but it may also be found, on some points, to make contributions to psychological discussions."

The work fulfils the expectations raised by Professor Baldwin's assured position, and by the promise contained in the passage we have quoted. We may have something to say in regard to it in our review of Mr. Sully's volumes.

Die Conträre Sexualempfindung mit Benutzung amtlichen Materials. Von Dr. MED. ALBERT MOLL, in Berlin. Fischer's "Medicinische Buchhandlung." Berlin. 1891.

The author of this work has already won his spurs in medical literature. His style is singularly lucid, and he is careful in his statements of facts. The work before us is no exception to his habit of writing and thought, and if the subject required further consideration and publication than it had already received, it could not have fallen into better hands than those of Dr. Moll. Dr. Krafft-Ebing, whose work on the same distasteful subject has been reviewed in this Journal, has acted the part of a foster-parent in writing a commendatory preface.

We do not propose to analyze this book, as we consider that those who find it their duty to study the subject of which it treats would do better to go to the fountain head than to take the facts at second hand from a review.

Éloge de Achille Foville. Lu à la Séance Publique Annual de la Société Médico-Psychologique, du 27 April, 1891. Par Le Dr. ANT. RITTI, Secrétaire Général de la Société. Médecin de la Maison Nationale de Charenton. Paris: G. Masson. 1891.

Our appreciation of the subject of this *Éloge* is shown by the tribute paid to his memory in the obituary notice of this lamented alienist. We are glad to welcome M. Ritti's eloquent address. The loss of Foville, in the prime of intellectual life, was an irreparable loss to psychological medicine. Exceptional, no doubt it is, for father and son to be eminently distinguished in mental power and activity, but we witness this concurrence in the cases of M. Foville *père et fils*.

PART III.—PSYCHOLOGICAL RETROSPECT.

1. *English Retrospect.**Asylum Reports for 1890.**(Concluded from p. 143.)*

Bedford, Hertford, and Huntingdon.—This asylum is overcrowded, and the Visitors are convinced that increased accommodation must be provided for pauper patients. How this should be done has not yet been decided.

Difficulty is still experienced in readily obtaining suitable men as attendants. The Commissioners point out the advisability of extending exercise beyond the airing courts to all patients physically capable of enjoying it.

Broadmoor (1890).—A severe epidemic of influenza occurred, an account of which has appeared in the "Lancet." The cases were on the whole simple in their character, and free from complication.

During the height of the epidemic the resources of the asylum were taxed to their utmost, as 25 out of 84 male attendants were off duty at one time.

Durham.—Two acres have been set aside for the formation of a cemetery for the burial of patients dying in the asylum, and of officers and servants belonging thereto.

A Roman Catholic priest has been appointed to attend to patients of that religion at a salary of £40 a year.

Concerning diseases of the lungs, Dr. Smith remarks:—

Diseases of the lungs, a largely preventable class of diseases, amount to 39 per cent., 45 per cent. of this number being due to phthisis, 44 per cent. to pneumonia and congestion of the lungs, and the remaining 11 per cent. to bronchitis. This is a very unsatisfactory state of matters. Although a number of patients are admitted at an early stage of phthisis, still there is an alarmingly large proportion of the disease found in patients who have for a long time been in the asylum, and who on their admission showed no traces of the disease. Where large numbers of people congregate in a house there is always a tendency towards lung disease, especially if the rooms are inadequately ventilated, or, what amounts to the same thing, if the rooms be over-crowded. Another factor in the production of lung disease is the abstraction of oxygen from the atmosphere, and the escape of poisonous products of combustion into the rooms owing to the use of coal gas as an illuminant. This I believe to be a much more frequent cause of lung disease than is usually thought. A still further cause of lung disease, and of phthisis in particular, is the absence of proper means of disinfecting the clothes and bedding of phthisical patients, but this latter is, together with a new laundry, receiving your attention; but the condition of the wards and their mode of lighting urgently require consideration.

Dr. Smith suggests as a short title for the new Lunacy Act:—

An Act to prevent the early treatment of the insane and to hamper all having the care of them.

Fife and Kinross (1891).—It has been decided to add a large hospital block to the buildings. The plans are so far advanced that it is hoped that building may be soon begun.

The method of utilizing the sewage is also to be rearranged.

Hants.—All private patients were removed from the asylum before the new Lunacy Act of 1890 came into operation. Dr. Worthington was of opinion that the printed notices required by that Act would be a fruitful source of discontent amongst the pauper inmates, who naturally would expect the same rights. As a matter of fact, paupers have the same privileges as regards their letters, but both classes seem to heed the notices no more than if they did not exist.

A third assistant medical officer has been appointed, and a billiard-room has been fitted up for the amusement of the officers.

Two severe cases of typhoid, one fatal, occurred, but the origin of the disease has not been discovered.

Inverness.—It has wisely been decided to improve the protection of the building from fire by carrying the partition walls above the slates. The building had a narrow escape from destruction by fire through hot ashes passing through a cracked hearthstone, and thus reaching the woodwork underneath.

Dr. Aitkin's report contains some useful information as to the increase of the asylum population. He finds that whilst the general population of the Inverness district has diminished during the last ten years, the number of patients sent to the asylum has increased, and that, as a rule, the increase has been greatest in the most isolated parishes.

London (County of).—The Asylums Committee report that during the year they have done much towards consolidating, improving, and making uniform various matters of asylum administration. They have dealt with the hours of work, the rates of pay and emoluments, and with the question of increased leave of absence, annual or otherwise, to the asylums' staffs. The appointment of 54 additional attendants, nurses, and servants has been necessitated by such increased leave. They have also fixed an uniform ordinary dietary scale for the patients and staff, and have discontinued beer as an article of dietary in all asylums. Details relating to these and many other subjects are to be found in the large volume published by the Committee.

The asylums having been brought under the ordinary incidence of rating by the 263rd section of the Lunacy Act, 1890, the question arose as to whether the payment of these rates should be met by the Council or by the Asylums Maintenance Rate, and a case was prepared and submitted to Mr. Meadows White, Q.C., for his opinion, and he having advised that the Council were liable, the Council adopted that view.

London (County of). *Banstead.*—Dr. Shaw reports that the increased amount of leave and the rise in wages has given much

satisfaction. A new operating-room has been built, and has proved of much service. There is now a very complete set of bacteriological apparatus, and a small laboratory is being prepared. It will almost exclusively be devoted to experiments in that direction. Dr. Shaw also states that the appointment of a pathologist has been very advantageous in many ways. The examinations are now much more thoroughly conducted and described.

The wards for the acute and infirm cases are overcrowded. Seventy-five of a total of 284 deaths were due to phthisis. It is suggested that the congregation of many persons in large wards may be partly responsible, and it is pointed out that wet-scrubbing of the floors must have an injurious effect. The water closets and drains are receiving attention.

London (County of). Cane Hill.—The enlargements of this asylum are making satisfactory progress.

Dr. Moody reports:—

The new scale of leave and pay for the attendants and nurses came into force on 1st April, and was received with considerable satisfaction. The extra leave necessitated the engagement of five additional nurses and five attendants. I do not find, however, any diminution in the changes that take place, and I am of opinion that no concessions, however liberal, will prevent this. Asylums are so numerous, and situations so easily procured, that servants often leave on the slightest possible pretext, no matter how much they are considered, or how much is done for their comfort and welfare.

London (County of). Olneybury.—The Committee have resolved to introduce electric lighting. The estimated cost is £17,500. Gas would probably not cost as much, but it is considered that the superior advantages of electric lighting, viz., brilliancy and softness of light, great cleanliness, improvement in sanitation, and saving in the cost of decorating walls and ceilings are of paramount weight.

London (County of). Colney Hatch.—There is now only one medical superintendent of this huge asylum. Mr. Marshall having retired, Dr. Seward has been appointed to the sole charge. We do not consider this a step in the right direction. The experiment is to be tried at Hanwell also.

The number of assistant medical officers has been increased to six.

It may be useful to point out that the Visitors state:—

From the fact that the asylum is now fully assessed for the purposes of the sanitary and other local rates, the time has, we think, arrived when steps should be taken to call upon the local authority to deal with the asylum sewage, and we propose taking early action in the matter.

Hot water pipes are to be placed in all the wards not already provided with a heating apparatus.

The Chaplain reports an experiment which might with much benefit be adopted in all asylums. He says:—

By way of experiment on a few occasions one of the week-day afternoon services has been reserved for the attendance of some patients of a less orderly

class than those who usually attend the chapel. The behaviour of most would justify their participation in the ordinary services.

London (County of). Hanwell.—The buildings are to be further protected from fire at a cost of £3,000.

Mr. Richards reports that there was an increase in the number of depressed and acutely suicidal cases. It is satisfactory to learn that of late years there has been a marked decrease in the number of deaths due to pulmonary phthisis.

Concerning the change of diet he says :—

Beer has been removed from the dietary table with marked advantage to the patients, and an additional meal (supper) has been given to them in lieu of the discontinued stimulant. I cannot speak too highly of this addition to the dietary scale, as formerly the patients went from half-past five in the evening until eight o'clock the next morning—a period of 14½ hours—without food. This was far too long. Since the supper meal has been given at seven p.m. the patients have been less restless at night.

The suppers are varied, viz., bread and cheese, seed cake, bread and jam, and porridge on different nights, and with these half-a-pint of separated milk is given.

To all those who are employed half-a-pint of separated milk is given at the dinner meal. Taking the patients as a whole I am sure that their bodily condition has improved. Many of them are certainly much stouter than when they had the ordinary diet scale, which included beer. The addition of the evening meal has conduced, in some measure, to the improved condition noticed.

On the same subject Dr. Alexander says :—

In the month of April a very memorable alteration was made in the dietary of the patients. Alcoholics were then deposed from their prominent and long-established position in the dietary, and relegated exclusively to the domain of medicinal agents. I may say that this change has so far been followed by the happiest results, as evidenced by the notable increase of contentment and decrease of squabbles and bickerings amongst the patients. The benefits accruing from the change have been most marked in the case of the epileptics, whose infirmities of temper are much less apparent than they used to be, and whose liability to fits—in some cases—has become lessened. As to the effect that the disuse of alcohol as a part of the dietary may have on the general health of the asylum, a sufficient time has not yet elapsed to enable me to form a definite opinion ; but I do not apprehend that it will be anything but improved, having regard to the compensatory addition that was made to the dietary on the withdrawal of alcohol therefrom.

Midlothian and Peebles.—Dr. Mitchell reports :—

Several cases of erysipelas occurred last March in the north-east wing of the asylum, and there had been one or two others in the previous year. On searching for a possible explanation of this outbreak it was found that a water closet (abolished a good many years ago) had had its soil pipe led into a branch drain near the windows of the north-east wing, and that this pipe had never been disconnected and sealed. It contained a large quantity of foul matter, and it appears most probable that this was the cause of the epidemic. The defect was thoroughly remedied by our own workmen, and since then the general health of the inmates has remained good.

Monmouth, Brecon, and Radnor.—Four cottages for married attendants have been erected.

Dr. Glendinning reports that the new male infirmary wing

approaching completion will supply a want which had become urgent, and will afford additional accommodation for 55 patients.

Montrose (1891).—The electric light is spoken very favourably of, both when employed in the wards and in the recreation hall.

The nursing in the new hospital is under the special charge of the new matron, and is carried out by trained nurses. Dr. Howden reports that a female nurse has charge of the chief male sick-ward, and that so far as his short experience goes the arrangement is entirely satisfactory.

The accommodation for ladies has been much improved by the acquisition of a villa. It stands within its own grounds, and commands an extensive and beautiful view of the bay of Montrose.

Portsmouth.—The female department is overcrowded. Plans for an additional building are in preparation. The estimated cost is £1,200. In August seven female patients were attacked with typhoid fever. They were mild cases, and all recovered. The walk round the estate is in use. It measures nearly two miles in length, and is 16 feet wide. The Committee have provided and furnished a laboratory for scientific work.

Somerset and Bath.—The purchase of the site intended for the new asylum has not been completed, pending inquiries as to the sufficiency of the water supply.

In an unusually large proportion of cases the admissions presented acutely suicidal symptoms.

Two outbreaks of fire occurred during the year. One was caused by a match falling into some bee's-wax and turpentine in an attendant's store-room. The other was due to the overheating of a drying stove in the foul laundry.

Staffordshire. Stafford.—This asylum is overcrowded. The Commissioners suggest that another asylum should be provided, as the best and permanent escape from the evil.

Staffordshire. Burntwood.—A second assistant medical officer has been appointed. The asylum is overcrowded, and some important structural improvements are urgently needed. The infirmaries for the acutely sick in both divisions are unsatisfactory as to size and arrangement.

In his report, Dr. Spencer says:—

The treatment of the patients has been carried out on hospital lines, as far as such treatment was found to be applicable. Many, if not all, of the numerous therapeutic agents have had a trial, some with success, the majority with but little good result. Among sedatives sulphonal has frequently been of much service to us, especially in the treatment of recurrent mania, several of the female patients who are subject to this form of mental disorder appearing to derive much benefit from the exhibition of the drug.

In discussing the well-known proposal of the London County Council, Dr. Spencer clings to the present system of asylum management and treatment, at the same time admitting the possibility and the necessity for improvement in various directions,

e.g., increased medical and nursing staffs, improved hospital accommodation for acute cases, etc.

Stirling, etc.—The whole of the asylum buildings have been overhauled by the new Committee, and many important structural improvements carried out. An abundant supply of good water has been introduced. The plumber work and sanitary apparatus have been reconstructed. The building has been more thoroughly protected from fire. A new and complete system of drainage has been adopted. The sewage is purified by means of the "International Sewage Purification Method." In the main buildings new bath-rooms, lavatories, and closets are being erected, and old ones refitted. The administrative block has been converted into a store, and a new administrative block erected. Finally, a new laundry and dairy are being built. To relieve overcrowding a hospital block is to be provided at once. Other minor improvements are mentioned by the Commissioners as having been carried out. Among these may be mentioned a room set apart for pathological research.

The case books appear to be kept with great care.

Each case is prefaced by a compendious schedule of particulars of great value; a photograph of each patient is inserted, and accurate details of examinations made with the best scientific appliances are added.

Dr. Macpherson writes strongly in favour of the creation of separate hospital blocks for new cases.

Suffolk.—Twelve deaths were due to dysenteric diarrhoea, one to enteric fever, and one to erysipelas. It is, under these circumstances, satisfactory to learn that a supply of wholesome water is shortly to be obtained for the institution. Much continues to be done to improve the character of the accommodation in this asylum, but it is evident that much is still untouched. The asylum being full, it has been determined to erect an infirmary block for each sex, each to contain 50 beds.

Mr. Eagar's report is of great interest, and treats of a variety of subjects, some relating to his own asylum, others being of general interest. He states:—

I have for years insisted that, with a better nursing system, very much might still be done to improve the condition of our patients; and that this can only be secured by paying higher wages, and by more liberal treatment generally, especially by very appreciably shortening the hours of duty. I am glad to see that at last a move is being made in this direction at several large asylums, with the view of securing and retaining such persons as nurses as may be depended upon for using that tact, gentleness, and forbearance which are so frequently demanded for the successful treatment of our cases.

In a note Mr. Eagar states that he has at last been able to arrange for the nurses in several of the wards to enjoy every alternate day the benefits of eight hours' duty only, eight hours' recreation, and eight hours' sleep. This has been done by the addition of one nurse to 76 patients.

The report includes some severe remarks upon the new Lunacy Act, and the auditing of asylum accounts under the Local Government Act of 1888.

Sussex.—Patients continue to accumulate. It has been necessary to board 50 women at another asylum. The nursing staff has been slightly increased.

Dr. Saunders reports that so much success has attended the setting apart of another observation dormitory on the female side, for quiet suicidal and epileptic patients, that a similar dormitory containing 25 beds has been opened on the male side. This, too, is much appreciated by the patients.

The Committee have adopted a scheme of rewards for merit and long service, and it is hoped that this will act as an inducement for attendants to remain in the service.

Wilts.—Under the direction of Mr. Rogers Field extensive alterations are being carried out in the drainage, etc.

In pursuance of Sec. 263 of the Lunacy Act, 1890, the asylum buildings, as well as the land, have been assessed to county, parochial, and other rates. The result of this is that, whereas formerly the Committee had to pay upon a rateable value of £225 15s., they have now to pay upon a rateable value of £2,356 3s. 2d. The Committee are advised that so much of the rates as are not assessed upon the land are payable by the county at large, and not out of the Maintenance Account. They have accordingly charged such rates paid during the past year against the Building and Repairs Fund Account, pending arrangements being made as to their liquidation by the County Council.

The following paragraph relating to dietary is from Mr. Bowes' report :—

A remark in the last report of the Commissioners in Lunacy, relative to the dietary of the patients, has been under the consideration of the Committee, and upon the suggestion of your medical superintendent a revised and improved dietary has been substituted for the former table, which was considered deficient. The old and new dietary tables are to be found in the appendix, and on comparing these tables it will be noticed that a more liberal supply of bread and meat in some form each day has been provided for, and there are now four full meat dinners every week. Another important alteration will be noticed in the omission of beer from the dietary table, and the substitution therefor of milk. No beer is now allowed to patients inside the building, but it is still granted to those who are actively employed out of doors. This arrangement is an incentive to active employment, and in this way, if in no other, will be beneficial to the patients. Those patients working inside the wards are given coffee in the morning, and tea in the afternoon. At the same time the dietary of the attendants and nurses was also revised and improved, and ale is no longer to be allowed to them, but each official has consented to accept a money allowance in lieu of the beer. It was expected the removal of beer from the patients' dietary might cause some discontent, but such happily has not been the case, but to the contrary, many expressions of gratitude on the change have been heard. The more liberal dietary will, of course, necessitate increased expenditure, but this to some extent will be counterbalanced by the saving in beer, which will amount to about £470 a year.

Yorkshire, East Riding (1889).—Some mild cases of typhoid fever occurred; but their origin could not be decidedly determined. Some sanitary defects were rectified.

Yorkshire, North Riding.—Additional accommodation is required for female patients. A new laundry is to be built.

Yorkshire, West Riding. Menston.—This large asylum is already filling up rapidly, and plans for its extension are in preparation, which, we trust, will provide for the entire separation of a certain number of the new blocks.

Dr. McDowall, who is to be congratulated on his successful administration, says:—

The great increase in the number of private patients shows how greatly accommodation for this class of case is required in public asylums. At present it is impossible to separate such cases from patients sent by the various Unions, and this in many instances, at least, is undoubtedly unfortunate, and acts prejudicially on the patients. A building with smaller rooms, and offering greater facilities for classification, would greatly facilitate the treatment of such cases, and would remove the greatest objection which the friends have to the existing arrangement. The cost of such a building would soon be covered by the profits arising from the reception of such patients. On more than one occasion applications have been made for the reception of cases at much higher rates than are at present charged, which have of a necessity been refused on account of the want of adequate accommodation.

This conclusion seems hardly warranted by the data mentioned in this paragraph.

Yorkshire, West Riding. Wadsley.—The structural improvements completed, or in progress, include dining and recreation rooms for the medical officers, a nurses' residence, and new pathological and photographic rooms.

Dr. Kay reports that the Outdoor Patients' Scheme has not been taken advantage of to the extent that was expected, though, when first introduced, several persons presented themselves for treatment. He believes that the distance of the asylum from the town has no doubt prevented several availing themselves of the advantages of the scheme.

Lectures have been given by the junior staff to the nurses and attendants.

Yorkshire, West Riding. Wakefield.—The following extracts from Dr. Bevan Lewis's report refer to subjects of much importance:—

Many asylum superintendents, and especially those who administer the large County and Borough Asylums in densely populated areas, must have felt painfully conscious at times of the helplessness presented by a certain section of the community, which comprised subjects of incipient mental disease, neither so bad as to demand asylum supervision, nor, on the other hand, able to afford the treatment and advice of those who are specially qualified to secure their relief. Personally, my experience taught me that the advice of the asylum superintendent had been sought for, in most cases, by those who were directly recommended to seek such aid by their own medical attendant. To the poorer classes, who could not afford the employment of skilled alienists, the asylum medical staff constituted their sole resource; and in full recognition of this fact,

the scheme of an out-patient department was inaugurated at Wakefield, and subsequently extended to the two kindred asylums at Wadsley and Menston. The objections to this departure, which were regarded as somewhat weighty, were mainly four, viz :—

(1) The natural antipathy to asylums, and the objectionable term "Lunatic Asylum," were regarded as inseparable barriers to the development of such a scheme.

(2) The risks of accepting such cases for treatment under home supervision were considered very grave for the medical officers of the asylum.

(3) The further burden imposed upon the medical staff, whose duties already were heavy, was another supposed objection to the scheme.

(4) There is the somewhat ungenerous insinuation that the principle was antagonistic to the interests of the profession at large, and might lead to such abuse as an out-patients' department is open to.

The past twelve months' experience has done much to explode these notions. The objectionable term "Lunatic Asylum" should certainly be replaced by "Asylum for Mental Diseases," or some such alternative designation; yet it cannot but be admitted that the system is taken full advantage of, and growing confidence in asylum outdoor treatment is conclusively manifested. Nor is the risk run by the medical officer so striking as to have led, during the year, to a single casualty, although the responsibility of a careful, judicious selection of the recipients of this relief is, I admit, a heavy one. It will not be gainsaid that the asylum medical officer is not the best judge as to the advisability of home treatment being tried in cases of incipient mental disease.

With respect to the over-burdening of the medical staff, I may add that on no single occasion have I heard any of my colleagues express the least dissent to the extra duties thus devolving upon them; it was, in fact, most cheering to see the readiness with which they met what was distinctly recognized as a public duty. It was but reasonable to suppose that the additional labour demanded of the medical staff by the new Lunacy Act rendered this question somewhat dubious; but at Wakefield, at least, an increase in the staff to meet such requirements of the Act was seen from the outset to be imperatively demanded, wholly apart from any consideration of the out-patients' scheme.

The addition of a fourth assistant medical officer, and the rearrangement of the duties reported below, rendered the out-patients' scheme practicable and consistent with the usual duties of the staff.

With respect to the last objection urged, it is particularly pleasing to be able to record here the entire absence of any friction, the generous and appreciative co-operation received in our work from the profession outside; and it may be added that a large proportion of out-door patients came here directly recommended by their former medical attendant.

In considering the operations of this scheme it should be borne in mind that the numbers availing themselves of such advice must, from the peculiar nature of the case, be small. In the first place, the class from which such subjects are drawn is a very limited one—those suffering from a special category of nervous diseases—in the next place, the class is still further limited by the careful selection of cases demanded, where all unnecessary risk is to be strongly deprecated; and a further restriction is imposed by the provision that all nervous diseases not immediately connected with, leading up to, or associated with mental derangement were to be strictly excluded from this department.

The actual results it would be somewhat premature to dwell upon, but the character of the cases presenting themselves for treatment may be gleaned from the following summary :—Melancholia (14 cases), chronic cerebral neurasthenia (5), epilepsy (12), hypochondriasis (3), mania (2), general paralysis, incipient (3), persistent insomnia (1), neuralgia, with mental depression (1), chronic cerebral atrophy (1), cerebral tumour (1), organic dementia (1), chorea (1), delusional insanity (1), hysterical mania (1), imbecility, with excitement (1), post-apoplectic neuralgia (1). Of the above 49 cases under treatment as many

as 35 were directly recommended by medical practitioners residing in the West Riding.

We shall be interested in knowing, when more statistics are forthcoming, the number of cases which recover as out-patients. We shall not be surprised if it is found that but few are cured at home, generally the worst locality for them, and that the chief advantage of this movement is to provide a stepping stone to the asylum, where their chances of recovery will be greater. It is a striking fact that 19 out of the 49 cases were presumably incurable. If the malady of the three incipient G.P.'s was arrested in its course, the advantage of the out-patients' scheme would be supported by precisely the kind of evidence we require, but which has yet to be brought forward.

The duties of the assistant medical officers have been rearranged. The pathologist no longer devotes the whole of his time to laboratory work, but has charge of 350 patients. With the remarks of Dr. Lewis we cordially agree, for we are convinced that under the name of pathological research much time is wasted by men who have nothing to show as the evidence of real work. We may at the same time remark that now scientific work is the "cry" of the day, there is some risk that other work may be neglected. It is highly important that the junior medical staff should not neglect to devote a fair share of its leisure to the immediate interests of the patients.

Perth District.—It is reported that besides the ordinary work of the farm and garden, occupation for the male patients, of a useful and remunerative kind, has been obtained in road-making on a neighbouring estate. The Visiting Commissioner commends work of this kind, if judiciously managed, as tending to break down to some extent the separation of the patients from the life of the outer world.

2. German Retrospect.

By W. W. IRELAND, M.D.

Histology of the Brain in the Lower Mammalia.

Dr. S. Ramon Y. Cajal ("Neurologisches Centralblatt," Nr. 22, 1891) has examined the cortex of the brain of new-born animals, rabbits, cats, and mice, after Golgi's method. He has found that the superficial nerve fibres (Krause's layer) seldom arise from the processes of ascending axis cylinders coming from the deeply situated pyramidal cells, but are connected with the ganglion cells of the higher layers of the cortex. These cells are difficult to recognize in grown animals. They are polygonal or spindle-shaped. Ramon never saw the axis cylinder processes of the small pyramidal cells reach the white substance—they branched off till they disappeared—but he succeeded in tracing the fibres of

the corpus callosum into the axis cylinder processes of the larger and middle sized pyramidal cells, or into their branches.

A Dog without a Brain.

At the meeting of the South-West German Neurologists in Baden Baden on the 26th May, 1889 ("Archiv für Psychiatrie," xxi. Band, 2 Heft), Dr. Goltz gave a report of his observations on a dog from whom he had removed both hemispheres with the scissors. The animal survived the last operation fifty-one days, and died of pneumonia. From the preparation which was shown it appeared that the whole of the cerebrum had been removed, with the exception of two symmetrical small pieces of grey matter at the base belonging to the middle of the gyri hippocampi, and some brain substance between the optic tracts and the crura cerebri. The corpora striata were also gone. The optic thalami were much injured and softened on their lateral surfaces. The rest of the thalami was covered by what seemed to be the remains of the corpus callosum and fornix. The cornua ammonis were wanting on both sides. The corpora quadrigemina were found to be uninjured, but spread out and softened. The pons Varolii and medulla had not the same firmness as in a normal brain. The left pyramidal tract was much smaller than the right. The left brain had been removed 263 days before the animal died. The cerebellum was uninjured. It is questionable whether the remains of the gyri hippocampi had any physiological connection with the stump of the crura cerebri. On the whole one can fairly say that this dog for the last 51 days of its life possessed no brain at all. Nevertheless after this deprivation the animal did a number of things, for whose performance, according to the opinion of most physiologists, the cerebrum is absolutely indispensable. A few hours after the last operation the dog was not only able to stand and walk, but he raised himself upon his hind legs, and put his fore paws upon the edge of the chest in which he found himself. Though he was unable to eat or drink, he chewed the food which was put deep into his mouth. The alternations of sleep and waking succeeded one another as in a normal animal. Before the time of feeding he was always restless; when satiated with food he became quiet and fell asleep. He could be waked out of sleep through touching any part of his skin. He then opened his eyes and stretched himself like an animal awaking from sleep. If one put his legs in an inconvenient position, he immediately redressed it by a counter movement. He could whine, growl, bark and howl. He did not appear to be affected by sounds, and could not have any sense of smell, as the paths of conduction from the olfactory nerves had been cut.

Changes in the Retina through the Action of Light.

Dr. Noiszewski ("Centralblatt für Nervenheilkunde," Juni, 1891) examines the question of the nature of visual impressions.

The most notable portions of his paper are those in which he shows that certain chemical and physical changes have been observed in the retina to follow the action of light. Some hold that the decomposition of the purple matter in the retina is a process important to vision; others that this matter is only useful for the absorption of the long waves of the heat rays. He, Noiszewski, observes that the quantity of the purple in the retina stands in an inverse ratio to the quantity of light. For the perception of a visual image a smaller quantity of the purple is necessary to make an impression the greater the intensity of light. The purple is decomposed by the light, and accumulates in the retina in the dark.

It has, however, been proved by experiments on frogs that after the entire decomposition of the purple matter the power of vision still exists. When the optic nerve is cut in frogs and rabbits the reaction is acid, but if the animal be killed after being kept in the dark for forty-eight hours the reaction is neutral or alkaline. The grey substance of the brain and medulla has always an acid reaction; and the white substance of the brain has the same, though weaker. Sczerback has shown from studies in his own person that mental work is accompanied by a decomposition of matters in the brain containing phosphorus, from which phosphoric acid is produced, and phosphates appear in the urine. Kühne has made observations upon the chemical reactions of the retina after being exposed to light. The action of osmic acid on the bacillary layer is not always the same. There are patches which are unequally coloured, apparently because they are rich in cerebrin and the ends of the rods take on a different hue from those which lie near the choroid. He concludes that the cerebrin and lecithin in the retina are decomposed by the action of light into various fatty acids and phosphoric acid. Noiszewski considers this a proof that there is under the action of light a chemical decomposition in the inner matter of the rods or cones, which he calls an explosion. There is also a swelling of the peripheral ends of the rods, so that all interspaces disappear. This change in their physical aspect causes a different reflection. After the explosion the elastic neuro-keratine envelope of the rods and cones contracts, leaving a ring-form fold. He thinks that the force generated by the explosion conducted through the nerve fibres to the brain causes a corresponding explosion in the nerve cells, but this of course is purely hypothetical. He holds that single impressions are sent from each of the cones of the bacillary layer. According to Weber, the smallest angle in which two white streaks can be recognized as two is $73''$. Helmholtz could still distinguish two bodies at an angle of $64''$; the space occupied by such an angle thrown upon the retina would be 0.00464 to 0.0055, but the breadth of the cones of the retina is according to Kölliker 0.0045 to 0.0055.

Here we have a proof that every cone of the macula lutea could give an especial impression distinct from another.

Injury to Musical Capacity with Aphasia.

Dr. L. v. Frankl-Hochwart (quoted in the "Neurologisches Centralblatt," Nr. 21, 1891) describes five cases in which observations were made upon the injury to the capacity for musical expression which accompanied aphasia. In the first case the aphasia was complete, and the patient seemed to have lost the capacity of understanding music; he could only hum the beginning of a few tunes. In the four other cases the patients retained the capacity of understanding words; and in three of these cases the power of speech was lost, and in the fourth, a woman, there was a great deficiency. None of these four patients could sing spontaneously. Of two of them who had previously been good musicians, one could not play any more, the other could only play a melody in part. When the titles of pieces of music were named, they said that they knew them, but they could not play them. Two patients could play from the music book, but they could not sing from it. In all the cases in which speech was lost the musical faculty had also suffered; nevertheless cases have been described by Finkelnburg, Bouillaud, Oppenheim, and Limbeck, where there was aphasia without injury to the musical faculty. Some idiots who cannot speak can sing to a certain extent. There is no case on record where the capacity for musical expression alone was lost; but it is strange why in some cases it is retained, in others injured. The author concludes that in many people the capacity for speech and for musical expression must have centres in the brain lying near one another. Musical expression appears in the child about the same time as speech, and is often lost through disease at the same time. Musical expression should have a double innervation, for both the hands are generally used in instrumental music. According to Anton violinists play the melody mostly with the left hand, and the piano is played by both hands acting at once.

Wry-Neck as a Cause of Deformity of the Skull.

Dr. Hans Kurella ("Centralblatt für Nervenheilkunde," August, 1891) observes that, although much attention has been directed to the pressure of the growing brain upon the sutures in causing deformation of the cranium, there are few studies about the effect which the traction of the muscles have in modifying the form of the skull. The principal of these are the muscles of the jaw, the sterno-kleido-mastoid, and the trapezius. Dr. Kurella presents a case where torticollis seems to have led to asymmetry of the skull. The subject was a shoemaker, aged 46, drunken and brutal, and of low intelligence, who had several times been in prison for theft and assault. The head was bent downwards on the neck towards the left, the chin being turned to the right. This was owing to a fall which he received in infancy. The wry-

neck is said to have improved till he was twelve years of age. The right trapezius muscle was atrophied, so that one could feel the splenius capitis below, and the left half of the occipital was broader and stronger, though, on the whole, the left side of the skull was smaller than the right owing to the lesser size of the frontal region. The hard palate was asymmetrical, being broader and flatter on the left. The left auditory meatus of the ear was 20 millimètres lower than the right. Dr. Kurella considers this deformity owing to the continuous action of the left sterno-mastoid, trapezius, and splenius muscles, which pulled down the petrous portion of the temporal and broadened the arch of the occipital base on the left side. It is interesting that the asymmetry of the base of the cranium had also involved the palate. The fact that the shoemaker was a man of low intelligence might lead to the supposition that the asymmetry of the skull was congenital, but from the history of the case Dr. Kurella is disposed to think this explanation to be excluded.

Another case of asymmetry of the face and skull following wry-neck is described by Greffié in the "Montpellier Médical" (Band xv., 1890). A *resumé* is given in the "Centralblatt für Nervenheilkunde" (December, 1891).

The subject was a man of 20 years of age, who had been received into the hospital at Montpellier for some gastric disorder. The chin was pulled from the right, so that the ear of the left side approached the left clavicle. The left sterno-kleido-mastoid could be traced like a cord of the thickness of the little finger, from its origin from the mastoid process to the sternum. The clavicular portion of the muscle was not visible. The face was quite asymmetrical. The under jaw was deformed, shorter on the left ramus than on the right. The teeth of the under jaw were to the left of those of the upper row, and the left lower lip covered the upper one. The left orbit was wider than the right. The cranium was also asymmetrical, and there was a flattening of the left temple. The man had a cervico-dorsal curvature of the spine, otherwise he was strongly made. His intelligence was normal.

Greffié attributes the asymmetry to the traction of the sterno-mastoid muscle upon the mastoid process. He observes that the earlier the torticollis, the greater is the deformation of the skull and face. In a case described by Broca the asymmetry of the face was much less marked, but the contraction of the muscle had commenced when the patient was two years old, whereas Greffié's case began in early infancy, when the bones were less formed. On this account, when wry-neck occurs in a child, tenotomy should be had recourse to at once.

Is General Paralysis Caused by Syphilis?

Professor Binswanger, of Jena, gives a contribution to this vexed question ("Neurologisches Centralblatt," Nr. 20, 1891.)

He maintains that general paralysis is one of the distant consequences of the syphilitic poison affecting the nervous system. It is not to be confounded with the ordinary sequelæ of constitutional syphilis. He admits that there are cases of syphilitic infection which simulate general paralysis, and are curable by anti-syphilitic remedies, but these need not perplex us. He observes that fifty per cent. of the cases of real general paralysis can be proved to have had syphilis. These do not differ either in the symptoms or pathological lesions from the other fifty per cent., in which no such infection can be proved, and, indeed, in many of the general paralytics, who unquestionably have had syphilis, the usual specific lesions are wanting.

Shortening of the Limbs from Inherited Syphilis.

Dr. Albrecht Erlenmeyer ("Centralblatt für Nervenheilkunde," November, 1891) describes a combination of symptoms which he had met with in five patients. Three of them were boys aged 12, 15, and 16 years; two were girls from 15 to 16 years. All these five patients suffered from Jacksonian epilepsy, and it was found that the extremities affected by the convulsions were smaller than on the other side of the body. The arms were shorter by about three centimetres; the legs by about 2·2 centimetres. The differences in circumference reached as high as 2·5 centimetres in the upper part of the arm, and three centimetres around the thighs. The motility of these affected extremities was normal. There was neither paresis nor spastic condition, nor could any abnormality in the muscular reaction to the electric current be ascertained; but both the extremities were weaker than the sound ones on the opposite side. This was especially marked in the left arm of one patient. The feeling of contact was a little duller on the affected side, and there was a weakening of the sensation of the limbs and the sensation of the weight of bodies.

In the boy aged 16 there was hemi-atrophy of the tongue, ptosis, and a slight atrophy of the face on the same side on which the extremities were affected. In the girl of 15 there was a facial paralysis on the affected side. No other symptoms of disturbed nervous power were noticed. It was ascertained that the children had been affected during the first years of life with fever, after which the epileptic attack began. In one of these cases at least it seemed clear that this affection must have been meningitis and peri-encephalitis. Dr. Erlenmeyer attributes the deficient growth of the extremities to the deficient development of the corresponding centres in the brain. He does not think that atrophy on the brain could have at once been the cause of the deficient growth of the limbs and of the convulsions. Jacksonian epilepsy is generally caused by some irritation in the affected brain centres, by syphilitic growth, by a deposit of tubercle, or by a splinter of bone. Assuming, therefore, the existence of some exudation, Dr. Erlenmeyer treated his patients with large doses of

iodine salts, and in one case this was followed by favourable results. Both have their beginning in an inflammatory affection of the brain; in the severer form it comes to a sudden hemiplegia, and to epileptic convulsions in the paralyzed limbs, and then to arrested growth, while in the milder form the paralysis is never reached. Dr. Erlenmeyer thinks it likely that the ordinary form of cerebral paralysis in children is more often caused by congenital syphilis than is commonly supposed.

On the Influence of Alcohol on the Organism of the Child.

In the "Centralblatt für Nervenheilkunde," December, 1891, there is a review of a pamphlet bearing this title, published at Stuttgart. The author, Dr. R. Demme, observes that not only in the poorer classes of the population amongst whom he practises, alcohol, in the form of brandy, or beer, or wine, is given to children under the persuasion that it is nourishing, but this notion sometimes prevails amongst better educated classes. Often brandy is added to the milk. The evil effects of this are found to be dyspepsia and chronic catarrh, with acidity of the stomach. In an extreme case in which brandy was given in large doses to a boy of four years cirrhosis of the liver was observed. The general effect of an intoxicating draught upon a child is stupor, lasting from twelve to eighteen hours. Sometimes there are convulsions at the outset. Children who are made to drink spirits in some form are often stunted in growth. Among 27 children whose height was under the average their shortness could be traced in 19 cases to the use of alcohol, and three of them grew quickly when the alcohol was cut off. Dr. Demme compares 10 families who could be designated as drinkers and abstainers (Nicht-trinker). The first had 57 children, and of these 25 died in the first month, six were idiots, and five of dwarfish stature, five were epileptic, one boy fell ill of chorea, which in the end led to idiocy, and in five children there were hereditary diseases, hydrocephalus, hare-lip, club-foot. Only 17 per cent. of the children of drunkards were sound in mind and body during the first years of life. Of the 61 children of the abstainers 81 per cent. were normal. Only five of these 61 children died early, four were affected with curable affections of the nervous system, and two suffered from congenital deformities.

3. *Retrospect of Criminal Anthropology.*

By HAVELOCK ELLIS.

Il Tipo criminale e la Natura della Delinquenza. By Prof. Enrico Ferri. ("Archivio di Psichiatria," Fasc. iii.-iv., 1891).

Prof. Ferri here discusses, in his accustomed broad and luminous method, the question of the criminal type and the nature of criminality. The article will be included in the forthcoming

edition of his great work, "Nuovi Orizzonti del Diritto," and as Ferri is the most philosophic member of the so-called "Italian school," his account of the matter is worth summarizing.

Topinard, he remarks, contests the accuracy of the word "type" in this connection, but, as Lombroso has replied, and as Topinard himself has written, if by the type we mean "an ensemble of distinctive characters," a kind of average which Gratiolet called "a synthetic impression," or, as Isidore St. Hilaire called it, "a kind of fixed point and common centre around which the various differences are so many deviations in opposite directions," in this clear and precise sense we may speak of a criminal type. As Broca, again, says, "the type is an ensemble of characters, but in relation to the group which it characterizes it is also the ensemble of the most marked feature and those which are most often repeated." Not every individual, therefore, presents a marked and complete type. There is no anthropometric type of criminal (and no one, so far as Ferri knows, has ever affirmed that there is), in the sense that anthropometric measurements would be sufficient to establish it. The anthropological criminal type results from an ensemble of organic characters, but among these the most decisive are the lines and the expression of the face. Abnormalities of structure and form in cranium and body are the complements of that central nucleus which is constituted by the physiognomy, in which certain features, in Ferri's experience, are especially characteristic—the eyes and the jaw. It is by these features that in marked cases Ferri has been able to distinguish murderers (of whom he has made a special and thorough study). Abnormalities of the cranium and skeleton generally are sufficient to distinguish examples of degeneration from the normal, but are not sufficient to distinguish the criminal from other degenerated persons.

The criminal type cannot be found in every group of criminals; it is naturally most common among congenital criminals, while among occasional criminals and criminals by passion, who stand at the opposite end, the anthropological type either does not exist or is found in very slight degree, because in these the crime is less largely determined by the biological factor, and more largely by the physical and social environment. Thus the results will be very different accordingly as we take 100 congenital criminals or 100 criminals of all kinds at random. Ferri demonstrated this by comparing a series of recidivist criminals with another series of non-recidivist criminals belonging to the same province. He considers that Lombroso's results would have been still more remarkable if he had classified his criminals. It has been objected by Dubuisson and Joly that if the murderer and the thief present distinct anthropological types how can a criminal begin with theft and end with murder? Should we not have to admit that he must change his face? This, replies Ferri, is to syllogise about

criminals without knowing them. It is not, as a rule, true that criminals begin with theft and end with murder. It is only true of a special group, the habitual criminals, and even among them it is the exception. There are two varieties of thieves: the simple thief, who will never commit murder if he can possibly avoid it, *i.e.*, will only kill in self-defence, and not in attack; and there is the sanguinary thief, who is truly a variety of murderer, probably by congenital tendency, as his instincts are frequently shown at a very early age. The criminal does not pass from the group of thieves to that of murderers, but already belongs to the latter before the crime is committed. To the objection of Tarde and Topinard, that criminal types are of a professional character, just as we have clerical, legal, etc., physiognomies, Ferri replies that this is to a large extent true, but that such influences cannot form a large lower jaw or a receding forehead; they cannot make a skull oxycephalic or microcephalic, or cause the disappearance of a vertebra. Ferri concludes the first part of his paper thus: "Not only in the case of criminals, but also of other professional or psychological groups of men, there exists in certain cases a bio-social type, in which either congenital or acquired characters prevail, accordingly as the individual is more or less disposed by his physico-psychical constitution to a given profession, or is determined to it by family and social conditions. But besides this there exists a purely biological or anthropological type of criminal in those cases in which the criminal tendencies are congenital or manifested in very early life, and are accompanied by anatomical, physiognomical, and psychical characters (complete moral insensibility, extraordinary improvidence) which cannot be regarded as the products of the environment and social conditions alone."

In turning to the question of criminality, Ferri tabulates the chief theories as under:—

<i>Crime is a phenomenon of</i>											
BIOLOGICAL ABNORMALITY by	<table style="border-collapse: collapse;"> <tr> <td style="padding-right: 10px;">atavism</td> <td style="border-left: 1px solid black; padding-left: 10px;"> { organic and psychic (Lombroso); { psychic (Colajanni); </td> </tr> <tr> <td style="padding-right: 10px;">pathology</td> <td style="border-left: 1px solid black; padding-left: 10px;"> { neurotic (Dally, Minzloff, Maudsley, Virgilio); { neurasthenic (Benedikt); { epileptic (Lombroso); </td> </tr> <tr> <td style="padding-right: 10px;">degeneration</td> <td style="border-left: 1px solid black; padding-left: 10px;">(Morel, Sergi, Féré, Zuccarelli);</td> </tr> <tr> <td style="padding-right: 10px;">defect of nutrition</td> <td style="border-left: 1px solid black; padding-left: 10px;">of central nervous system (Marro);</td> </tr> <tr> <td></td> <td style="border-left: 1px solid black; padding-left: 10px;">moral abnormality (Despine, Garofalo).</td> </tr> </table>	atavism	{ organic and psychic (Lombroso); { psychic (Colajanni);	pathology	{ neurotic (Dally, Minzloff, Maudsley, Virgilio); { neurasthenic (Benedikt); { epileptic (Lombroso);	degeneration	(Morel, Sergi, Féré, Zuccarelli);	defect of nutrition	of central nervous system (Marro);		moral abnormality (Despine, Garofalo).
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	moral abnormality (Despine, Garofalo).										
SOCIAL ORIGIN by	<table style="border-collapse: collapse;"> <tr> <td style="padding-right: 10px;">economic influences</td> <td style="border-left: 1px solid black; padding-left: 10px;">(Turati, Battaglia);</td> </tr> <tr> <td style="padding-right: 10px;">defect of politico-social adaptation</td> <td style="border-left: 1px solid black; padding-left: 10px;">(Girardin, De Greef, Vaccaro);</td> </tr> <tr> <td style="padding-right: 10px;">complex social influences</td> <td style="border-left: 1px solid black; padding-left: 10px;">(Lacassagne, Tarde, Topinard).</td> </tr> </table>	economic influences	(Turati, Battaglia);	defect of politico-social adaptation	(Girardin, De Greef, Vaccaro);	complex social influences	(Lacassagne, Tarde, Topinard).				
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BIOLOGICO-PHYSICO-SOCIAL ORIGIN (Ferri).											

In presenting this table, Ferri remarks that those writers who

offer theories of a biological character do not regard them as absolutely exclusive; they do not deny the influence of external physical and social conditions. Those, on the other hand, who regard crime as a social phenomenon do frequently deny the influence of biological conditions. Ferri then criticizes these various explanations of criminality, and concludes that while they are all partially true, none of them is sufficient and complete. None of them gives us the precise and fundamental reason why in certain individuals this or that condition of biological abnormality determines crime, while in others it determines insanity or suicide or mere organic and psychic inferiority. Congenital criminality (and in some degree occasional criminality), Ferri considers, is a specific biological abnormality, the nature of which is yet undetermined. The most precise and positive conception of criminality on the biological side is that of a "criminal neurosis," distinct from every other form, pathological, atavistic, degenerative or other. Criminality, therefore, is neither exclusively a biological phenomenon, nor exclusively the product of the physical and social environment; but every crime is always the resultant, partly of a special, permanent or transitory abnormality, congenital or acquired, partly the result of external circumstances (physical and social), the two classes of elements coinciding at a given time and place to determine the action of a given man.

Un mattoide riformatore ("Archivio di Psichiatria," 1891, Fasc. v.-vi.).

The study of the mattoide (or "crank") does not strictly come within the region of criminal anthropology. But mattoides are frequently mixed up in criminal affairs, sometimes as the principal agent (Guiteau is a notable example), and it is worth while to refer to the careful study made by Ardu of the mattoide Giuseppe Vall . . . , although he is not a criminal.

Vall . . . belongs to San Maurizio, is 44 years of age, and unmarried, parents healthy, without either nervous disease or alcoholism. He says that in childhood he had "inflammation of the spine," and from his 20th year he has suffered from headaches. At the age of 12, in church, he had a vision of St. Bernard, and religious ideas came to him with, later on, ideas of reform. He became a mason, and cautiously refrained from speaking of his socialistic ideas lest they should hinder him in obtaining work. But he has written a great number of what he calls "problems" on all sorts of social subjects.

He is of average height, bony and muscular development good, adipose development considerable, skin normal, partly bald (since age of 25), wrinkles on forehead, teeth normal. There is flattening of the occiput. Sensibility and motility normal on the whole, and the physical functions generally normal and vigorous. (It is

not necessary to reproduce the details of exact measurements given, as they reveal few abnormalities.)

His dress is that of an ordinary well-to-do workman. Physiognomy intelligent, eyes bright, and he talks sensibly. He is attached to religious observances and fond of reading, but especially fond of writing, and would like to be writing always. He carries with him an enormous portfolio of writings, and when asked respecting his ideas he at once begins to read one of the "problems" in which he has settled social questions. It is not easy to make him talk about these questions, he prefers to read his writings. His ideas are founded on the Gospel, and the main point is the triumph of the humble (*i.e.*, the workers) over the proud; these and some other phrases constantly recur in his writings. Ardu gives a summary of the chief doctrines, usually in Vall . . . 's own words.

In conclusion, Ardu remarks that Vall . . . is the type of the congenital mattoid. His graphomania is well marked, and he confesses that he sent 16 volumes to the last *Exposizione Operaia* at Turin. Characteristic also is the use of alliteration, the tendency to rhythm, the fondness for special words and phrases, and the use of symbols and allegorical figures. An important point which differentiates the mattoid from the man of genius is his inconclusiveness, and his constant return to the antique, well-shown in Vall It is a kind of atavistic record. While the man of genius is always ahead of his age, at the bottom of the mattoid's conceptions there is always some ancient and primitive idea. Another feature of the mattoid, as distinguished from the man of genius, is his ability in practical life. Outside the circle of what may be called his monomania he is an average man. Lombroso knows more than one mattoid who worthily occupies important posts. Like most mattoids, there are few physical abnormalities to be noted in Vall He is at once a typical and a rare example of the mattoid—rare because mattoids are usually the product of culture and a high degree of civilization.

The Physiognomy of the Anarchists. By Cesare Lombroso. ("Monist," April, 1891.)

Prof. Lombroso (who in the January number of the "Monist" had given under the title of "Psychiatry and Criminal Anthropology" a summary of recent investigations, which should be of great value to English readers) here deals with the physiognomy of anarchists from the point of view of criminal anthropology. The initiators of great political revolutions, he remarks (such as Mazzini, Garibaldi, Sophia Petrowskaia, Vera Sassulitch), very rarely show the degenerative characters of the "criminal type." In 321 Italian revolutionists he only found them in 0.57 per cent., *i.e.*, 2 per cent. less than it is found even among normal persons. So of the Nihilists, "who represent to us, even

psychologically, the Christian martyrs." But it is quite otherwise when we turn to regicides and "presidenticides," such as Fieschi, Guiteau, Nobiling; such men also as Marat and Carrier show the criminal type, which also frequently appears among communards and anarchists. Among the latter Lombroso finds the criminal type in 12 per cent., and the insane type in 10 per cent. Among Parisian anarchists he found the criminal type in 31 per cent.; in Turin anarchists in about the same proportion (as against 43 per cent. in ordinary Turin criminals). He examined the photographs of 43 of the Chicago anarchists, and found the criminal type in about 40 per cent. In Parsons and Neebe he found "a noble and truly genial physiognomy," Parsons resembling Bodio, the eminent Italian statistician. By this prevalence of the "criminal type" among anarchists, Prof. Lombroso explains that he does not mean that anarchists are criminals, but that they "possess the degenerative characters common to criminals and the insane." Lombroso's distinction in this paper between revolutionists and nihilists (as belonging to a high type of humanity), and regicides, presidenticides, and anarchists (as belonging to a low type) does not seem to be very clear or sound. Sophia Petrowskaia and Vera Sassulitch, whom he, no doubt rightly, places in the higher class, were regicides quite as much as revolutionists. On the other hand, the chief Chicago anarchists were pure revolutionists, personally the most peaceful of men, without desire for bloodshed. The only exception was Lingg, a mere youth (of whose physiognomy Lombroso gives a bad account), who had dabbled in the subject of explosives, and who was by no means on good terms with many of his fellow-anarchists. In the following number of the "Monist" Schwab, one of the Chicago anarchists in question (mentioned by Lombroso as having the face of a *savant* and student), writes from his prison, "A Convicted Anarchist's Reply to Prof. Lombroso." In this article Schwab, who writes in the gentlest and most temperate manner, points out some of the fallacies connected with judgments founded on physiognomy, and shows that much of the material on which Lombroso depended was of an unreliable character. Spies, "undoubtedly the most gifted of all the indicted anarchists," had a most intelligent appearance, with well-developed forehead. He was full of compassion for the poor and wretched, and was a man of manifold charities, but his intellectual activity, Schwab remarks, was excessive. "Many of his articles betrayed nervous over-excitement," and intellectual work had been forbidden him by his physician. Fielden, of whose physiognomy Lombroso gave a very bad account, was always regarded by his employers as "an honest man, and a harmless enthusiast of an amiable nature." And Judge Gary wrote that "there is in the nature and private character of the man a natural love of justice, an impatience at all undeserved suffering, an impulsive temper. He was an honest, industrious, and peaceable labouring man."

His speech in his own defence was regarded as a masterpiece. It is clear that these men at heart belong to Lombroso's class of revolutionaries. In the latest number of the "Archivio di Psichiatria" Lombroso thus refers to this article:—"The anarchist Schwab, from the prison to which he has been condemned for life, confutes my study on the physiognomy of anarchists with a serenity and delicacy scarcely to be found even in the most correct of law-abiding persons."

The New School of Criminal Anthropology. By Robert Fletcher, M.D. ("American Anthropologist," July, 1891).

Dr. Fletcher devoted the whole of his lengthy address on retiring from the Presidency of the American Anthropological Society to the development and present position of criminal anthropology. Dr. Fletcher does not appear to have made any original investigations, but he has an extensive acquaintance with the literature of the subject and deals especially with certain matters of detail, such as abnormalities of the ear. The address is an interesting proof of the attention which criminal anthropology is beginning to attract in America.

Instinctive Criminality: Its True Character and Rational Treatment.

By S. A. K. Strahan, M.D., Barrister-at-Law. London: Bale and Sons, 1891.

This is a reprint, with prefatory note and appendix, of the paper read by Dr. Strahan at the Cardiff meeting of the British Association, when it attracted considerable attention. Although it contains little that is fresh, it is well adapted for its purpose, and is an excellent popular statement in brief compass of the present condition of criminal anthropology. In the course of the paper Dr. Strahan effectively compares the special statistics shown in the reports of the Prison Commissioners with the general statistics of the country, whereby it appears that the criminal is about forty times more liable to become insane than the ordinary citizen; that suicide, in spite of all precautions, is about twenty-four times more commonly a cause of death in prisons than outside them; that the mortality from phthisis is five times more fatal among criminals than among the ordinary population, and that notwithstanding the excellent hygienic conditions of prisons the death-rate among the prison population is nearly 50 per cent. higher than among the general population at corresponding ages.

Dr. Strahan advocates the indeterminate sentence, and the establishment of "industrial penitentiaries managed on much the same lines as are our public asylums, namely, by a medical director acting under a committee of magistrates, or of the local County Council. The director would be responsible for the health and education of the inmates and the general management of the institution. In the place of the prison warders there would be a

staff of instructors, whose duty it would be to instruct the young and ignorant, and persuade the idle and indifferent to employ themselves. There would be a gymnasium, a library, a band, and a drill sergeant, and every effort would be made to occupy usefully every hour of the twenty-four not given up to sleep." This corresponds very closely with the system carried out by Mr. Brockway and Dr. Wey, at Elmira.

Work Among the Fallen as seen in the Prison Cells. By the Rev. G. P. Merrick, Chaplain of H.M. Prison, Millbank. London: Ward, Lock, and Co., 1891.

This pamphlet contains in a small space a large amount of statistical and other information of considerable interest to the student of psychological degeneration. It has been Mr. Merrick's habit to take shorthand notes of his cases, and he thus possesses a mass of information concerning considerably over one hundred thousand prostitutes. A portion of the information thus obtained he has condensed into this pamphlet. The offences for which the women were sent to prison (taking 14,110 cases) were 9,443 for drunkenness and disorderly conduct, 2,542 for robberies of various kinds, 1,607 for street quarrels with other women, etc. Nearly 11,000 of these were sent to prison owing directly or indirectly to excessive drinking; but Mr. Merrick has met with very few instances where for the sake of drink one prostitute has taken the life of another. He finds that not one prostitute in ten is able to dispense with a free resort to stimulants. During long depressions of trade admissions are, comparatively speaking, low; as trade improves the number of admissions of prostitutes to prison rises.

Of 3,106 cases in which the women had been married, 859 were widows, 476 had been driven from their homes by the brutality of their husbands, 443 had been sent away by their husbands for misconduct, 270 supported their husbands by prostitution, 187 lived with their husbands, carrying on prostitution clandestinely, while of the remainder most had been deserted. Among those who were married and had been mothers, 2,372 children were still living, 546 were dead. Among the illegitimate mothers, 1,593 children were living, 1,854 were dead. The rate of mortality among the legitimate children was thus about 23 per cent., among the illegitimate upwards of 116 per cent.

In regard to the age at which sexual intercourse began, it appears, when we take 14,563 cases, that in the majority (nearly 8,000) it began between the ages of 16 and 21, the maximum (1,417) being between the ages of 16 and 17. In 11 cases there was sexual intercourse before the age of 11; in 36 cases before the age of 12; in 62 before 13; in 104 before 14; in 358 before 15. At the other end of the table we find it did not take place until the age of 38 in 128 cases; 174 were between 39 and 49; and 1

was 50. As a rule, it appeared from the confessions of the women, that they had been usually induced to become prostitutes by other women rather than by men. "I discovered," Mr. Merrick remarks, "that the woman's special enemy was not so frequently a man, but a member of her own sex, and often the very woman herself." As to the motives which induced the women to take up a life of prostitution, Mr. Merrick finds that of 16,022 cases taken consecutively, 5,061 (nearly a third) voluntarily left their homes or situations to take up "a life of pleasure;" 3,363 pleaded poverty and necessity; 3,154 were seduced and drifted on to the streets; 2,808 were led away by other girls; 1,636 were betrayed under promise of marriage, and having lost their character felt that they had no alternative but prostitution. Thus the motive which is conventionally assumed to be most frequent is that which comes last in the list; and while 4,790 owed their resort to prostitution directly to men, 11,232 confessed other causes. Mr. Merrick notes that of 2,836 instances where women were betrayed by men, only 657 were laid to the charge of "gentlemen," and it was found that by "gentlemen" was usually meant somebody wearing other than the ordinary workman's clothes.

It is interesting to compare the motives here set down, as given by London prostitutes, with those assigned by Brussels prostitutes on official inscription. Between 1865 and 1884, 3,505 women were inscribed as prostitutes at Brussels. Of these, 1,523 gave poverty as a motive; 1,118 confessed that sexual passions were the cause; 420 put it down to bad company; 316 were disgusted with hard work and small pay; 101 had been abandoned by their lovers.

Testing the powers of some 14,615 prostitutes in reading, writing, and ciphering, Mr. Merrick found that 3,237 could neither read nor write; 2,293 were equal to the first standard; 3,104 to the second standard; 4,721 to the third; 1,260 to the fourth or higher standards. "In fully one-third of the cases the women were not sufficiently educated to be enabled to read a book so as to take in an idea from it." He finds that the average number of years which prostitutes live, after having adopted a "life on the streets," is about three years and six weeks. It is to be hoped that Mr. Merrick will be enabled to publish a more comprehensive monograph concerning a matter on which he is unquestionably one of the chief living authorities.

Report of Elmira Reformatory for 1891.

The reports of this remarkable institution seem to grow in interest every year. In this pleasantly got-up volume of some 140 pages, very few are unreadable, and there are some fifty illustrations from photographs, illustrating the various activities carried on in the prison. As last year, nearly the whole is the work of the inmates, *i.e.*, letterpress (except the formal reports),

photographs, process engravings, type-setting, press-work, and binding.

Every department of this many-sided institution is deserving of study, but the physical training department is that which has most interest for the psychologist. The results obtained are regarded as reasonably satisfactory, and the subjects are such as would otherwise be regarded as hopeless. During the two years the gymnasium and baths have been opened, 212 men have been selected for treatment for periods varying from six to eighteen months. The causes of selection included physical degeneration, mental dulness and inertia, general debility, masturbatic deterioration, venereal disease, physical grossness, rheumatism, etc. The ages varied from 16 to 30. In recapitulating the various types found in the class, the director of the department includes "the boy who knew neither the name of days nor months, and dated an epoch in his life from 'the time the snow went off the ground;' the girl-boy, effeminate in features and soft of voice, ignorant of the country and the State in which he lived; the youth not far removed from feeble-mindedness and with the embarrassed locomotion the mentally deficient so often have; the crank with peculiar notions of his own importance and inclined to disobey; the dullard in the school; the moral imbecile who lies and steals, and tortures whom he can, and sees no error in the acts that yield him what he wants; and the little tyrant who ruled a widowed mother with despotic sway and filched her hard-earned wages to minister to his factitious wants." An exhaustive system of measurements (similar to Dr. Sargent's) is in use and is applied every two months, in order to test the improvement under treatment, and photographs, in three positions—front, side, and rear—of each man are made on entering and leaving the class. "The anthropometric apparatus in use consist of scales, measuring-rods, breadth, stretch of arms and girth measures, caliper, spirometer, manometer, back, chest, and hand dynamometers, and parallel bars."

"From 200 measurements of men entering the class," we are told, "the gymnasium instructor has prepared an analytical drawing exhibiting the proportions of the average prisoner assigned for physical renovation. Upon comparing this with a similar scale-drawing representing the average of 15,000 students examined by the gymnasium directors of Yale, Amherst, and Cornell, it is found that the inmates of the reformatory exhibit marked deficiencies in most particulars. The mean man of the reformatory weighs 2·7 lbs. less, and is 17 millimetres shorter than the mean man of the colleges; the girth of his head is 11 millimetres, and the breadth of head 6 millimetres, or a quarter of an inch less. In all measurements exhibiting capacity and strength the college man makes the best showing by far. In those which may be said to represent grossness of breeding, the larger figures are on the

reformatory side of the columns. The reformatory composite has the larger waist, the larger wrist, and the larger foot. It must be borne in mind, in making comparisons, that the prisoners of the reformatory are selected for training most often because of physical defects, and of degeneracy resulting from lack of proper nourishment, while the college students who resort to the gymnasiums are usually in good health, are well nourished, and, in most cases, have had some previous training." Following are a few of the most important measurements of the two classes of men, in parallel columns:—

	Reformatory.	College.
Stature	1705 m.m.	1722 m.m.
Girth of head	559 "	570 "
Girth of chest, natural	855 "	877 "
" " full	898 "	924 "
Girth of waist	738 "	726 "
Girth of thigh	490 "	512 "
Girth of calf	336 "	352 "
Girth of upper arm	280 "	310 "
Girth of wrist	170 "	165 "
Breadth of head	148 "	154 "
Breadth of neck	110 "	107 "
Length of foot	265 "	258 "
Capacity of lungs	286 litres.	388 litres.
Strength of back	107·7 kilos.	136·7 kilos.
Strength of legs	143·2 "	167·6 "
Strength of arms	2 dips.	6 dips.
Strength of forearms	22·2 kilos.	39·5 kilos.

This year there is a full index to the "Year Book," as it is now called.

Papers in Penology. Second Series. New York State Reformatory. Elmira. 1891.

This little volume is published "for the purpose of providing those interested in prison reform, and the general public, with reliable data regarding current movements in modern penology." In the preface we are told that "this book, editorially and mechanically, is entirely the work of inmates of the reformatory. Its compiler is the editor of 'The Summary,' and the composition and press-work, the etching of the cover, and the binding were done by members of various trade classes under the direction of inmate instructors." The first paper is an excellent and temperately written account of the present condition of "The Prisons of Great Britain," by Jay S. Butler. This is followed by a brief but admirable paper by Prof. Collin, on "The Leading Principles of Modern Prison Science," in which he works out the modern conception of the prison as "a hospital for the remedial treatment of depraved bodies and diseased souls," and shows how, ultimately, all theories as to the object of criminal punishment are in harmony with "the proposition which is the corner-stone of modern prison science, that the object of punishment is the improvement of the

offender." This is followed by an essay on "The Philosophy of Crime and Punishment," by Dr. W. T. Harris. Then follows the paper on "Criminal Anthropology," by Dr. Hamilton D. Wey, to which I called attention in the Retrospect for last April. Then comes an interesting paper on "New York's Prison Laws," more especially the Fasset Law of 1889, which "is above the high-water mark of all previous legislation, on both sides the Atlantic, in the prominence it gives to reformation as an avowed object in the treatment of convicts." This law gives the courts a discretionary power of carrying out the indeterminate sentence—the foundation-stone of the scientific treatment of criminality. The volume concludes with papers on "Prison Labour Systems," and "The Elmira Reformatory of To-day." It is to be feared that many years must elapse before our convicts in this country are set to such excellent tasks as the editing and publishing of such volumes as this, or before any one of our huge prison establishments becomes, even in the slightest degree, such a centre of light on criminological matters as Elmira.

4. *Therapeutic Retrospect.*

By HARRINGTON SAINSBURY, M.D.

Hydrochlorate of Hyoscine and its Employment among the Insane.
By Drs. RAMADIER and SÉRIEUX. ("Bulletin Général de
Thérapeutique," January 23, 1892.)

The salt employed in these investigations was obtained from Merck. The authors' statements are based upon a two years' administration of the drug at the Vaucluse Asylum. They first touch lightly upon the physiological action of the drug, laying special stress, however, upon the general paresis, most marked in the lower limbs, which follows a full dose of the salt. This general muscular relaxation includes, of course, the intraocular muscular relaxation, but it may also include a complete relaxation of the vocal cords, which is attended by more or less complete aphonia.

Next they enumerate the diseases mostly belonging to the spasmodic group, in which hydrochlorate of hyoscine has been employed, *e.g.*, asthma, whooping cough, chorea, etc. Then they proceed to discuss its use in mental disease. Mania, however produced, is the condition which indicates hyoscine, *e.g.*, simple mania, alcoholic delirium, epileptic delirium, mental excitement, following upon intense sensory impressions, the excitement observed in certain cases of melancholia, maniacal excitement of general paralysis, symptomatic febrile delirium. Hypodermic administration is the best. The dose should be tentative, and should begin with, say $\frac{1}{300}$ grain or even $\frac{1}{600}$, if the patient be weakly.

According to the results obtained, this dosage will be continued for a few days, or an advance may be made to $\frac{1}{150}$ grain or $\frac{1}{120}$ grain. A certain amount of tolerance follows the continued use of the drug, but much less rapidly than in the case of morphia; the dose may then have to be advanced to $\frac{1}{70}$ - $\frac{1}{60}$ grain, or to double this quantity. Salgo, of Buda-Pesth, has given as much as $\frac{1}{15}$ grain (3 milligrammes).

The effects follow an injection in about 10-30 minutes; sometimes they delay longer. The patient, whose motor excitement has up to that moment been difficult to restrain, then begins to feel weak on his legs. He may stagger and complain of vertigo, and that he has been made tipsy. His voice becomes hoarse and may even quite fail him. He sinks into a chair, and, if he succeeds in rising, he falls back quite limp; he may then stretch himself out and go to sleep. The result is very striking.

Sleep, if it follow, and it is the exception for it to fail, is of variable duration; it generally lasts several hours and may do so right through the night if given late. If sleep do not occur, the patient is quiet. Like morphia, hyoscine sometimes causes nausea or even vomiting. Mydriasis is almost constant; diplopia may occur; the face may be congested.

The authors' point out that hyoscine is not to be regarded as a mode of treatment of mania, but as a palliative, enabling us to tide over certain crises of excitement which, through the loss of sleep entailed and the refusal of nourishment, threaten grave complications. They also have found it useful in the treatment of surgical complications, when the patients were wholly unmanageable. We might say that hyoscine, as they employ it, takes the place of the strait jacket.

What are the contra-indications? In general, cachectics and cardiac patients are ill-fitted to receive the drug, but, on the other hand, Mitchell Bruce has given it in cerebral and aortic disease, in double pneumonia, in albuminuria. The authors think it may be given safely to general paralytics. They hold with Kraepelin that delirium or *collapse*, sometimes witnessed as a sequence to the injection, depends on the presence of impurities. During two years' routine use at Vacluse on over two hundred patients, they have no accident to record, and they consider that, though calling for cautious use, hyoscine is a valuable sedative where other drugs fail, and that it is very preferable to hyoscyamine, which very commonly causes delirium.

M. Constantin Paul, commenting on this paper, refers to methods already at our disposal for combating cases of mental and motor excitement, e.g., chloral hydrate, given by him in 90-grain dose as an enema and with good results; sulphonal, so much used of late, etc. He says, further, that, despite the unfavourable reports of the use of hyoscine by P. Nacke and Serger, that the general opinion bears out the value of hyoscine.

Case of Hyoscine Poisoning. By Dr. EMIL KORN, of Tapiau.
("Therap. Monatsh.," December, 1891.)

The dose taken, probably with suicidal intent, was one centigramme of hydriodide of hyoscine (the doses usually exhibited vary between 0.0002 grms. and 0.003 grms.). The patient, besides suffering from thoracic disease, was melancholic and the subject of delusions of persecution. The effects of the dose were: Stupor, with stertorous breathing, flushed face, and dilated pupils. The action of the heart was not influenced. About $\frac{1}{14}$ grain of apomorphia was exhibited subcutaneously, but without effect (on account of heart disease it was feared to give more), an ice bag was applied to the head, sinapisms to the calves of the legs, and black coffee administered by the mouth in teaspoonful doses. On awaking three hours after there was headache and dryness of the mouth. The next morning the patient was sufficiently recovered to leave his bed.

In spite, therefore, of alarming symptoms, we note here a speedy recovery after a dose exceeding the maximum by more than three times.

On the Use of Duboisine Sulphate in the Treatment of Mental Affections.
By Dr. MAX LEWALD, Liebenburg. ("Therap. Monatsh.,"
December, 1891.)

This author obtained good results from the hypodermic injection of 0.002 grms. (0.031 grains) of sulphate of duboisine in cases of mental excitement. The first symptom obtained is mydriasis, then the excitement quiets down (10-30 mins. later) and then sleep sets in. In 75 per cent. of 22 cases sleep was thus obtained; it lasted from 2-7 hours. Of other symptoms, there were noted before the occurrence of sleep, vertigo and lassitude, and, rarely, staggering, also thirst and dryness of the throat. In one case the injection was followed by extreme dilatation of the pupils, increased unrest, a pulse of 168, very small and hurried respirations, 35; there was marked redness of the face. The remedy is, therefore, not without danger, and the dose of 0.002 grms. is not to be exceeded.

Dr. Vladimir Preininger, of Prague, obtains essentially the same results with hypodermic injection of duboisine sulphate. He counsels that the dose should not exceed 0.002 grms. (about $\frac{1}{35}$ grain), since doses even of 0.0025 and 0.003 grms. are frequently followed by toxic effects. In the dose of 0.002 grms. a sedative, hypnotic effect is almost always produced. Taken by the mouth, the effect of duboisine sulphate is much less than when injected hypodermically. The action is analogous to that of hyoscine.

Duboisine, of course, is regarded as identical with hyoscine and iso-meric with hyoscyamine and atropine. It is considerably more active than these two last. At present there seem to be no

special indications for duboisine in preference to hyoscine or an equivalent dose of hyoscyamine.

Bromides.—In the “*Annuaire de Thérapeutique*” (supplément au “*Bulletin Général*”), February 8, 1892, we find a tabular statement of the relative poisonous action of the bromides; a long list. Intravenous injections were made by Dr. Féré with one per cent. solutions. The animals experimented on were rabbits; the fatal dose was in each case recorded. His results place, as most poisonous, mercuric bibromide; bromide of cadmium follows next; arsenic and potassium bromides come next to each other at some distance on the list, though the arsenic salt ranks as about twice as poisonous as the potassium salt. Calcium, strontium, lithium, and sodium, in this order, finish the list. We are astonished with this relative placing of calcium and strontium, and also that barium is separated by a very long distance from strontium, but we should fully agree with the placing of sodium as least poisonous of all the salts of bromine (*Société de Biologie*). Bromides are so much used by alienists, that a really comparative list of the toxic values of the bromides would be most interesting. Can we accept this tabular statement as at all final? We doubt it.

Treatment of Tetanus by Chloralhydrate in Combination with Bromide of Potassium. By V. POULET, Plancherles Mines (“*Therap. Monatsh.*,” December, 1891).

Of the various methods of treatment of tetanus, the local method comes too late, and the eliminative by diaphoresis, etc., does not promise much. The most efficient mode of dealing with the developed malady appears to be by means adapted to strengthen the nervous system, or to render it insensitive to the action of the poison of tetanus. Of the many drugs suggested for this latter purpose, *e.g.*, hypodermic injections of morphia, atropine, cocaine (P), eserine, cannabis indica, etc., none is so reliable as the combined use of bromide of potassium and chloral, the patient whilst under this treatment being kept as absolutely quiet as possible in a darkened room, from which all noise is excluded (the ears of the patient should be plugged with cotton wool). Liquid, highly nutritious diet, must be administered at regular intervals, every four hours. As to the dose of chloral and bromide, Dr. Poulet saw excellent results in two very violent cases, in which during 12 days 93 grains of each drug were administered daily (*i.e.* 6·0 grammes pro die).

This treatment is in agreement with H. C. Wood's teaching, that the combined use of chloral and potassium bromide should constitute the basis of the treatment of tetanus. He advocates, however, a much freer use of the bromide, of which, he says, not less than half-an-ounce, 217 grains, should be given pro die. It is interesting to note that the means of combating the excitement or

instability of the lower centres in tetanus are those most effectual in the treatment of a similar instability of the cortical cells in mania. For in this latter disease is there any combination of drugs more generally successful than bromide and chloral? In convulsions of cortical origin (epileptic), the bromides hold the field, and in the more acute epileptiform seizures, constituting the status convulsivus, no drug acts more promptly and strikingly than chloral hydrate.

Case of Sulphonal Poisoning ("Therap. Monatsh.," December, 1891).

The report is from Hungary, the case, that of a man of 54, a chronic dyspeptic, who, through recent business worries, had suffered much from sleeplessness. He was ordered a nightly dose of 30 grains of sulphonal, to be repeated in two hours if without effect. By the end of a week the patient had taken some nine or ten doses. His condition at that time included the following symptoms: Anorexia, nervous apprehension, vertigo, clonic spasm of the muscles, in particular of those of the trunk. The patient gave the impression of a dement; he was very restless, excited, and sleepless, his memory failed him, and he was very depressed. Mentally he was confused. During his interview with the doctor he suffered from repeated clonic spasmodic attacks, during which there was dyspnoea and great mental distress.

On cessation of the sulphonal, and treatment with chloral hydrate and suitable diet, the patient began at once to mend. He became more cheerful, and the spasms left him entirely. "Rational" treatment of the patient's primary trouble (the chronic dyspepsia?) is also mentioned, but what this was is not stated.

We should hardly have expected that chloral hydrate would help in such a case, but since the dose of this drug is not mentioned, we cannot judge whether the improvement is to be regarded as due to the sulphonal withdrawal rather than to the chloral exhibition. The interest in the toxic effects of sulphonal remains.

Sulphonal Habit ("Lancet," February 20, 1892).

It was maintained at one time, of course during the early days of sulphonal administration, that the drug did not establish a habit. How this might be, it was difficult to understand, for any substance exciting a desired effect upon the organism must, if habitually taken into the system, root itself in the affections of the taker. We should be more than human if this were not so. In a recent lecture given at the Congress of German Neurologists at Baden, June, 1891, Dr. Gilbert, of Baden Baden, describes two cases of habit, amounting to "a perfect mania," in which enforced abstinence gave rise to a series of symptoms similar to those witnessed in morphia abstinence. Two other cases were described in

which serious symptoms were present, as the result of the continued use of sulphonal. All four cases showed among their symptoms illegibility of handwriting; the patients could not write straight, and the characters were unsteady. Attention is drawn to the fact that sulphonal is very largely used in Germany, and that it can be obtained from the chemist without medical prescription. The same thing surely holds in England, where the tabloid system reigns supreme. What, indeed, can we not get in most acceptable and portable form! To such an extent have new drugs invaded the country, and established for themselves an uncontrolled sale, that we cannot be too thankful to those who will make plain the dangers of the practice.

Dr. Gilbert concludes with recommendations of how the drug should be taken if it must be given, viz., in solution in boiling water, poured on, and allowed to cool just sufficiently to be drinkable. Sleep will follow in some 15 to 20 minutes when this method is adopted. This mode of administration is already largely in vogue among us.

Pental as an Anæsthetic. By Prof. HOLLÄNDER, Halle A. S. ("Therap. Monatshefte," October, 1891, and January, 1892).

We make no apologies for introducing this substance into the "Journal of Mental Science," for the relation between hypnotics, narcotics, and anæsthetics is so close that they indeed form one large pharmacological group; they help us to abolish the functions of the cerebrum, whilst life, hanging on by the centres in the medulla oblongata, is still maintained. The whole theory of anæsthesia depends upon the less resistance of the higher cortical centres, the greater resistance of the lower centres in the medulla. The group of the anæsthetics proper, *e.g.*, chloroform, ether, laughing gas, etc., is separated from the group of the hypnotics, *e.g.*, chloral, sulphonal, paraldehyde, etc., etc., by such comparatively unimportant characters as speediness of effect, and speediness of disappearance of the effect; these have great practical, but little philosophical value. Moreover, the close relationship between hypnotics and anæsthetics is seen in the slight differences in chemical composition, which may exist between members of the two groups, *e.g.*, the hypnotic chloral hydrate, the anæsthetic chloroform. This point is further illustrated by the body under consideration, pental, another name for which is amylen, for this substance, as an anæsthetic, has a congener, amylen hydrate, which ranks as a hypnotic. Dr. Holländer, in his first contribution on pental, drew attention to the history of the discovery (in 1844) and the use of amylen, C^5H_{10} (in 1856-1857), as an anæsthetic. The reports were most eulogistic, then the drug practically disappeared, and we hear no more of it. Dr. Holländer presumes that there must have been difficulty in obtaining a uniform substance, and that for the

reason of uncertain action it fell into disuse, and he points out that a number of very closely allied bodies were formed in the old process of preparing amylene from amylic alcohol. The new substance sold as pental is simply amylene, but being prepared by the action of heat and acids on amylene hydrate, the result is a single quite pure substance. It is a clear liquid, of low specific gravity, highly volatile and inflammable, therefore, like ether, to be kept carefully from the proximity of any flame. Insoluble in water, it mixes freely in all proportions with alcohol, ether, and chloroform. It produces narcosis more quickly than chloroform, and is almost free from unpleasant after-effects; from bromide of ethyle it differs, by being somewhat more tardy in producing its effect, but on the other hand this effect lasts longer. Dr. Holländer points to its composition as a hydro-carbon, in explanation of its much less dangerous action than that of chloroform, the danger attaching, as some have taught, to the halogen, chlorine. No bad effect on heart or respiration was observed by him. The only drawback lies in the unpleasant, penetrating smell of pental, which resembles somewhat that of oil of mustard.

The further experience with pental, which the author reports in January of this year, fully confirms his original statements. He regards pental as one of the safest of anæsthetics, and one of the most certain; in these two respects he thinks that it does not only equal, but even surpasses nitrous oxide.

Dr. Holländer's experience is in tooth extractions, therefore, in short operations, but, as he points out, this is a most complete test of anæsthesia, and, inasmuch as the patient is operated on in the sitting posture, it is the best test of safety, so far as the heart is concerned, for the posture threatens syncope.

In the safety of pental, we find that it resembles amylene hydrate, for this produces its effect, hypnosis, whilst heart and respiration are practically unaffected.

PART IV.—NOTES AND NEWS.

MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

The Quarterly Meeting of this Association was held at Bethlem Hospital, London, on Thursday, Feb. 18, Dr. Whitcombe, President, in the chair.

Dr. EWART read a paper on "Epileptic Colonies" (see Original Articles).

The PRESIDENT, in inviting discussion on the paper, said he was sure that most superintendents of asylums would be delighted if they could get rid of the majority of their epileptics, among whom they found some of the most dangerous, as well as the most harmless, amongst their patients. There was much to be said for and against the system of keeping a particular class of patients together, especially in the case of epileptics. He was himself doubtful whether the fact of one patient having a fit would not be prejudicial to others, for it was

frequently the case that a patient having a fit sent other patients off into fits. He had felt that for some time amongst his epileptics. At the same time there could be no doubt that the weeding out of a large number of chronic cases out of asylums would enable superintendents to pay much more attention to their acute cases, and would, he thought, be profitable to acute cases in asylums. The separation of acute from chronic cases was one about which he felt very strongly, and he should be glad to hear it discussed.

Dr. SPENCE said the idea of a home or colony for epileptics who were not insane was a matter of very great importance, and one which had not been brought so prominently before them as it might be. He believed that the adoption of such a practice would not only be for the good of the patients themselves, but it would also be successful financially. They could scarcely ever take up a number of the "British Medical Journal" without seeing an inquiry of that description—whether anyone could recommend a home for an epileptic patient. He himself often met with inquiries as to anyone who would take in epileptics, not insane epileptics, but people who would be dangerous to themselves if not properly looked after. He hoped some practical result might arise from the discussion.

Dr. ROGERS said he had in his hands a medical report for 1890 of a home for epileptics at Moghull, near Liverpool. That report contained some remarks with reference to the effect of epileptics upon one another which bore rather upon the points raised in the paper. It said: "The advantages of the segregation of epileptics in suitable homes or colonies seem to us for this reason [that was that their companions were their equals] to be very great, and this opinion is formed, and distinctly formed, in the face of opposite opinions held not only by the public, but by many medical men—opposite opinions formed by non-epileptics of what their feelings would be were they shut up with epileptics, and not by the experience gained in suitable epileptic homes, of which there have hitherto been none in this country." That institute did not seem to be known to members of the Association. It was started two years ago, and was under the management of the medical officer connected with the local infirmary, the chief managing man being Dr. Alexander, of whom most of them had heard as having attempted various operations for epilepsy, such as ligaturing the cerebral artery, and one or two other things. So far as the institution had gone, with its very limited accommodation, it seemed to have been an entire success, so much so that the applications for admission were considerably in excess of the available accommodation. Dr. Ewart's paper was so discursive—it seemed to take in everything, and a good many other things besides—that he could not follow the whole of it. For instance, he proposed in this home to class epileptics who were insane and those who were not insane together. He (Dr. Rogers) thought that would damn the whole concern. In the first place, without a special Act of Parliament it could not legally be done; they could not set up a home of that sort for lunatics who happened to be epileptic. It would also tend very much to the disadvantage of those who were simply epileptics. The friends and others would not care to send their children or adult epileptics to be associated with lunatics of the most violent description. What was wanted—and this was a thing they were endeavouring to do in a joint association of the British Medical Association and the Charity Organization Society—was to form a home for epileptics who were not insane, and more particularly for training children where they would be free from the disadvantage of being associated with those already mentally unsound. The institution he had referred to was not entirely devoted to that object, but still the manner in which it had been started, and the success which had followed its operations, showed what might be done on a larger scale. Each institution should be distinct by itself. There should, first of all, be one for training children, and then one for those who had passed the age of education, but who might be trained in manual and other industrial employment.

Dr. RAYNER said he was very much interested in this subject, having some

few years back been in communication with the Charity Organization Society with regard to provision being made for non-insane epileptics. Nothing, however, had yet been done towards founding any such colony or shops as he then suggested. He certainly at that time abstained from recommending that insane epileptics should be treated in connection with those who were not insane. He quite agreed with Dr. Rogers that it would be very desirable to avoid in such a colony or institution having those who were obviously insane, so that he was afraid such a scheme would not really relieve the asylums of some of their most troublesome cases.

Dr. FLETCHER BEACH said the portion of Dr. Ewart's paper which referred to epileptic children dealt with a question which had occupied his (Dr. Beach's) mind for some considerable time. He read a paper with reference to it at the Congress. He considered it necessary, as Dr. Rogers and Dr. Rayner had said, that ordinary epileptics should be kept distinct from those who were insane. He was quite certain no father or mother would send an epileptic child to an institution which was known to take in the insane. There was always a certain amount of stigma attaching to insanity, and parents would send their children to a home where epileptics alone were admitted, but certainly not to one where epileptics and the insane were admitted. Dr. Ewart was undoubtedly right in saying that epileptic patients could be taught shoe-making, carpentering, and other trades, and so contribute towards their own maintenance. Dr. Rogers and himself were both members of the Charity Organization Society, which was going into the question of homes for the feeble-minded. They found there was an Act of Parliament which allowed the Guardians of different parishes to contribute towards the maintenance of the blind, deaf and dumb, and if that power could be extended so as to include epileptics some good would result. No doubt many epileptic patients did not require attention; they might be taught in day schools, and while many parents would no doubt object to send their children to a home where they were detained, they would not object to their being sent to a day school where they would be under a proper amount of supervision. Like Dr. Spence, he had often noticed in numbers of the "British Medical Journal" the inquiry: "Here is an epileptic child, what can we do with it?" He had also been asked if he knew of homes to which such children could be sent, and he had to reply with great regret that he knew of no such homes. Of course such homes would not be intended to touch the upper classes in society, they could provide very well for their own children, but he was quite sure that many a poor parent would be very glad to have a home to which he could send his epileptic child. Some time ago the Charity Organization Society had a scheme for providing workshops for epileptics. The question was gone into, but unfortunately there was not a sufficient public spirit evinced, and it was not carried out. He thought the question he had raised was worthy of consideration, namely, whether the Act of Parliament as now applied to the deaf and dumb could not also be extended to epileptics.

Dr. WALMESLEY said most medical men who had had any experience in this matter would know that there were a vast number of epileptics to be found in their workhouses. What he thought was that industrial centres should be established to which epileptics who were not insane might be sent and taught to carry on some useful trade. Such institutions should be for the epileptic sane, not the epileptic insane. He should be glad if that could be defined a little more clearly, because at present there was a little uncertainty as to whether the colonies recommended by Dr. Ewart should include both sane and insane.

Dr. SAVAGE said he did not know whether Dr. Rogers knew if the school started by Mr. Mould, some years ago, ever came to anything. He remembered that the house was beautifully arranged; everything was to be on the flat—there were to be no stairs. The bedrooms were all on one floor, opening by French windows on to the garden. It seemed from that point of view an ideal proposition, but whether it practically was a success he had never heard.

Dr. ROGERS said, though he had no authority for saying so, he believed that the home referred to had not been kept for the use for which it was first intended and started.

Dr. FLETCHER BEACH said that he had visited the institution referred to, and he was told that they had only two epileptics. The other patients were brought in from the main body of the asylum.

Dr. SHERRARD said, having had practical experience of cases not exactly epileptic, he should like to express his views as to the separation of the sane from the insane. One of the most certain facts they had to go on would be this, that if sane and insane epileptics were mixed together, it would be very difficult to get them in the same colony. His opinion was that sane epileptics should be separated, if possible, from the insane, and should be put to industrial work. Any plan, in his opinion, for keeping the two classes together would be impossible, and it would set people very much against the scheme. With reference to several epileptics, as to whom he had lately been consulted, he found it very difficult to make them feel that they were insane, or that they ought to be under control. He had one very remarkable case. It was that of a man occupying a very high position, who had been an epileptic for years, and it was an utter impossibility to make that man feel that he ought to be under control. If there was a home to which he could be sent, where he would see that he was not detained, but where, by remaining, he was benefiting himself, and where he could really do some good work, something beneficial might be effected. Dr. Ewart's paper brought forward such an admirable idea that it ought not to be allowed to stop where it was.

The PRESIDENT, in calling upon Dr. Ewart to reply, said the paper had brought a question to his mind which would probably be dealt with in a much more efficient manner if all classes of epileptics were together, and that was the question of the treatment of epilepsy. He had lately had several cases which, to all intents and purposes, had thoroughly recovered after a prolonged treatment during many years by drugs. He could call to mind three cases in which the epilepsy had entirely disappeared, and the mental condition was quite restored.

Dr. EWART said, having written to a gentleman connected with the Charity Organization Society, asking him if he knew of any such home as he had referred to in Great Britain, the reply was that he did not know of any epileptic colony in these islands. In reading up the literature of different epileptic colonies on the Continent and in America, he had always gathered that the non-insane, the insane, and the children were massed together. The great argument in favour of epileptic colonies was that no sooner one was started than two or three others invariably followed. They were found to be so beneficial that a great demand always arose for the accommodation they provided. The working out of the details he must leave to those who had greater knowledge of the practical working of asylums than he had. He had read the paper chiefly to obtain criticisms upon the project, so that if possible it might lead to some practical result. He was very much obliged to those gentlemen who criticized it so kindly.

The PRESIDENT said that a bedstead was on view in the passage, invented by the Ambulance Society, and a gentleman was in attendance to give any explanation that might be required. He would now ask Dr. HACK TUKE to read a paper sent by Dr. Jacobson, of Copenhagen, entitled "Relations between Syphilis and General Paralysis."

Dr. HACK TUKE said that Dr. Jacobson, of Copenhagen, was attached to the communal hospital in that city and to that department devoted to nervous and mental diseases. He was in England last summer, and was known to some members of the Association. He had written a work on general paralysis in the Danish language, which, perhaps, some members of the Association might be able to read. (See Original Articles.)

The PRESIDENT said the Association must recognize the great ability dis-

played in the paper which had been read by Dr. Tuke, under somewhat exceptional circumstances. That Dr. Jacobson should have taken the trouble to write this paper and send it to them showed a considerable amount of interest in the Association. He wished, in the name of the Association, to give a very hearty welcome to a specialist from Copenhagen, who was present with them at that meeting, Dr. Friis. They were always delighted to welcome specialists from the continent, or indeed from any part of the world. He thought it was only right that they should express their thanks to Dr. Jacobson for his able paper, and for his kindness in sending it to the Association. (Applause.)

Dr. SAVAGE said he should be glad to have the pleasure of seconding that vote of thanks. The subject was one to which he had paid a very great deal of attention. They always had to remember that if one had a hobby he was inclined to ride it rather hard. His hobby certainly was that syphilis was a very general factor in the production of general paralysis of the insane. In the paper which he read at the Washington Congress, he had dealt with the relationship of syphilis to insanity generally, of course extending far beyond the bounds that were included in the paper before them. The longer he lived the more he was impressed by the very marked relationship between syphilis and general paralysis of the insane. During the last five months he had seen 28 cases of general paralysis of the insane, and in those 28 there were 18 in which he had a distinct history of syphilis, and in most of those cases the whole history of syphilis, the length of time, and the general symptoms of the disease. In three other cases, although the fact of syphilis was almost certain, there was some doubt. There were five instances in which one could not approach the history at all—the patients were in a weak-minded condition and were brought by a wife or near relation, so that, of course, it was not practicable to get at facts. There were only two of the 28 cases in which such evidence was absolutely wanting. Amongst the 28 cases was that of a woman belonging to the upper middle classes, who had had some 12 or 13 children. On seeing her husband apart he said that seven years ago he had infected his wife with syphilis, so that the only woman with general paralysis who had come under his care during the last five or six months had undoubtedly had syphilis. Then, on the other hand, with regard to all those other cases that he had seen in consultation, there was one case in which there was a history of acute syphilis, influenza, and acute pneumonia, and in two other cases there was what they had been in the habit of calling syphilophobia, which was now called syphilidophobia. At all events, of the only cases which had come under his notice, of insanity, in which there was clear history of syphilis, two of them were suffering from melancholia, one from acute mania, and all the others were people suffering from general paralysis of the insane. It seemed to him that those were extremely important facts. Another point to be observed was whether there was any evidence that congenital or inherited syphilis might give rise to some of those odd cases of developmental general paralysis of the insane. He had seen at least one, he thought two, in which there was a history of congenital syphilis, and in which the patients had developed general paralysis of the insane when quite young. He believed there was one case of paralysis at this moment at Peckham House with a history of congenital syphilis, having all the symptoms thereof, and having general paralysis of the insane, the patient being a lad 20 or 21 years of age. Dr. Hack Tuke, in reading the paper, had referred to the relationship of syphilis to general paralysis, and of syphilis to locomotor ataxy. That, of course, was a very important question. The recognition of the syphilitic origin of nearly all cases of locomotor ataxy was well within the memory of most of them. He believed the great authority on locomotor ataxy, Dr. Gowers, would say, "Show me a case of locomotor ataxy, and I will show you a case of constitutional syphilis." The percentage among the unfortunate Russian Jews, quoted by Dr. Jacobson, showed that of the Jewish ataxics 87 per cent. had syphilis, and of the Jewish general paralytics 85 per cent. The conclusion to

which he arrived was that after all, whether general paralysis came from syphilis or not, it was about equally hopeless, and that led them to another point. He knew there were some members of the Association, and he believed his friend Dr. Newington was one of them, who considered that many confused cases of general paralysis were those suffering really from syphilitic degeneration of brain. He (Dr. Savage) was free to confess that a great number of cases of general paralysis of the insane due to syphilis did not run the so-called typical course, but he found that Griesinger, in his last edition, referred to the one characteristic criterion of all syphilitic brain cases, namely, their uncertainty, their instability, their tendency to remissions, to temporary cures, and the like. That seemed to him the exact characteristic of the majority of cases of general paralysis which he had seen, especially those depending on syphilis. He thoroughly believed that the great majority of cases of general paralysis did depend upon constitutional syphilis, but not all cases. Excesses of other kinds and injuries were quite capable of starting this degeneration. Some years ago they had in Bethlem two brothers, one who had been leading a perfectly steady life, while the other had led the life of a contrary character, one having had syphilis, the other not having had syphilis, yet both broke down at the age of 32, and died of general paralysis of the insane. There was another case in which there were twins, one dying of general paralysis in Scotland and the other in Bethlem. It was, of course, possible that they had both got syphilis, but it seemed much more likely that there was some special predisposition, causing them to break down.

Dr. RAYNER said it was very satisfactory to hear that there was such a very definite cause of insanity, because of late one had begun to fear that all causes had been submerged in one, and that influenza was the only cause of insanity. It was quite refreshing to be reminded that there was such a definite cause as syphilis. One must agree with Dr. Savage, with the writer of the paper, and with nearly everyone who had written on the subject of general paralysis, that syphilis entered very largely into its production, and constitutional syphilis was found to have existed in the history of an immense proportion of general paralytics. They would, most of them, agree with Dr. Savage in saying that there were a considerable number of cases in which there was no history of syphilis, and it would not be rational to accept the theory that the peculiar form of degeneration which was found in general paralysis could be the result of one pathological cause only. There could be little doubt that the pathological condition found in the brain might be reasonably expected to be brought about by such pathological causes as the continued abuse of alcohol, or the continued action of lead, or the great stress of sexual excesses, or mere loss of sleep, which he, no doubt, in common with others, had seen producing general paralysis. Whilst admitting that syphilis was a very large factor, and a very frequent substratum, in the causation of general paralysis, he certainly could not admit that was invariably *the* cause.

Dr. WEATHERLY said the author had mentioned that syphilis and general paralysis might be looked upon as the "Darkest Africa" in psychological medicine; and when they found, on the one hand, such an authority as Dr. Savage maintaining that something like 90 per cent. of general paralysis was caused by syphilis, and, on the other hand, one of the most eminent pathologists they had, Dr. Bevan Lewis, maintaining that it was very rarely due to syphilis, they certainly had not yet found a standpoint. One factor had been lost sight of, and that was a very important one. Anyone who had lived in this country, and exercised his perceptive and reasoning powers, or who had read that wonderful book of Buckle's, "The History of Civilization," must believe that their minds were guided to a very large extent by the wonderful law of average. Adopting that as a fact, could they not say that every man who had syphilis must be a man who had probably had connection with a good many women? Admitting that, they at once came to the conclusion that out of every hundred men who had had syphilis, the great probability would be that something like

90 per cent. would have indulged in sexual excess. Might they not say that, after all, a leading factor in the causation of general paralysis was not syphilis, simple and purely, but the sexual excess that lay at the back of it all?

Dr. BLANDFORD said, even supposing that all cases of general paralysis were caused by syphilis, one thing was very clear, namely, that all cases of general paralysis were treated as if they were due to syphilis, for he never saw any case of general paralysis that was not deluged with mercury and iodide of potassium, whether there was the very smallest trace of syphilis or not. He certainly had seen cases, not only of general paralysis, but other cases of insanity, where infinite mischief had been done to the patient by this treatment. No doubt there were some cases of general paralysis due to syphilis, but he believed that there were a very considerable number due to other causes, and where one could not clearly establish the impossibility of there having been any syphilis at all. Syphilis was not such an extremely common disease among the males of the upper classes of this country as was general paralysis. If a great number of cases of general paralysis were carefully investigated it would be found that the patients were absolutely devoid of any history of syphilis. With regard to the question of women, they knew that women were not attacked by general paralysis in anything like the same proportion as men, but surely syphilis existed amongst women, in a certain grade of society, almost as universally as it did among men. If they went to the Lock Hospital they would find women there treated by hundreds, but they did not find the same proportion of women becoming general paralytics. He had heard it said that there was a great immunity in Ireland from general paralysis, that in Irish asylums they found very few general paralytics. He should like to know whether syphilis was equally unknown in Ireland. These matters required to be very carefully gone into before it could be said that any great number of cases of general paralysis were due to syphilis.

Dr. RAYNER said that in his experience of the treatment of general paralysis from the syphilitic point of view, anti-syphilitic remedies, instead of doing good, had, he thought, done harm.

Dr. SEYMOUR TUKE spoke, but his remarks did not reach the reporter.

Dr. SPENCE said that in the cases which had come under his special notice he had been struck to find how little connection there seemed to be between insanity and syphilis. They very rarely got cases of syphilis in their asylums, and although he had inquired into the matter closely he got very little history of syphilis, but a good deal of general paralysis. He believed it was universally acknowledged that the virtue of an Irish woman was not to be questioned under any circumstances, and he was glad to hear that the virtue of Irish men was equally the same.

Dr. McDONALD said he could most fully endorse what Dr. Spence had said with regard to the connection between syphilis and general paralysis as coming under the observation of superintendents of county asylums. After thirteen years' experience of two asylums he was not sure that he could remember more than one or two cases where the connection between syphilis and general paralysis was fully borne out by the facts. The discussion had gone on the line of what could be observed in general and consulting practice rather than on what came under their eyes as superintendents of asylums. Of one thing he was quite certain, viz., that general paralysis was such a wide term that he was not at all sure that they were not including in it more than one disease. He believed there was a connection between syphilis and a certain form of general paralysis, and it was that class which perhaps had led Dr. Savage to form such a very firm opinion as he had done upon this question. At the same time, as Dr. Spence had said, there was another class of general paralytics where there seemed to be absolutely no connection whatever between it and syphilis. During the last nine years he had only in one case been able to trace syphilis as the cause of general paralysis.

Dr. BAKER said in large asylums it was very difficult to trace the history of a patient. In small hospitals it was much easier to do so. He had only been able

to trace four cases of general paralysis, and in only one of them was there the slightest suspicion of syphilis.

The PRESIDENT thought the question of locality, as far as general paralytics were concerned, had been left out of the question. The large towns supplied a large number of general paralytics, but general paralysis in some county asylums, and he believed in asylums in Ireland, was almost unknown. At Hull something like twenty per cent. of their admissions were general paralytics. At Birmingham about ten per cent. of his admissions were general paralytics, and he believed other large towns supplied general paralytics in somewhat similar proportions. He had been able to find traces of syphilis in very few of the large number of cases which he had seen. As a rule he attributed the cause to a general excess. He thought with Dr. Weatherly and Dr. Rayner that sexual excesses had a very great deal to do with a large amount of general paralysis, and also excesses from alcohol and other causes. It seemed to him that they had lost sight altogether of the locality from which general paralysis arose.

Dr. HACK TUKE said Dr. Jacobson would be very much gratified to hear of the manner in which his paper had been received by the Association, and of the valuable discussion which had followed it. Dr. Blandford's remarks called to his mind what was said by Dr. Bucknill a good many years ago. Speaking very sceptically as to any causal relation between syphilis and insanity in any form, including general paralysis, and saying that a very large number of people had syphilis and comparatively few had general paralysis, he went on to say if this were true they should go to the Lock Hospital to see cases of insanity, and that if they went there they would not find them. It certainly seemed to him that you must ascertain the proportion of syphilitic people who become general paralytics, as well as the number of general paralytics who have been previously syphilitic. Part of the value of Dr. Jacobson's paper was due to the recognition of this fact.

SCOTTISH MEETING OF THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

A Quarterly Meeting was held in the Hall of the Faculty of Physicians and Surgeons, Glasgow, on Thursday, the 10th March, 1892. Dr. McDowall, of Morpeth, was called to the chair, and the following members were present:— Drs. Bruce, Campbell Clark, Gairdner, Ireland, Carlyle Johnstone, Oswald, and Urquhart (Secretary).

The minutes of the last meeting were read, approved, and signed by the Chairman.

The SECRETARY intimated a large number of apologies for absence, including one from Dr. Carswell, who was to have read a paper.

Dr. CAMPBELL CLARK reported that the authors of the "Handbook for Attendants" had met and considered the question of a new edition. He said that he would ask the meeting to homologate what they had done, because it would be within the recollection of members present that the book was altered to the satisfaction of, and approved by, a large committee representative of Scotland generally. He stated that, at a meeting of the authors, he had produced a letter from the publishers intimating the necessity for the immediate preparation of a new edition. Inasmuch as the Council purpose to deal with this question on the 19th May, and have expressed the hope that the Scottish members will then be represented, the authors resolved to waive their claims in respect of the handbook, to enable the Council to deal freely with the subject, provided that the authors remain on any editorial committee that may be formed.

The SECRETARY supported Dr. Campbell Clark's remarks, and briefly recapitulated the history of the book. He reminded members that Dr. Clark had read a paper on the "Special Training of Asylum Attendants," in Edinburgh at

the November meeting of 1883, and that the meeting then resolved to consider the question of training and the preparation of a manual. For that purpose a Committee of the officers of the asylums of Scotland was appointed. That Committee reported, in February, 1884, that a short manual should be prepared, and Drs. C. M. Campbell, Campbell Clark, Turnbull, and Urquhart were appointed for the purpose. In November of the same year the proof sheets were corrected by the whole Committee of Asylum Medical Officers in Scotland, and the book was published forthwith.

After some discussion, Dr. IRELAND moved that the meeting approve of the course adopted by the authors.

This was seconded by Dr. BRUCE, put to the meeting, and carried *nem. con.*

Dr. OSWALD then read his notes on certain German asylums, which will appear in our next number.

Dr. McDOWALL thanked Dr. Oswald for his interesting paper, and referred to the difficulty of instituting comparisons between asylums in different districts and different regions. He instanced his experience in Yorkshire and Northumberland with regard to pachymeningitis hamorrhagica. At Wakefield they might have two cases in one day, whereas in 18 years he could not remember one instance in Morpeth. He also asked why bedsores should be so frequent in some asylums compared with others. At the Hull Asylum, with a great proportion of general paralytics, very few occurred. This might be in great measure a question of nursing.

Dr. CAMPBELL CLARK, in replying to Dr. McDowall's remarks, stated that he had found the "red liquor" used in tanning an excellent preventative of bedsores. He further stated that he had found puerperal insanity more common in this country than abroad, in conformity with Dr. Oswald's statistics, and drew the attention of members to an observation that he had made respecting the colour of the eye in that malady. He had found few puerperal cases with grey or blue eyes—they were mostly brown. As to the statistics of general paralysis they were often vitiated by differences as to diagnosis.

Dr. IRELAND thought that a syphilitic case could be distinguished from a paralytic by the marks discoverable on minute and careful examination.

Dr. GAIRDNER said that he did not think that general paralysis in the advanced stages was common outside asylums. From time to time these did occur in hospital and private practice, and he had reported cases from time to time in the "Journal of Mental Science" and the "Glasgow Medical Journal." He referred to one case of exceptional interest in a man who had probably a rather shady history sexually. He had come complaining of aneurism, and settled down into deep hypochondriasis. He was of quite the opposite temperament to the cases of general paralysis usually described, and no assurance that he did not suffer from aneurism could make him desist from his repeated visits. One day he was a little shaky on his lower limbs, but presented no affection of speech or other symptoms of general paralysis. There was no suspicion of that malady during the months of his attendance in the consulting room. However, ultimately he was seen by Dr. Gairdner in Gartnavel in the last stage of the disease.

Dr. URQUHART briefly referred to the difficulties of diagnosis between general paralysis and syphilitic disease, and described shortly the Irrenklinik at Leipsic, as compared with the neighbouring asylum of Alt Scherbitz. He also condemned the practice of "preventing" bedsores by the prolonged warm bath or by wood wool. There was a difficulty in comparing foreign and home asylums in respect of the fundamental differences in the home life and surroundings. The standard of comfort was not the same. No doubt, as a general rule, the fewer the bedsores the better the nursing; but he doubted if they could be prevented in every case.

Dr. OSWALD then read notes on a case of wide-spread tubercular disease that had lately occurred in Gartnavel Asylum.

Dr. McDOWALL drew attention to the frequency with which septic inflammation of the bladder is set up in cases of spinal disease with retention of urine.

The members dined in the Bath Hotel after the meeting, in accordance with the usual custom of the Association.

RECORDS IN APPEAL.

Thomas Lees, Inspector of Poor, North Berwick, against T. W. Kemp, Inspector of Poor, Haddington.

The subject of dispute was one Michael Buchan, who was born in Haddington on the 26th August, 1867, a son of Peter Buchan, a farm labourer. This Peter Buchan resided in different parts of the county of East Lothian, but did not seem to have acquired a residential settlement in any parish of the county. On the 20th of November, 1885, Michael Buchan was sent to the Haddington District Lunatic Asylum, where he was detained for three months, at the end of which he was discharged without being certified as recovered. On the 18th June, 1889, application was made by his father to the Inspector of Poor of North Berwick to get Michael Buchan again admitted into Haddington Asylum, and shortly after application was made to relieve the parish of North Berwick, on the ground that the parish of legal settlement was the parish of Haddington, the place of his birth. This was disputed on the ground that Michael Buchan was a congenital idiot and unable to work or to maintain himself. The plea in law of the defenders was that the said Michael Buchan, being incapable of acquiring a new settlement, followed that of his father, who never had a residential settlement in Haddingtonshire. The question turned upon the degree of imbecility or weak-mindedness. It was an object with the pursuer based upon recent decisions, to show that the weak-mindedness of Michael Buchan was not of a decided character, and that he was capable of earning wages, and thus gaining a livelihood for himself. In that case they might hope to have a decision that the place of his birth was the place of his settlement. On the other hand it was an object of the defender to prove that Michael Buchan had been imbecile from birth. The young man's father stated that he appeared a bright, intelligent child until he was nine or ten months old, when he got a fall. He was then seen by the late Dr. Thomas Howden, Junior, who reported that the child's head was over big for his body. After this he was noticed to be imbecile. His father tried to teach him reading, writing, and counting with some little degree of success. He was never at any school save for about three weeks at Dirleton. He could do a few messages, such as buying small articles in shops, but never could be got to go through any regular work.

Three medical witnesses were called by the pursuers, and three by the defenders. Dr. Angus Mathison, practising at North Berwick, stated his belief that Michael Buchan was weak-minded, but he did not think that at any period of his life any medical man would have certified him as a congenital idiot. He was clearly of opinion that, under supervision, Michael could be taught to do some work.

Dr. J. B. Ronaldson, Medical Officer of the District Asylum, certified that Michael Buchan had been twice under his charge. He had been introduced into the asylum in a very filthy and neglected condition, suffering from insanity, superadded upon his general imbecility.

Dr. Ronaldson, as well as Dr. Mathison, considered that the early weakness might be owing to the accident which he met with when nine or ten months old. He thought that, if taught in early youth, Michael Buchan might have been taught to contribute partly to his own relief.

Dr. W. W. Ireland, proprietor of a Training School for Imbeciles at Preston Lodge, in the county, said that he had examined Michael Buchan at the Had-

dington Asylum. He found him of short stature, the head somewhat larger than usual. He found the palate high, but not so much so as to attach any importance to this. He found that Michael Buchan had 32 teeth; imbeciles have rarely more than 28. Dr. Ireland could not detect any of the usual marks of congenital idiocy. Michael Buchan could count up to thirty, could tell the time on the clock, could read a little, though he had scanty teaching. He wrote out the days of the week correctly, but put in two Sundays, one at the beginning, the other at the end. He might be taught to do country work under supervision, as much as would keep him. Dr. Ireland thought, recalling the observation of Dr. Thomas Howden, Junr., that it might be a case of imbecility from hydrocephalus about the ninth month.

The evidence of these three witnesses was supported by Mr. James Mowatt, Superintendent of the Haddington Asylum. Dr. Thomas Howden, of Haddington, was then called for the defender. He said that he had examined Michael Buchan. He found his head unusually large. He had heard the statement that until Michael Buchan was nine or ten months old he was a bright and alert child, but was still of opinion that he was a congenital idiot. He thought Michael Buchan incapable of making his own way, and that he would not be responsible for any illegal action.

Dr. Wm. Martine, of Haddington, was of opinion that Michael Buchan's imbecility might be congenital, though, when cross-examined, he acknowledged that the accident he met with in infancy might account for his condition. Dr. Martine observed at the same time he thought that, under supervision, Michael Buchan might do light work, but was of opinion that he could never earn his own livelihood.

The Sheriff-Substitute, having considered the cause, gave his opinion on the 26th June, 1891. He found that Michael Buchan had been, during his whole life, an idiot or imbecile, and that he had never been able to earn anything for his own support. He found, therefore, that the parish of his father's settlement is the parish bound to relieve the pursuer of the maintenance of Michael Buchan.

The Sheriff-Substitute, Mr. Charles J. Shirreff, added the following note explaining the grounds of his decision:—

"This is an action at the instance of the inspector of poor of the parish of North Berwick, for recovery of outlays in the maintenance of Michael Buchan, a lunatic, on the ground that Haddington, as the parish of the lunatic's birth, is liable for his maintenance.

"The lunatic was born in the parish of Haddington, on 26th August, 1867. He was residing with his father at Balgone Barns, in the parish of North Berwick, in June, 1889, when his father applied for parochial relief for him, and he was admitted to the Haddington District Asylum, where he still is.

"The lunatic has never been able for any work, so as to earn anything for his own support. He has been taught to read and write and count a little. He has a certain amount of intelligence. He can tell the hours on a clock, or go a message to a shop. The whole of the five medical witnesses concur in the opinion that he has never been able to earn his own livelihood, and is not now able to do so.

"He has resided in his father's family from his birth till he was removed to the asylum in June, 1889, excepting a period of three months from 25th November, 1885, when he was previously in the asylum (Defences, p. 2, sec. 2).

"Although he had attained the age of 22 years when he became chargeable to the parish of North Berwick, his father was still bound to support him. After he attained majority, he did nothing to break the ties that 'united him to the family circle.' He was, therefore, 'still a child of the house in the ordinary sense of that expression, a member of the family of which his father was the head, and consequently his settlement still depended on that of his father.' (Fraser v. Robertson, 6th June, 1867. Session Reports, Third Series, Vol. v., p. 819. Lord Justice Clerk's op., p. 823.)

"The only ground on which, in this action, the parish of Haddington is sought to be made liable for the maintenance of the lunatic is that Haddington is his own parish of birth. As the Sheriff-Substitute is humbly of opinion that the parish bound to support the lunatic is the parish of his father's settlement, the defender, as representing the parish of Haddington, is assoilized."

The pursuer appealed to the Second Division of the Court of Session, who, however, adhered to the judgment of the Sheriff, that the parish of Michael Buchan's settlement was the parish properly liable. We understand that this is in Ireland.

THE APPROACHING CONGRESS OF CRIMINAL ANTHROPOLOGY.

The third International Congress of Criminal Anthropology will be held at Brussels, at the Palais des Académies, from the 7th to the 14th of August. The Belgian Government will give their co-operation, and the Minister of Justice (M. Le Jeune) is on the committee of organization. Dr. Semel, the best-known Belgian alienist, is the president of the committee. Papers will be read by Lombroso, Brouardel, Lacassagne, MM. Clémence Royer, Mendel, Magnan, Féré, Garnier, and other well-known alienists and anthropologists. The support of English alienists has not been invited, on account of the lamentable and discouraging abstention from the very successful Congress of 1889 at Paris, when delegates from nearly every civilized country in the world, except England, were present. It is needless to say, however, that the English will be warmly welcomed at Brussels, and it is to be hoped that some attempt will be made to remove the unfavourable impression produced at previous Congresses. The subscription entitling to membership and the publications of the Congress is 20 francs, and should be forwarded (as well as any other communication) to Dr. Semel, 11, Rue de la Loi, Brussels.

Among the papers to be read and discussed at the Congress may be mentioned:—"The morbid origin of the characters of congenital criminals" (Dr. Jelgersma), "The physical conditions of criminality" (Prof. Ferri), "The characters of criminality in women" (Prof. Lombroso), "Morbid criminal obsessions" (Dr. Magnan), "The obsession of murder" (Dr. Ladame), "Criminal suggestions and penal responsibility" (Drs. Benedikt, Voisin, and Bérillon), "The motive of crime in childhood and youth" (Dr. Motel), "The influence of professions on criminality" (Dr. Contagne), "The respective importance of the social and anthropological elements in the problem of penalty" (Prof. Gauckler), "The applications of criminal anthropology" (Baron Garifoli, Prof. von Liszt, and Prof. Benedikt), "Sexual inversion and legislation" (Prof. Mendel), "The heredity of crime" (Prof. Manouvrier), "Suicide and insanity among criminals" (Dr. Semel), "The influence of simulation on real insanity" (Dr. Féré), "The necessity for the compulsory study of criminal anthropology by alienists and advocates" (Dr. Winckler).

INTERNATIONAL CONGRESS OF EXPERIMENTAL PSYCHOLOGY.

PROVISIONAL PROGRAMME.

London, October, 1891.

The second session of the above Congress will be held in London, on Tuesday, August 2nd, 1892, and the three following days, under the presidency of Professor H. Sidgwick.

Arrangements have already been made by which the main branches of contemporary psychological research will be represented.

Among those who have already promised to take part in the proceedings of the Congress may be named the following:—Professor Beaunis, Monsieur A. Binet, Professor Pierre Janet, Professor Th. Ribot, and Professor Richet, France; Professor Lombroso, Italy; Dr. Goldscheider, Dr. Hugo Münsterberg, Professor G. E. Muller, Professor W. Preyer, and Dr. Baron von Schrenk-Notzing, Germany; Professor Alfred Lehmann, Denmark; Professor N. Grote and Professor N. Lange, Russia; Dr. Donaldson, Professor W. James, and Professor Stanley Hall, United States of America; and Professor V. Horsley, Dr. Ch. Mercier, and Dr. G. J. Romanes, England. It is also hoped that Dr. A. Bain, Professor E. Hering, and others may be able to take part in the proceedings; and that some, as Professor W. Wundt, who will not be able to attend the Congress, may send papers.

As a specimen of the work that will be done, it may be said that Professor Beaunis will deal with "Psychological Questioning" (Des questionnaires psychologiques); Monsieur Binet, with some aspects of "The Psychology of Insects;" Dr. Donaldson, with "Laura Bridgman;" Professor Stanley Hall, with "Recent Researches in the Psychology of the Skin;" Professor Horsley, with "The Degree of Localization of Movements and Correlative Sensations;" Professor Pierre Janet, with "Loss of Volitional Power (*l'aboulie*);" Professor N. Lange, with "Some Experiments and Theories concerning the Association of Ideas;" Professor Lombroso, with "The Sensibility of Women, Normal, Insane, and Criminal;" Dr. Münsterberg, with "Complex Feelings of Pleasure and Pain;" and Professor Richet, with "The Future of Psychology."

A Committee of Reception has been formed, which includes, among others, the following names:—Dr. A. Bain, Dr. D. Ferrier, Mr. F. Galton, Dr. Shadworth Hodgson, Professor V. Horsley, Dr. Hughlings Jackson, Dr. Chas. Mercier, Professor Croom Robertson, Dr. G. J. Romanes, Mr. Herbert Spencer, Mr. G. F. Stout, Dr. J. Ward, and Dr. de Watteville.

The attendance fee at the Congress is ten shillings. Arrangements will be made for the accommodation of foreign members of the Congress at a moderate expense.

Communications are invited, which should be sent to one of the undersigned Honorary Secretaries not later than the end of June, and as much earlier than that date as possible. The communication should be accompanied by a *précis* of its contents for the use of members.

F. W. H. MYERS,

Leckhampton House,
Cambridge.

JAMES SULLY,

East Heath Road, Hampstead,
London, N. W.

Correspondence.

To the Editors of "THE JOURNAL OF MENTAL SCIENCE."

GENTLEMEN,—Allow me to draw your attention to a mistake which exists in the answer of Dr. Robert Jones to Professor Kojewhikoff, published in the "Journal of Mental Science," January, 1891, p. 204. Dr. R. Jones asserts having received his information about the clinique from Dr. Korsakoff; this could not at all have been the case, as I had not the pleasure of seeing Dr. Jones during his stay in Moscow, being myself at that time in Switzerland, on my return home from the Congrès de Médecine Mentale, in Paris.

I have the honour to remain

Your obedient servant,

S. KORSAKOFF, M.D.

Moscow, January 13th, 1892.

[Note by Dr. Jones.—It is nearly two years since my holiday in Russia. My

visit to the University Clinic at Moscow was made in company with Dr. Moquelevitch, of Moscow, and whether the gentleman who took us round was named Dr. Korsakoff or some other name I now forget, but I trust the description of that person in my article as a "most courteous and able specialist" will be allowed to stand correct.—ROBERT JONES.]

"THE NANNERCH INSTITUTION."

This is the title of a proposed new Institution for the Treatment of Mental Diseases, near Mold, North Wales. We have received a circular, asking our co-operation in forming there "*A Private Asylum and Retreat for Middle-Class Patients.*" A Form of Application for Shares accompanies the circular. The Shares are £1 each; the Debentures £10.

The circular is signed by the General Manager, J. Herbert Wilkinson, the offices being at 5, Norfolk Street, Manchester. We believe these documents have been widely circulated.

No doubt medical men, being aware that the new Lunacy Act forbids the granting any fresh licenses for private asylums, must have felt no small surprise in receiving a circular which entirely ignores this fact, and proposes to obtain the subscriptions of persons applying for an allotment of Shares.

We immediately wrote to Mr. Wilkinson for an explanation. The reply was to the effect that the Company purpose to make a special application for a License as soon as "we get the necessary capital." All we can say is that it might have been just as well to make this application for a License before, not after, issuing the Form of Application for Shares, or obtaining the capital.

Obituary.

DR. T. B. CHRISTIE.

Dr. Thomas B. Christie, C.I.E., died on the 15th January, 1892. He had but recently retired from the post of Medical Superintendent of the Royal India Asylum, Ealing, and expired at his residence, Madeley road, not far from the institution which he had directed so long. He was formerly Superintendent of the North Riding Asylum, Clifton, near York. Dr. Christie had an apoplectic attack some years ago, and had been in failing health for some time. His sudden death came, however, as a shock at last, when his friends hoped that with care and the absence of professional work he might enjoy some years of peaceful life after his retirement.

DR. E. S. WILLETT, J.P.

Dr. Edmund Sparshall Willett became the proprietor of the Wyke House Asylum, Isleworth (Middlesex) in 1856, and remained so until his death, on February 20th, at the age of 64. "No private asylum stood higher in public estimation, and it was well known that his patients were treated with all that generous consideration which hospitable Englishmen are accustomed to show towards their private guests. Dr. Willett was an ardent sportsman, and no one was more popular than he in the hunting field and at the covert side. As a Magistrate he knew well how to temper justice with mercy, and his poorer neighbours all found in him a generous friend, ever ready to help them with money and good counsel."—

"Lancet." He was not given to the use of the pen. On one occasion, however, we induced him to contribute an interesting case of sudden recovery to this Journal. This was the only matter ever contributed by him to our columns.

DATE OF NEXT QUARTERLY AND ANNUAL MEETINGS.

The next Quarterly Meeting of the Medico-Psychological Association will be held at Bethlem Hospital, on Thursday, May 19th, 1892, and the Annual Meeting will take place at York, July 21st, 1892.

THE NEW COMMISSIONER IN LUNACY.

We are glad to be able to record in the Journal that the lot has fallen on Dr. Frederick Needham, the Medical Superintendent of Barnwood House, Gloucester. We only express the unanimous feeling of the members of the Medico-Psychological Association in saying that Dr. Needham is the right man in the right place.

We seize the occasion to congratulate Dr. Clifford Allbutt on his election as Regius Professor of Medicine in the Cambridge University. Possibly he may be disposed to exclaim—

Better twenty years in Cambridge
Than in Whitehall Place a day.

Appointments.

BEADLIS, C. F., M.R.C.S., L.R.C.P., appointed Assistant Medical Officer to Colney Hatch Asylum.

FENNINGS, A. A., M.B., B.S., appointed Junior Medical Officer to Camberwell House Asylum.

FISHBOURNE, Dr. J. E., appointed Fourth Physician to the British Hospital for Mental Disorders.

GIVEN, J. C. M., M.B. Lond., appointed Assistant Medical Officer to the Derby Borough Asylum.

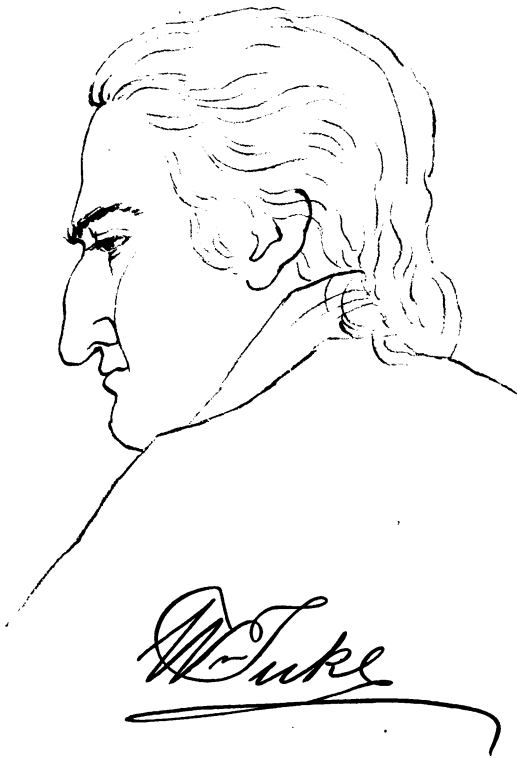
HUNTER, ANDREW, M.B., C.M., appointed Junior Medical Officer to Montrose Royal Asylum.

REVINGTON, G. T., M.D. Dub., appointed Resident Medical Superintendent of the Criminal Asylum, Dundrum, *vice* Dr. Ashe, deceased.

SYKES, A., L.R.C.P., M.R.C.S., Assistant Medical Officer to the City and Borough Asylum, Hillesdon, Norwich.

EXAMINATION IN PSYCHOLOGICAL MEDICINE.

December Examination for the Certificate of Efficiency in Psychological Medicine, held at Aberdeen:—James Humphry Skein, M.B., C.M.



HERRICK. del. 1791.

DANIELSSON & CO, Imp.

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JULY, 1892.

VOL. XXXVIII.

PART 1.—ORIGINAL ARTICLES.

*Retrospective Glance at the Early History of the Retreat, York ;
its Objects and Influence.** By D. HACK TUKE, M.D.

In celebrating the Centenary of the York Retreat, the first question which arises in everybody's mind is, why was it established, and why at one time rather than at another? Further, it is natural to inquire what were its objects, and what influence has it exerted?

I. To answer the former questions we must briefly touch on the general condition of the insane a century, or rather more than a century ago, and also on the local circumstances which led up to the foundation of the institution. I shall not describe the dreadful suffering and neglect which existed in regard to the former condition of the insane. I may take it for granted that everyone here knows sufficiently well the deplorable state in which, for the most part, those labouring under mental afflictions were formerly to be found. He who doubts the truth of the descriptions given of the *bad* old times should visit the Guildhall Museum in London, and he will see there a specimen of the heavy chains formerly in use at Bethlem Hospital, and also the celebrated figures by Gibber of raving madness and melancholy bound in fetters. The Treasurer and Governors of Bethlem have presented these relics of the past as the outward and visible sign of the blessed change which has taken place in asylum treatment. So far from being ashamed of them we glory in having them exhibited to the public eye, that the thousands of people who visit the Guildhall Museum may "look on this picture and on this."

It is interesting to refer for a moment to John Howard's incidental reference to asylums when, at the later part of the 18th century, he was visiting prisons in various parts of the

* Paper read at the Centenary Meeting of the Retreat, York, held at that Institution, May 6, 1892.

world. He says, "I greatly prefer the asylum at Constantinople to that of St. Luke's, or to Swift's Hospital at Dublin;" but he appears to refer to the structure of the building, the rooms, and the corridors, and the gardens rather than to the condition of the patients themselves, for at Constantinople there was an asylum for *cats* near the Mosque of St. Sophia, where the *feline* inmates seem to have received more consideration than the human inmates of the asylum. Speaking of English prisons, in 1784 Howard observes that idiots and lunatics are confined in some gaols, and adds, "These serve for sport to idle visitors at assizes and other times of general resort. Many of the Bridewells are crowded and offensive, because the rooms, which are designed for prisoners, are occupied by the insane." It is remarkable that more practical work was not done for the insane in England at this period when we remember the great interest which was excited in the disease by the fact that a distinguished Prime Minister, Lord Chatham, and the Sovereign himself had been laid low by mental disease. In fact, the attention of the nation had been concentrated upon the sick-room of George the Third and upon Dr. Willis, the clerico-medical doctor, who gained so much notoriety at that period. It was in April, 1789, that his Majesty went to St. Paul's to give thanks for his recovery, and enjoyed a lucid interval until 1801. It may be observed in passing that the treatment of the Royal patient was much on the lines of the prevalent doctrines of the day, perhaps not quite so depressing; and although there was nothing apparently to call for coercive methods, he was not only mechanically restrained by the doctor's orders, but was brutally knocked down by his keeper.

It would carry me quite too far, however interesting it might be, to recall what was happening in the world at the eventful period when this comparatively small work was being commenced at York. But what a contrast do the quiet proceedings which we commemorate to-day present to the wave of excitement which was passing over England as well as France, where the guillotine had just been invented and the King's fate was rapidly approaching. If we turn to the Annual Register of that period its pages are full of addresses from political societies in this country to the French National Convention. The preface to this volume asserted that "metaphysicians, geometers, and astronomers have applied the compasses of abstraction to human passions, propensities, and habits. The minds of men are alienated from kings and become enamoured of

political philosophy." It may be said of some of the great events of this period that splendid and magnificent as they were when contrasted with lesser achievements the world might have been better had they never occurred. Washington exclaims in one of his letters, "How pitiful in the eye of reason and religion is that false ambition which desolates the world with fire and sword for the purpose of conquest and fame, when compared with the minor virtues of making our neighbour and our fellow-men as happy as their frail condition and perishable natures will permit them to be."

And it was this very thing, "the minor virtue of making our fellow men as happy as their frail condition permits them to be," that characterized the proceedings at York a hundred years ago at a time of local as well as national excitement, when the Corporation of York presented Charles James Fox with the freedom of the city in recognition of the efforts which he had made on behalf of liberty and the rights of man.

I must now ask your attention to the earlier year of 1777, when an asylum was opened at York in consequence of the need felt for such an institution for the insane poor in this locality. It was commenced under favourable auspices and evidently with the best intentions. It was not very long, however, before its management became unsatisfactory. I wonder how many people know that Mason, the Poet and Precentor of York Minster, was something more than either, and, in conjunction with Dr. Burgh and Mr. Withers, of York, endeavoured to hold the Governors of that day to the original design of the institution. They were persistently thwarted in their honourable endeavours. In 1788 Mason published his "Animadversions" on the asylum. In 1789 he was the means of procuring a legacy, which afterwards constituted "Lupton's Fund" for the poor, but from unworthy motives this charity was opposed by the physician of the asylum, and the Governors even passed a resolution in 1791 that anyone who contributed to it (and among those who did so was no less a person than Wilberforce) should be excluded from the privilege of being a Governor. In fact, in spite of these praiseworthy efforts, nothing whatever was done to remove abuses, and Jonathan Gray, the historian of the old York Asylum, wrote, "The opponents seem to have abandoned the matter as hopeless," and pathetically adds: "It cannot be doubted, therefore, that Mason, Burgh, and Withers quitted the world under an impression that their labours in this benevolent cause had been worse than useless, having been repaid only by

obloquy and misrepresentation." Although, however, they were thus hopeless about the York Asylum they rejoiced to know that an important step had been taken in establishing another institution. And this brings me to the well-known local incident which occurred in 1791.

A female patient was admitted from a considerable distance into the York Asylum. After a time her relatives desired and authorized some of their friends in York to visit her. They met with a repulse from the asylum authorities, and not long afterwards the patient died. That there are cases when a superintendent is fully warranted in advising the relatives and friends not to see a patient cannot be denied, and it would be, therefore, very unreasonable to ground serious complaint on the simple refusal of the superintendent to allow a lunatic patient to be visited. However, in this instance, as the patient was very ill and her friends were forbidden to see her, suspicions were naturally aroused, and further inquiries made after her death suggested neglect and possible cruelty. At this juncture William Tuke, a philanthropic citizen of York, was informed of the circumstances. He felt strongly that there was something wrong, not only in this case, but in the general management of the institution. He was not given to listen readily to sensational reports; his temperament was certainly sufficiently calm, and indeed his character, if contemporary descriptions are worth anything, was typical of enthusiasm without fanaticism, human sympathy without intrusiveness, philanthropy without fads. His portrait on the wall is expressive, I think, of this kind of man. The evidence, therefore, must have been of a very decisive character to induce him to arrive at this conclusion. He knew that any direct attack upon the asylum would meet with the same fate as that which disheartened Mason and Dr. Burgh; but his mind was stirred within him, and he began to think whether it would not be desirable and possible that an institution should be established in which, without destroying privacy, there should be no secrecy as regards the family of the patient, and in which the patient should be treated with humanity and kindness. Thus revolving the subject in his mind, he arrived at the conclusion that the question ought to be answered in the affirmative. He conferred with his friends. Some of them took the same view as himself, especially his son and daughter-in-law, Henry and Mary Maria Tuke, who warmly supported the idea, as also did his excellent friend, Lindley Murray, of York. His own wife, although she had been a helpmate in some of his benevolent

schemes, did not favour this, and, being of a satirical turn of mind, said he had had many children emanate from his brain, and that "his last child was going to be an idiot." Who shall say how many of the great designs of men have been nipped in the bud by the ridicule of women? However, he was not one to be easily discouraged either by opposition or by satire, and the result was that in the spring of 1792 he brought forward a definite proposition that an asylum for the insane should be established, at the close of, and altogether distinct from, the business transacted at a quarterly meeting of the Society of Friends held at York. No official record, therefore, was made of the conference, either then or subsequently. The proposition was thought to be one the wisdom of which admitted of grave doubt indeed; a wet blanket was, in fact, thrown on the scheme, and the meeting broke up in this mood. Even several years afterwards we find him writing a letter on the brink of despair, in which he exclaims, "All men seem to desert me in matters essential." Many would have no doubt been permanently disheartened; but William Tuke made still further inquiry as to the necessity for such an institution with the effect of fortifying his position. He visited some of the asylums in repute at that period. At St. Luke's Hospital, London, he found a miserable state of things, chains, and a large number of patients lying, as he described them, naked and on filthy straw. His description recalls that given of Mrs. Fry's visit to an asylum at Amsterdam many years later, where she noticed one unhappy woman heavily ironed and similarly grovelling on the floor.

What this angel of mercy was unable to do at the Amsterdam asylum William Tuke was able to do at St. Luke's Hospital, so far as this, that a female patient who was thus chained to the wall and shamefully neglected was subsequently removed to the Retreat, and in one of his letters he speaks with gratification of the comfort thus afforded her.

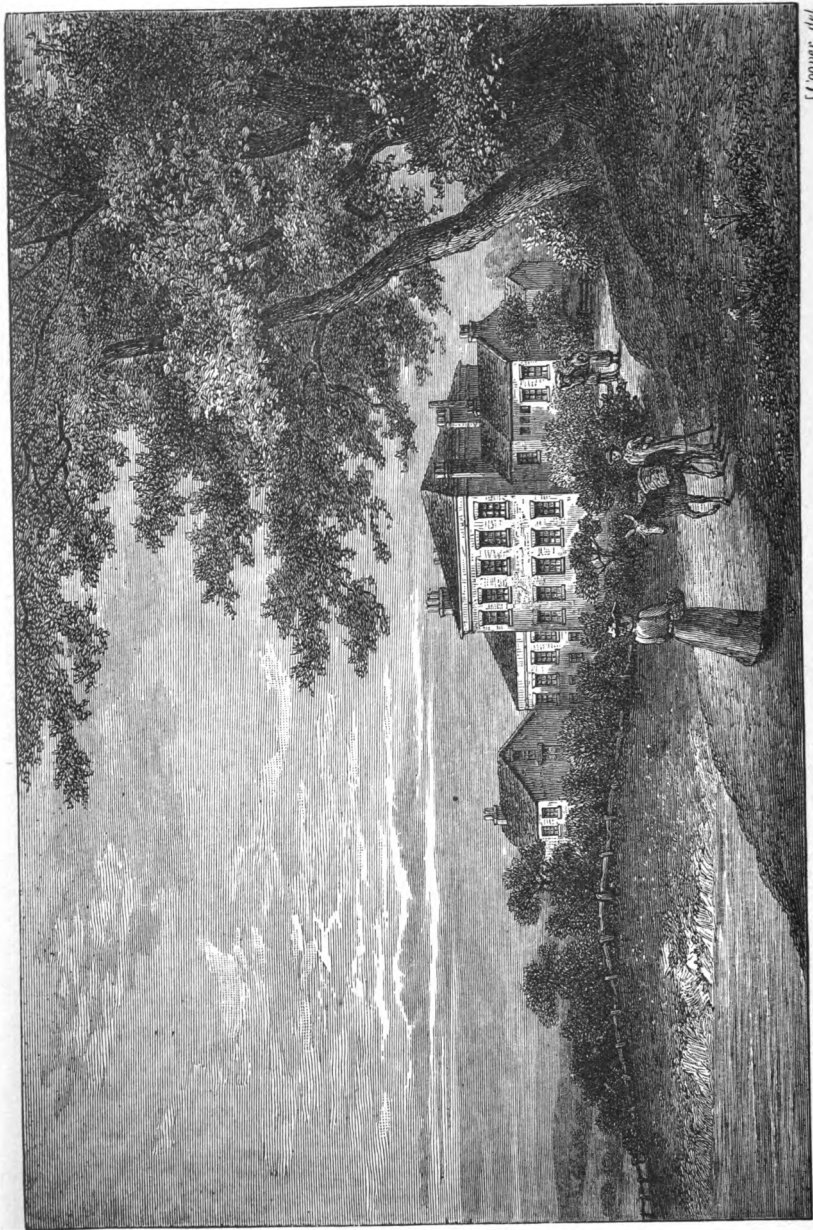
Well, William Tuke, although he had received a check, returned to his charge and reinforced his arguments at a meeting held at midsummer three months after his first proposal (June 28th). The opposition was renewed. One of those who were present on this stormy occasion has stated that the whole scheme seemed for some time as if it would be entirely shelved, so strong was the objection to it, but that the speech of Henry Tuke turned the scale, for if his father was the *fortiter in re*, the son was the *suaviter in modo*, which sometimes succeeds when the other alone fails. He said to the meeting, "Well.

but isn't it worth while considering my father's proposition ? ” The consequence was that at this second meeting the Retreat was instituted, though not without the note of Cassandra being heard, and, therefore, assembling as we do in this month of May to celebrate it, we meet very appropriately at a time intermediate between the first proposition in the spring and its formal institution in the midsummer of 1792, and can vividly realize the anxiety which must have filled the breast of the projector as to whether his scheme would be crushed or accepted.

The opposition to the proposal is not surprising when we consider how little was known at that time of the condition of the insane, or of what might be done in the way of treatment and kindly moral management. I have already said that conspicuous among those who did support the proposition was the well-known Lindley Murray, who not only gave what I may call his “Grammar of Assent” to the undertaking, but was helpful from time to time in giving that which was far better than money—his calm judgment and thoughtful advice as to the best mode of proceeding—employing just that diplomatic way of going about business which succeeded in winning over objectors and lukewarm friends in support of the experiment, which Lindley Murray so well knew how to employ on critical occasions—a man so justly respected for his worth, his kindly nature, and the judicial character of his mind. To most he is known only as the Grammarian, and I suppose there are many who wish they had never formed his acquaintance in this character when at school; but he ought to be remembered with respect for the wise counsel which he gave in connection with the early history of this institution.

A learned Professor of Chemistry in an American College, when travelling in Europe, visited the recluse at Holdgate at this time, and in his book, giving an account of his travels, he records this visit with great pleasure, and writes: “Who would not rather be Mr. Murray, confined to his sofa, than Napoleon, the guilty possessor of a usurped crown and the sanguinary oppressor of Europe ? ” I fear that, in this wicked world, all would not reply as the Professor anticipated !

When I was in America some years ago I was requested to be present at a social gathering in the institution at Northampton, Massachusetts, over which the veteran alienist, Pliny Earle, presided, as medical superintendent, and in the speech which he made nothing was more interesting to the audience than the statement that when a young man he visited York and had the pleasure of finding in the bedroom which he occu-



[Cooper, del.]

ORIGINAL BUILDING OF THE RETREAT, YORK. INSTITUTED 1792.

Care, pinx.]

pied in Samuel Tuke's house, the wheeled chair which was used for many years by the Grammarian, who, as you know, met with an accident in his native land (America), in consequence of which he had only the partial use of his lower extremities.

As a consequence of the Resolution which was passed at the midsummer meeting, ground was purchased in a suitable and healthy locality near York, a city then of 16,000 inhabitants. The locality itself was historically interesting, for it contained a mound on which at that time stood a windmill, from which it is supposed that its name, "Lamel Hill," was derived, "being no more," says Drake, "than *le meul*, miln hill, called so by the Normans." Its height above the summer level of the Ouse was about 90 feet. Here it was that the troops of Fairfax and Lesley placed their battery during the siege of York by the Parliamentary Army in 1644, symbolical, we may say, of the fight made by those whose weapons were not carnal against the cruel treatment of the insane, while they laid siege to the whole system of Asylum abuses. But we must hasten on and think rather of the new Institution itself, of which, in its original state, there is a representation here from a drawing taken by a York artist, Mr. Cave. The building bore no resemblance to the prison-like asylum of the day, and a special point was made of avoiding bars to the windows; but time will not allow of my entering into any details, interesting as I consider them to be. If these old windows now excite surprise, let it be remembered that at Bethlem Hospital, even in 1815, the bedroom windows were unglazed.*

On the foundation stone, which Macaulay's New Zealander may some day find among the ruins of the Retreat, were inscribed the words:—

HOC FECIT
AMICOBUM CARITAS IN HUMANITATIS
ARGUMENTUM
ANNO DÑI MDCCXCII.

This inscription is of great interest and importance, as proving that in 1792 the word humanity was uppermost in the minds of the friends of the movement—their leading idea. "The charity or love of friends executed this work in the cause of humanity." In other words, charity raised the edifice as a token or sign in demonstration of humanity. It is also interesting to note that on the foundation stone, which was not actually laid

* "Report of the Select Committee of the House of Commons, 1815."

until 1794, the period of instituting the Retreat was carefully recorded as 1792, as, indeed, it was on the first page of the early Annual Reports.*

But in dwelling on the foundation stone we must not forget the important matter of the name which was given to the institution, and this, like the inscription, carried with it a deep meaning. I have said that the wife of William Tuke indulged in some sarcasm with regard to his proposal. It was very different, however, with his daughter-in-law, Mary Maria Tuke, and when the inevitable question arose and was discussed in the family circle, "What name shall we adopt for the new establishment?" she quickly responded, "The Retreat"—a name, be it remembered, which up to that time had never been applied to an asylum for the insane; in fact, in the vulgar tongue, an asylum was, as I have said, a madhouse—this and nothing more. I think it was a most felicitous term, and a beautiful illustration of that aspect of the movement uppermost in the minds of those who were engaged in the undertaking, that, as is stated, "It was intended to convey by this designation their idea of what such an establishment should be, namely, a place in which the unhappy might obtain a refuge; a quiet haven in which the shattered bark might find a means of reparation or of safety." I wish that I had the happy power of reviving or restoring the picture of the interior of the early Retreat life as I seem to see it myself. William Tuke's brother-in-law, T. Maud, a surgeon in Bradford, was to have helped him in carrying forward his plans and resided at the Retreat, but this arrangement was unfortunately cut short by his unexpected death, and William Tuke had to superintend it himself. My father, in his "Review of the Early History of the Retreat," writes: "The Founder looked around among his friends for a suitable successor, but not finding one ready for the engagement, he agreed to take the office himself till a substitute should be found; and for nearly twelve months he had the immediate management of the young establishment upon him"—the estab-

* When the Retreat was projected the great mass of the insane in England were unprovided for as regards asylum accommodation. In addition to three or four private asylums, including Ticehurst, there were the well-known, but unfortunately ill-managed hospitals of Bethlem and Saint Luke's, and the lunatic ward of Guy's Hospital. There were, at Manchester and Liverpool, wards for the insane in connection with the Royal Infirmarys of those towns, and in addition to the old York Asylum there was the Norwich Bethel Hospital, and St. Peter's Hospital at Bristol, to which, many years after, the celebrated Dr. Prichard was physician. The recognized number of insane in London and in the country was under 7,000, which stands out in strange contrast with the number registered at the present day.

lishment in which for nearly thirty years he took so deep and paternal an interest. There was, then, William Tuke, the father of the little family, organizing, planning, and arranging the details of the house, and planting with his own hands some of the trees which we now see on the north boundary of these grounds. Then there was a physician at that time in York, Dr. Fowler, who, in this capacity, visited the Retreat, and was a kindly, estimable, and unassuming man. He is described as one "who estimated men and things according to their real value rather than their names or aspects." He originally came from Stafford. I am unable to obtain any particulars with regard to his life; but his name is associated with what is called "Fowler's Solution," the well-known preparation of arsenic in use at the present day. He died, much regretted, five years after the opening of the institution, and was succeeded in the office of visiting physician by a young and ardent physician, Dr. Cappe, whose talents and affectionate disposition gave promise of a useful career, and who felt a warm interest in the Retreat. He threw his whole soul into his work, but grave pulmonary symptoms soon made their appearance. He sought in vain to recover his health in a warmer clime, and, to the sorrow of all connected with the Institution, fell a victim to consumption.

But to return. Patients were being admitted, and were kindly cared for and treated. I have mentioned the poor woman who was brought from St. Luke's, and I may add that there was another patient (a man), who, when admitted, was found to have lost the use of his limbs, and when released from his manacles tottered about like a little child, but regained the use of his muscles and required no mechanical restraint. When visited by one of his relatives and asked what he called the Retreat, he replied, with great warmth, "Eden, Eden, Eden!"

And now I must hasten to speak of one who was largely influential in carrying out the hopes and aims of the original projector. This was George Jepson, a most estimable man residing at Bradford. My father, who greatly appreciated him, writes:—"He was almost entirely a self-taught man; yet so highly esteemed in his neighbourhood, that he was the counsellor of many of the country people for miles around his residence, in some of their most important private concerns; and he may be said to have been a medical practitioner." He by no means confined himself to the medical art; in fact, he never passed any examination, for at that period it was not illegal to practice without a qualification. He was an acute

observer, and one who thought for himself. It was in 1797 that he was induced to come to the Retreat. It certainly was not the amount of medical knowledge which he possessed, but rather freedom from the trammels of the medical schools of the day (unless indeed he had a prejudice in favour of the lancet), which rendered him a suitable person to be appointed to the Retreat. My father thus writes of this period:—"George Jepson was of course initiated into the duties of his office by William Tuke. It was indeed," he remarks, "a rare concurrence of circumstances which brought together two minds, one so capable to design largely and wisely, and the other so admirably fitted to carry such designs into execution. The two men, though exceedingly different, were one in an earnest love to God and man, in disinterestedness and decision of character, and therefore in a steady constant perseverance which works onward wherever truth and duty lead." It may also be stated that when Sydney Smith visited the Retreat at a later period he was much struck with Jepson, and his wife also, who acted as matron. The Grand Duke Nicholas, afterwards the Emperor of Russia, on going round the Retreat, was impressed by her appearance, and remarked in a low tone to my father, "Quel visage!" No man was more esteemed and beloved by the projector of this institution and by his family, and I am quite sure that if he could be with us to-day he would wish that due honour should be rendered to Jepson for what he did within these walls. There was but one feeling, that of mutual esteem. William Tuke rejoiced at being able to meet with a man who entered so readily into his schemes and acted so loyally in carrying them out; while Jepson looked upon "the Manager-in-Chief" (as my father designates William Tuke) as his "guide, philosopher, and friend." It was William Tuke's custom to correspond with a medical nephew and to communicate to him what they were doing at the Retreat, especially as to the results of the then heterodox treatment pursued. My father attached great value to these letters, and I have a vivid recollection of the pain which he experienced in consequence of a number of them being carelessly destroyed by a domestic who, in her ignorance of their value, had torn them into shreds, and had been using them for her candles. In one of the letters which remain (and some are only fragments) written in 1798, and addressed from the Retreat, I find him discussing the value of opiates, although without the advantage of a medical education; while in other letters he refers with

lively interest to the utility of the warm bath. Of course, all this was very wrong from my own professional point of view, but there was some excuse for it when we consider the state of mental medicine at that time at York. Why, the physician of the old York Asylum boasted of his "secret insane powders, green and grey," which, as Dr. Thurnam states, "were sold as nostrums for insanity throughout a great part of Yorkshire and the north of England." In another letter, dated from the Retreat in that year, and before William Tuke had had the good fortune to meet with Jepson, he mentions the case of a female who, on the way to the institution, "dreaded being put into a kind of dungeon." When visited, the morning after her arrival, she promised him that if she might only stay at the Retreat she would ~~be~~ have well, and she requested her daughter who had accompanied her to return home. On this he makes the commentary, "A strong proof of the sensibility of insane persons respecting those who have the care over them." With delight he reported that he had almost every day observed an improvement in the case of a patient among those first admitted who had occasioned him great anxiety. In one instance a patient committed suicide, and he was greatly distressed. He relieved his mind in a letter to his friend, the well-known philanthropist Richard Reynolds, and received a very sympathetic letter in reply.

I may remark that it is not very difficult to understand the successful treatment of the patients at the Retreat, although there may have been little of that definite scientific or medical element which is so justly prized at the present day. But although there was not over much medicine and still less science in the primeval atmosphere of the Retreat, the single-mindedness of those who were trying what may be called a Holy Experiment—that of personal kindness and love to man in his misfortune and sickness as well as in health, helped to secure its success. It must not be supposed that medicine was despised. It is true that a clean sweep was made of the routine of bleeding, blistering, purgatives and emetics then in vogue in what were regarded as the best institutions for the treatment of the insane, and this probably gave rise to the idea that *Æsculapius* was not duly honoured at the Retreat; but there was the guarded use of drugs, a careful attention to the general health, and a very special use of the hot bath. It was also found that instead of lowering the patient it was generally better to feed him, and that good nights could be obtained for the sleepless, not by antimony and other depressants, but by good malt liquor.

Medical men were scandalized at such a reverse in the mode of treating excitement and sleeplessness, but it was acknowledged before long that the results were of the happiest kind.

And here we shall be assisted in forming an idea of the management and treatment pursued at the Retreat by the evidence which William Tuke gave before the Select Committee of the House of Commons, although of course he did this at a much later period. The new system had become widely known, the old system was on its trial, and the Parliamentary Committee naturally called upon the projector of the Retreat to supply them with information in regard to its management and the treatment pursued there. I have heard my father, who accompanied him, speak of the great interest which his presence excited. The witness spoke with pleasure and satisfaction of what had been effected at the Retreat. After stating (in reply to a question) that he had taken an active part in everything that had been done respecting the institution from the beginning, he was asked to give to the Committee an account of the practice pursued in the establishment. He replied in general terms that "everything is done to make the patients as comfortable as they can be, and to endeavour to impress upon their minds the idea that they will be kindly treated; that is generally the setting out; when that is done it is not so difficult to manage the patients." Asked in regard to the effect of medicines in cases of mental derangement, he replied that he thought that very little could be done except when the disorder is accompanied by bodily disease of one kind or other. He said that from his personal observation he considered the patients had frequently recovered in consequence of the removal of the physical complaint. He was requested to inform the Committee whether the patients were periodically physicked, bled, made to vomit, and so forth, and he replied with great emphasis "*No such thing*," and added, "That with respect to bathing the bath was frequently used, the warm bath more than the cold, but that in no case was it employed periodically. It was his opinion that the warm bath had been found very beneficial." The subject of mechanical restraint has become such a burning question in these later days that it is interesting to ascertain from his evidence what was the actual practice at the Retreat. It has often been stated in histories of the treatment of the insane in England that the Retreat introduced what is called non-restraint. This is quite a mistake. It never was and is not at the present day a dogma held by those who have the management of the

Retreat that under no circumstances whatever is it justifiable to resort to mechanical means of restraint. On the contrary, it was frequently stated by those who spoke in the name of the institution that no rule could be laid down on the subject, and that it must be left entirely to the discretion of the medical superintendent so long as he retains the confidence of the Committee. William Tuke stated to the House of Commons Committee that in violent cases it was found necessary to employ sometimes a leather belt to confine the arms, and that this was preferred to the strait-waistcoat on account of its not heating the body so much, and leaving the hands free for use, although not so much as to do mischief. Seclusion was resorted to, he said, when it was found necessary. Thus he says, "We have a patient who has long lucid intervals of calmness, but is subject to very violent paroxysms and very sudden ones, during which we conceive he would injure any person who came within his power; this man during his paroxysms is confined in a separate room, about 12 feet by 8." In this instance it seems that the strait-waistcoat was occasionally used, and William Tuke found it necessary to state that he was not submitted to chains of any kind.

I hope that this evidence, along with the letters I have quoted, few as they unfortunately are, will convey a clear idea of the early, as well as the somewhat later, Retreat treatment of patients. I must for a moment retrace my steps to remark that one of the best proofs of the important work carried on in the early days of the Retreat was the striking impression produced upon visitors, especially medical men. Only two years after its opening a Swiss physician, Dr. de la Rive, bent his steps thither, was delighted with what he saw, and published a very interesting account of his visit. "This house," he wrote, "is situated a mile from York, in the midst of a fertile and cheerful country; it presents not the idea of a prison, but rather that of a large rural farm. It is surrounded by a garden. There is no bar or grating to the windows." In 1812 Dr. Duncan, of Edinburgh, who was greatly interested in the lunatic asylum of that city, also visited the Retreat, and spoke in the highest terms of its management. He considered that it had "demonstrated beyond contradiction the very great advantage resulting from a mode of treatment in cases of insanity, much more mild than was before introduced into almost any lunatic asylum either at home or abroad." He regarded it as "an example claiming the imitation and deserving the thanks of every sect and every nation. For, without

much hazard of contradiction from those acquainted with the subject, it may be asserted that the Retreat at York is at this moment the best regulated establishment in Europe either for the recovery of the insane or for their comfort, where they are in an incurable state."

When in Paris many years ago, I visited M. Ferrus, the first Napoleon's physician, and a distinguished alienist. He recalled in graphic terms and with that gesture language in which the French so much excel us poor phlegmatic Englishmen, the pleasure and surprise he had experienced on visiting "The Retreat." I subsequently found a description of his visit in print. There he refers to it as "the first asylum in England which attracted the notice of foreigners;" and describes its projector as "a man for whom religion and morality were practical virtues, and in whose eyes neither riches, nor poverty, nor imbecility, nor genius ought in the slightest degree to affect the bonds which unite all men together in common. He thought with reason that justice and power ought to be evinced, not by shouts and menaces, but by gentleness of character and calmness of mind, in order that the influence of these qualities might make themselves felt upon all, even when excited by anger, intoxication, or madness. The traditions of this friend of humanity are preserved in the house which he founded." M. Ferrus adds that "those who are admitted find repose in this building, which much more resembles a Convent of Trappists than a madhouse; and if one's heart is saddened at the sight of this terrible malady, one experiences emotions of pleasure in witnessing all that an ingenious benevolence has been able to devise to cure or alleviate it."

A pleasing picture of the interior of the Retreat is given in a poem written more than 80 years ago. Many here are no doubt familiar with certain lines of Wordsworth, headed "To the spade of a friend, an agriculturist, composed while we were labouring together in his pleasure ground." His friend's name was Wilkinson, a minor Lake poet, who, on visiting the Retreat 14 years after it was opened, described it in verse too long to cite here, but from which I may take the following few lines:—

"On a fair hill, where York in prospect lies,
Her towers and steeples pointing to the skies,
A goodly structure rears its modest head;
Thither, my walk the worthy founder led.
Thither with Tuke, my willing footsteps prest,
Who oft the subject pondering in his breast,
Went forth alone and weigh'd the growing plan,
Big with the lasting help for suffering man."

I must not occupy your time in quoting more from this poem than the lines which bring before us in a vivid manner the social and homely character of the group of patients whom he describes, and which appears to have removed from his mind the apprehensions with which he entered "The Wards of Insanity," as he calls them :—

"Such and so on I passed with fearful tread,
 With apprehensive eye, and heart of lead ;
 But soon to me a motley band appears,
 Whose blended sound my faltering spirit cheers ;
 What female form but brightens into glee
 Whilst bending o'er exhilarating tea ?
 What man but feels his own importance rise,
 Whilst from his pipe the curling vapour flies ?
 But oft, alas ! tea and tobacco fail
 When demons wild the erratic brain assail.
 But why this wreck of intellect ? Ah ! why
 Does Reason's noble pile in ruins lie ?"

Whether Wilkinson's poetry is equal to that of his friend's "Excursion" I will not decide, but we cannot help feeling grateful to him for having left on record the impression produced upon his mind by the Retreat not many years after it was opened.

II. Now what were the primary objects in view in the foundation of this Institution ?

First, the revulsion from the inhumanity which had come to light rendered it necessary that the fundamental principles of moral treatment should be those of kindness and consideration for the patients. It was the very basis of the proceedings that were taken ; in fact, as we have seen, it was carved upon the foundation stone of the building.

A *second* object undoubtedly was to provide an atmosphere of religious sentiment and moral feeling congenial to the accustomed habits and principles of those for whom the institution was primarily intended.

Thirdly, it is a significant fact that when the Retreat was instituted it was laid down that there should be "a few acres for keeping cows and for garden ground for the family, which will afford scope for the patients to take exercise when that may be considered prudent and suitable." Recreation and employment were put prominently forward directly the Institution was opened, and were carried out into practice much to the surprise of those who visited the house. The Swiss physician (Dr. de la Rive), who in 1798 visited the Retreat, as I have related already, reported thus :—"As soon as the patients are well enough to be employed, they endeavour to make them

work. The women are employed in the usual female occupations; the men are engaged in straw and basket work, etc. The Institution is surrounded by some acres of land which belong to it. The superintendent had undertaken to make the patients cultivate this land, giving each a task proportioned to his strength. He found that they were fond of this exercise, and that they were much better after a day spent in this work than when they had remained in the house, even when they had had the liberty to take a walk."

Fourthly, the moral treatment must no doubt be emphasized as characteristic of the early practice of the Retreat. The physician just mentioned writes:—"You see that in the moral treatment they do not consider the insane as absolutely deprived of reason, that is to say, as inaccessible to the motives of hope, feeling, and honour; rather they are regarded, it would seem, as children who have an excess of force and who make a dangerous employment of it." In the first Annual Report occurs the following sentence:—"They who think the object worthy of their attention may be encouraged to promote it, not only on the principle of charity to the poor, but even from compassion to those in easy and affluent circumstances, who will, doubtless, think themselves benefited, though they may pay amply for it." It is pointed out that "those who have embarked in this undertaking have not been influenced by interested views, nor are they requesting or desiring any favours for themselves. A malady, in many instances, the most deplorable that human nature is subject to, hath excited their sympathy and attention." Lastly, they appeal for "co-operation with them in an Establishment which hath for its object the mitigation of human misery, and the restoration of those who are lost to civil and religious society, in the prosecution of which they humbly rely on the favour of Him whose tender mercies are over all His works." I may add that the title page of this Report bore the words: "*The State of an Institution near York, called the Retreat, for persons afflicted with Disorders of the Mind;*" certainly a very sufficient description of the object for which it was established, and this title page remained undisturbed until 1869, when, unhappily, as I think, it was discarded for another.

Fifthly, that which from the first has been regarded as a most important feature of the Institution, is its *homishness*—the desire to make it a family as much as under the peculiar circumstances of the case is possible. However desirable the scientific study of insanity may be, and I hope we shall never

underrate it, it would be a fatal mistake to allow it to interfere with or in the slightest degree take the place of the social and domestic element, and the personal relationship between the physician and his patient which tend to mitigate the distress which may be occasioned by the loss of many home comforts and associations, along with the residence amongst strangers.

III. I must pass on now to an important event in the history of the Retreat. I refer to the publication of the "Description of the Retreat,"* written by Samuel Tuke in 1813, and dedicated to his grandfather, William Tuke. Now what had the old York Asylum been doing since the female patient died there in 1791, an interval of ~~42~~ years? Why, it had gone from bad to worse. In the Preface to this book the author made an observation which gave great offence to the superintendent, who interpreted it to be a reflection upon that institution. Well, what was this terrible passage? Nothing more than this. "If it" (that is this book) "should be thought to afford satisfactory evidence in favour of a more mild system of treatment than has been generally adopted; if it should also prove, which I flatter myself it will, the practicability of introducing such a system into establishments for the insane poor, whose situation has, in general, been too pitiable for words to describe, I shall esteem myself peculiarly happy in this publication. This paragraph *did*, however, cause the greatest offence, and the superintendent of the asylum wrote a warm letter to the newspapers under the name of "Evigilator" in defence of the institution. *Qui s'excuse s'accuse*. From that moment hostilities commenced. York became the scene of an exciting encounter. I have said that Fairfax's battery on Lamel Hill was a symbol of the moral warfare upon which the Retreat entered. I find in the *Yorkshire Chronicle* of September 30th, 1813, a letter from Northallerton, signed by "Viator," which runs thus:—

"It is customary with travellers to call for the papers containing intelligence of the important events which now attract the attention of all the world. After my supper this evening I indulged my usual appetite for news, and on two papers being brought to me, from a sort of instinctive partiality for Yorkshire, I seized the *York Courant*, in preference to a London paper, which was at the same time laid upon the table. The editor's summary account from the late Gazettes pleased me much; I there read:

* "Containing an account of the Origin and Progress, the Modes of Treatment and a Statement of Cases, with an Elevation and Plans of the Building."

First despatch, 'Forced St. Cyr from a strongly entrenched camp;' second despatch, 'Melancholy fact of Moreau having lost both his legs;' third despatch, 'Important victory over Vandamme;' and fourthly, 'A Gazette containing the numerical account of cannon and prisoners taken in the various actions.'

"My heart was filled with exultation at these glorious achievements of our allies. Nothing less than the humiliation of the Grand Tyrant and the repose of all the world filled my imagination, when casually casting my eye upon a column of the paper parallel to that which contained this gratifying intelligence, I found an account of further hostilities having been carried on by 'storming,' 'boarding,' 'grape or shells,' by 'sapping,' 'mining,' 'catamaran,' or 'torpedo.' Now (thought I) for the fall of Dresden! And who is the gallant General that has employed all these means? On looking for the name and the date, I discovered with astonishment that *York* was the scene of these tremendous military operations.

"In a fit of terror and surprise the paper fell from my hand; by an involuntary impulse I rang the bell, and on the waiter entering, anxiously inquired if he had heard that the City of York had been blown into the skies by some insidious revolutionists. With equal surprise, but to my great joy, he answered, 'No, sir, all was well there to-day when the coach left it.' Recovering a little from my confusion, I took courage to examine this article a little more carefully."

The writer tells us that he then found that the article he had read was occasioned by the alarm which one "Evigilator" had taken at a mere description of the Retreat, written by one of the most unwarlike and inoffensive of people.

William Tuke, as vigilant and earnest as he had been in 1791, wrote a letter to the Governors of the York Asylum, in which he says he had the satisfaction of asserting that "kind and conciliating treatment is the best means to promote recovery, as proved in the management of the Retreat, where coercion, though sometimes necessary for feeding the patients and preserving them from injury to themselves or others, is administered in the most gentle manner, and the use of chains is never resorted to." It was not difficult to read between the lines, and the Governors, doubtlessly, did so. And here I cannot avoid pointing out the gratifying contrast, in which no one rejoices more than the present Governors, presented by the well-managed institution of to-day—well-managed for so many years—and that which, unfortunately, became so notorious at the period under review. As a Governor of Bethlem Hospital, I have the corresponding feeling. Nor can I resist the temp-

tation of expressing the pleasure which I feel in the fact that a former superintendent of the asylum, Dr. Needham, has been made a Lunacy Commissioner. A better appointment the Lord Chancellor has never made. Writing in the *York Herald* of October 23, 1813, Henry Tuke says of these Governors:—"Like a modern warrior of declining fame, they claim victory where others consider them defeated. Their self-congratulations will add nothing either to their own credit or that of their cause. The asylum has been wrested from its original design; the poor are in a great measure excluded; and the institution, it is understood, is committed to the care of a physician and apothecary, without the interference of any committee or visitors in the internal management. Thus, instead of being a public charity, it has become a source of private emolument and '*hinc illæ lachrymæ.*' Let the Governors of the asylum turn their attention to this important subject, and seriously consider whether they are acting the part of good stewards of the trust reposed in them. It is to them only that the public can look for a reformation, and without their interference all altercation is fruitless."

The question at the bottom of all this controversy was, whether or not the same system of neglect and cruelty, alleged to have been in force in 1791, was still a reality in 1813. As we know, prolonged investigations followed. Concealment was attempted, but fortunately in vain. A Yorkshire magistrate, Godfrey Higgins, of Doncaster, attracted by the fray, and convinced that abuses did exist in the asylum and ought to be exposed, came forward and was of the utmost service in bringing the engagement to a victorious result. I possess a large number of letters which passed between him and my father at this exciting crisis. A warm friendship was formed between them, based upon their equal indignation at cruelty and wrong. I met the widow of Professor De Morgan, when above 80 years of age, and she told me that she had received from the lips of Mr. Higgins himself a stirring account of his visiting the York asylum one morning, when a remarkable scene occurred. He was assured, on asking the attendant where a certain door in the kitchen led to, that the key could not be found. Mr. Higgins replied that if it was not found he would find a key at the kitchen fireside—the poker. The key was then instantly produced. When the door was opened, this faithful, fearless, and resolute magistrate entered, to find four cells in the most disgraceful and sickening condition. He demanded that he should be taken to see the

patients who had slept there the previous night, and was shown no fewer than thirteen women.

To give a history of this period and the disclosures which were made, would require a lecture devoted to it; but for our present purpose it is sufficient to record the fact that the Governors of the asylum, with the Archbishop of York in the chair, reinforced by the entrance of a batch of new Governors, eventually passed a series of resolutions which sealed the fate of the old *régime*, and paved the way for a complete reorganization in the management of the institution in 1814. I have met with those who think that the ill-treatment to which the insane were subjected in former days, whether in this asylum or Bethlem, in which I feel as much interest as in the Retreat, should be passed over in silence; I have indeed. But I am strongly of the opinion of Sydney Smith, when he said in anticipation of such a mistaken feeling, and in reference to the abuses in this very asylum at York, that they should be "remembered for ever as the only means of preventing their recurrence."

Now it was undoubtedly the exposure of the condition of the insane in the old York Asylum, followed as it was by suspicions in regard to the state of other asylums, which led to Parliamentary investigation into the abuses which, almost everywhere, existed at that time, and which, happily, forced the Legislature to pass acts for the protection of the insane and for the provision of better institutions. The link between the successful management of the Retreat on new lines and lunacy legislation is not my assertion. It was clearly pointed out by Sydney Smith in 1817, as well as by many others:—"The new Establishment" (he says) "began the great revolution upon this subject," and he adds, "The period is not remote when lunatics were regarded as being insusceptible of mental enjoyment, or of bodily pain, and accordingly consigned without remorse to prisons under the name of mad-houses, in the confines of which nothing seems to have been considered but how to enclose the victim of insanity in a cell, and to cover his misery from the light of day. But the success of the Retreat demonstrated by experiment that all the apparatus of gloom and confinement is injurious, and the necessity for improvement becoming daily more apparent, a Bill for the better regulation of mad-houses was brought into Parliament by Mr. Rose." It was, sad to say, after great delay and discouragement that really effective Acts of Parliament were passed, and, in this connection, the name of Lord Shaftesbury at once

rises to my lips. In the speech which he delivered in the House of Commons, when Lord Ashley, on the occasion of his introduction of the famous Lunacy Bill of 1845, his eulogy of the movement inaugurated here 53 years before, is of the strongest and warmest character. I am sure that we, who know what Lord Shaftesbury has done for the insane, can most fully appreciate the splendid, and, as in the case of the projector of this Establishment, the unremunerated services, which he rendered to this neglected class, and must acknowledge that the work in which he was engaged with such unfailing energy and perseverance was, as he himself regarded it, the necessary supplement to previous reforms, inasmuch as it evoked the strong arm of the law to make adequate provision for the insane and to protect them from harsh treatment. Honour to whom honour is due!

I should like to refer now to one of the most pleasant features of the history of the Retreat, and that is that there has been no international rivalry, and no desire in our own country to detract from the beneficial effect of the courageous step which was taken in this city 100 years ago.

A well-known French physician, the late Dr. Foville, after observing that Pinel was not aware of what was being accomplished at York until 1798, and that on the other hand it was not until 1806 that the news of the enterprise undertaken at the Bicêtre reached the Retreat, generously acknowledges that the philanthropists in Paris and in York alike deserve public recognition for the work of humanity which they simultaneously accomplished in France and in England, without there being room for raising any question of rivalry or precedence between them.*

And who is there amongst us, as among all British alienists, that does not revere the memory of the illustrious Pinel?

Germany clearly recognized the improved methods of treatment introduced at the Retreat. One day, nearly 60 years ago, there arrived in York a German physician, Maximilian Jacobi, the son of a well-known mental philosopher, the head of a school of metaphysicians, contemporary with Goethe, who took a great fancy to the medical son, and expressed "his admiration of his unswerving devotion to his profession." The doctor came to the Retreat, was delighted with what he saw, and stayed some days at York for the purpose of examining on the spot the arrangements and management of an Institution with which he had already (in the year 1822) made his

* Introduction to "Le Corps et l'Esprit," page xx.

countrymen acquainted, by translating into German, the work on the Retreat of which I have already spoken.

I really must read to you the passage in his travels in which he describes his visit to this city, to which he came by coach from Hull. He says:—"As I approached York I perceived the Retreat through the trees, when looking out to the left of the road, being able to recognize it from the 'Description of the Retreat,' which I had translated, and I rejoiced that I was now able actually to see this memorial of Christian humanity. A letter from my friend, Dr. Zeller, of Winnenthal, secured for me a very friendly reception from Samuel Tuke," who, Dr. Jacobi goes on to say, "introduced me to the superintendent of the Retreat, Thomas Allis, who by his character as well as by his outward man, produced a powerful impression, and who possessed special knowledge and dexterity in (comparative) anatomy, as was proved to me by the beautiful preparations to be seen in the new museum of the Yorkshire Philosophical Society. As Thomas Allis led me through the Retreat I felt at home from the first step, because I had so long been familiar with the plan and arrangements of the building from my translation of Tuke's "Description of the Retreat." I may mention that some time after his return to Germany he sent the latter a work on insanity inscribed, "To his friend, in dear remembrance of the two days spent with him in October, 1834. Siegburg."

Dr. Jacobi became in the course of years the Nestor of German medical psychologists, and, while the superintendent of the Siegburg Asylum, near Bonn, he in his turn wrote a work on the construction and management of asylums, which my father asked John Kitching to translate, and wrote an introduction to it of some length. I may add that I visited him at his asylum on the Rhine, when he was in very advanced life, and that he had lost none of his interest in the Retreat, nor was the memory of his visit to York dimmed by age. The whole incident affords a pleasing picture of international reciprocity in the common interests of humanity, and emphasizes the truth of what I am endeavouring to show, that so far from there having been any jealousy on the part of foreign countries, there has been the fullest, warmest, and most generous appreciation of the lead taken a century ago by the Institution whose birth we celebrate to-day. In connection with the visit of Dr. Jacobi to the Retreat, I may mention that another figure in the group to whom he makes a pleasant reference was the Visiting Medical Officer, Dr. Caleb Williams, a name so

familiar to us all, and for so many years honourably connected with the Retreat.

The Americans, and notably the very distinguished Dr. Isaac Ray, have been forward to pay their tribute to the influence exerted by "The Retreat," and have acknowledged the direct help they derived in the way of advice from those who were connected with it. I may, perhaps, be allowed to say that I possess the original of a letter of inquiry from an American to Samuel Tuke respecting the Retreat, and that it was in replying to it, the latter was led to think it might be useful to publish an account of the mode of treatment practised there, and which resulted in a work the wide-spread influence of which he little anticipated.

In our own country there has been the same generous feeling in recognizing the position of the Retreat as the pioneer in the amelioration of the condition of the insane. I may specially refer to Dr. Conolly, for the circumstance which connects his career with the Retreat is exceedingly interesting. I have just spoken of the remarkable influence of the publication of the "Description of the Retreat." But it had another effect no less remarkable, though not so generally known. There was in 1817 in the Edinburgh University a student of medicine of Irish extraction, but born in Lincolnshire, into whose hands there fell this book, and upon whom it produced a powerful and, as it proved, a permanent and far-reaching impression. That student was John Conolly, and in after years, when tracing his past history and the influences which led to his great work, he mentions this circumstance:—"Viewing the things which I have described day after day, and often reflecting upon them, and with deep impression, partly derived from the perusal again and again, even when still a student, of that excellent 'Description of the Retreat near York,' already alluded to, and which I would still urge every student to read and to add to his library, and partly from what I had actually seen at Lincoln a few weeks before commencing my residence at Hanwell, I was not long before I determined that whatever difficulties there might be to encounter, no mechanical restraints should be permitted in the Hanwell Asylum."—(*Medical Times and Gazette*, April 7th, 1860). If that little book of 1813 had done nothing more than inspire Conolly to undertake his work, it would not have been written in vain. Dr. Conolly always took pleasure in attributing to the foundation of the Retreat the reform in the humane treatment of the insane. "The substitution," he writes "of sympathy for gross unkindness,

severity, and stripes ; the diversion of the mind from its excitements and griefs by various occupations, and a wise confidence in the patients when they promised to control themselves, led to the prevalence of order and neatness, and nearly banished furious mania from this wisely-devised place of recovery.* He spoke of it as "that admirable asylum, the first in Europe, in which every enlightened principle of treatment was carried into effect." I may say that in his declining years I received a letter from him in which he said he loved to dwell upon this theme. I should like to add that we, on the other hand, can and do delight, in the same spirit, to render all honour to the admirable Hanwell physician. My father entertained the highest esteem for him, and in his writings has paid a warm tribute to his "zeal, talents, and integrity." In a letter addressed to myself he writes:—"Lincoln furnished much unhappy evidence in the abuse of non-restraint, and I do greatly rejoice that Dr. Conolly has rescued the great experiment from the failure and miserable reaction which would, I believe, have taken place had it not been for what has really been effected at Hanwell, where all may not be done which meets the eye. I fully believe an excellent system is admirably carried out, and that Dr. Conolly really deserves all the credit which is given to him on the subject. We ought never to have recourse to mechanical restraint at the Retreat, except when it is decidedly the most easy and altogether unexceptionable method of coercing the patient ; and whenever that is really the case, why should he be subject to a prohibitory law ? If the general principle on the subject be fairly carried out, it will, I believe, be found that the infrequency of the exceptions will prove how fully the rule of non-restraint is carried out by us, and this kind of evidence ought to be satisfactory, and will, I think, be so to all reasonable men."

I need hardly say that the writer of this letter raised his earnest protest against the abuse of restraint, and reprobates what in our days it would be a work of supererogation to mention, "those swingings, whirlings, suspensions, half-drowning and other violent expedients by which some physicians have sought to frighten the unhappy subject of insanity into reason, or at least into subjection."†

These observations are necessary in order to understand the

* "The Treatment of the Insane without Mechanical Restraints," by Dr. Conolly, page 18.

† Introduction to Jacobi's "Construction and Management of Hospitals for the Insane," by Samuel Tuke, 1841, p. 35.

position taken in regard to mechanical restraints by those who first undertook the charge of the Retreat. When kindness failed to subdue maniacal excitement, when medical remedies failed to calm, and when there was danger to life or limb of a patient or attendant, then mild forms of personal restraint were reluctantly adopted rather than maintain a prolonged and exasperating conflict between them. It is notorious that at the same period, painful and degrading forms of restraint were employed in many asylums, and even at the Lincoln asylum, so worthily distinguished afterwards for its humane treatment, iron handcuffs weighing 1lb. 5oz. and iron hobbles weighing 3lb. 8oz. were in use until the year 1829.

Having now glanced at the former days of this Institution, and endeavoured to show the great objects contemplated when it was founded, and having shown that the example it set has exerted a wonderful influence for good by its dual action of exposing abuses, and, most important of all, of showing a more excellent way, I would, in conclusion, emphasize the encouraging record of a century —

“Over the roofs of the pioneers
Gathers the moss of a hundred years;
On man and his works has passed the change
Which needs must be in a century's range.”

Happily the moss which has accumulated upon the roof of the building which the pioneers of a new era in the history of the insane erected, has not been an indication of stagnation and desuetude, but rather the venerable reminder of the Past—the original work done under the roof of the old Retreat. We gladly recognize that a change has passed over man and his works, such an one as must necessarily be evolved if the law of progress is to be fulfilled. During this period, the civilized world has seen the rise and development of an entirely different system of treatment of the insane, a complete reversal of opinion and practice having taken place. Therefore I hope it has not been uninteresting or unprofitable to recall, as we have done to-day, the history of the movement in the very place of its birth, and where it was cradled with so much thought and fatherly care—the benefits secured by this remarkable reform not being restricted to time or confined to the narrow locality from which it sprang. The progress may seem to have been slow and intermittent, being often impeded by those who ought to have pursued a more enlightened course, but considering the amount of ignorance and neglect, and the time-honoured opinions which had to be exploded, the beneficent change in which all good men rejoice has been effected in a

comparatively short period. But here let us be on our guard. There is such a thing as a true and genuinely humane movement against shameful abuses, while on the other hand there is a fussy, intermeddling philanthropy which is as different from the former as the true coin of the realm from the counterfeit. There have been occasions in later times when the pendulum of lunacy reform has swung a little too far, and mischief as well as good has unfortunately been done to the very classes for which such movements (sometimes originated by hysterical agitators) have been ostensibly and ostentatiously promulgated. These popular outcries, when ill-founded and, therefore, unjust, are calculated to have the effect of discrediting attempts at reforms when they are really necessary as they were when the Retreat was instituted. But so it has ever been in the history of all philanthropic movements. There have been uncalled-for and feeble imitations of some great original work, and in the minds of too many people the one is mistaken for the other. A pseudo-humanitarianism has ended in making lunacy legislation vexatious, and calculated to interfere with the prompt care and unfettered treatment of the insane by the asylum physician, whose thoughts are diverted by such means from proper scientific work into that which, as General Sherman would have remarked, carries us back to the day when our mothers taught us the Book of Numbers.

It is a great gratification to me to be able to take any part in this celebration. The Retreat is associated with my earliest recollections. My interest in insanity was inflamed by what I saw and heard respecting the patients here when a boy, and I was mainly influenced in the choice of the medical profession by the desire to be connected with this Institution, and it was within its walls when I was on the medical staff that I was able to find the materials necessary for the preparation, in conjunction with my friend, Dr. Bucknill, of the "Manual of Psychological Medicine." These details are, of course, of infinitesimal importance to anyone but myself, and I only mention them as reasons why I myself should feel indebted to the Retreat. My reminiscences before, as well as when, I resided here, include very definite memories of the Allises, Dr. Williams, Dr. Belcombe, Dr. Thurnam, the Candleres, and last, but by no means the least worthy, Dr. and Mrs. Kitching, whose sons, I am glad to see, are with us to-day. All had their several and particular merits, their especial characteristics, and if, being human, they had their imperfections, they possessed qualities which in their different ways were of lasting benefit to the Retreat.

It was long after my own connection with it that Dr. Kitching was succeeded by Dr. Baker, to whom it must be a great satisfaction to know that his work here is appreciated, and that he can hand over the management of the institution to his successor in so satisfactory a condition. It is a satisfaction to those also who have its welfare at heart to know that he will, as Consulting Physician, be still associated with it, and will no doubt initiate Dr. Bedford Pierce into his new office much as William Tuke did George Jepson. I am sure we all desire for Dr. Baker many years of health after his long and faithful services, while for Dr. Pierce we wish a most successful career, honourable to himself and of advantage to the Retreat, animated, as he will be, I hope, by the inspiring memories associated with its past history.

It ought to be gratifying, I may add, to those connected with the Retreat that the Medico-Psychological Association of Great Britain and Ireland has decided to recognize the importance of this Centenary by holding their Annual Meeting in this city in July, and by making the Medical Superintendent of the Retreat the President on the occasion.

I had intended to offer an apology for having so frequently referred to my own ancestors in connection with its history, but I am assured that this is not necessary. The truth is, I found it to be inevitable if I gave any history at all. It naturally happens that family traditions and papers have given me special facilities for preparing this sketch. I may, indeed, employ, in view of the philanthropic movement we celebrate to-day, the language of the Psalm, as paraphrased in what De Quincey called the Divine Litany of the Church of England:—“O God, we have heard with our ears, and our fathers have declared unto us the noble works Thou didst in their days, and in the old time before them;” they looked forward in faith and hope; we can look backward and can witness to-day the fulfilment of their hopes. Those who have listened to their words may well be incited to follow in their footsteps. The lesson is surely writ large and clear in the early history of the Retreat, that not only ought cruelty and neglect in the treatment of the insane to be exposed and denounced, but that those who would reform abuses ought to show a more excellent way. May the course of the future history of this Institution be one of continuous progress, inspired by broad and generous ideas, while conducted on the same humane lines which marked its early life!

*Influenza and Neurosis.** By GEO. H. SAVAGE, M.D.

Griesinger says: "The onset of psychosis after influenza follows in all cases after the disappearance of bodily symptoms, and when the increased temperature has passed off. The character of the psychosis varies from slight to profound depression, hallucination, typical maniacal disorder, and the like."

"In all cases the bodily ailment only plays a part as cause of the disorder, it being on the one hand a predisposing cause, a reduction of nervous or bodily power of resistance; or on the other, the last shock to upset an unstable system. There is no simple and special neurosis depending on influenza alone, but various forms of neurosis may arise in predisposed subjects. Influenza alone does not produce insanity." The above is the opinion of the editor of the last edition of Griesinger, and in the main it sums up my experience.

I shall not occupy your time in considering the various theories of the causation of the disease; it must suffice for me to say that it produces nervous complications much more commonly than do the continued fevers, and the resulting disorders differ greatly from those following such fevers. Its effects most resemble those following diphtheria, though in many ways the symptoms resemble those depending on syphilis or lead poisoning.

It appears to attack the nervous system in those who are already failing along the nervous lines, as well as in those who by inheritance or acquisition are nervously unstable.

Thus the grave neuroses have in my experience been most common in persons who from excess or injury have damaged nervous systems, in those who showed signs of senile nervous changes, in those who had been alcoholic, or had suffered from constitutional syphilis, or in those who had had previous attacks of insanity, or had suffered from allied neuroses.

In my experience, too, the attack of mental disorder produced by influenza has resembled previous attacks which have occurred in the same person from other causes. Thus a patient subject to recurrent mania may have an attack produced by influenza, and another who has had previous attacks of melancholia may suffer from mental depression as a result of influenza.

* Paper read at the Quarterly Meeting of the Medico-Psychological Association, Bethlem Hospital, May 19, 1892.

Influenza occurring in predisposed subjects may give rise to psychosis *directly* or *indirectly*. The nervous symptoms may follow directly on the influenza, or may follow on disorder of the bodily functions; in some patients very grave nutritional disorders arise, there may be gastro-intestinal irritation causing sickness and purging with exhaustion, leading to mental disorder; profound alterations in the circulation also occur, and in most of the insane patients I have found marked deviations from health in the pulse rate. There is anæmia in some cases, and disorder of the menstrual functions in others; syncopal attacks have been met with, and some seizures which were more epileptic than syncopal have occurred at the onset or during the progress of the mental disorder.

After influenza various nervous symptoms may arise pointing to implication of the nervous system, and these symptoms need proceed no further, but, on the other hand, they may be the starting points of more developed mental disorder.

We all recognize *sleeplessness* as one of the most marked symptoms of mental disorder, and this symptom has been in my experience very frequent with and after influenza. This may rapidly lead to other symptoms of nervous instability and malnutrition; next to sleeplessness, *neuralgia* has been the most common complaint, and it is interesting to notice that this has generally picked out the nerves which have previously suffered, or which have already some irritant affecting them. Thus the patient who has had sciatica has a recurrence of this, while the sufferer from "muscular rheumatism" has a return of this pain, and the patient with an exposed dental nerve will suffer in the various branches of his fifth nerve; the alcoholic and the ataxic patient will suffer from peripheral nerve pain. Rarely, however, does the sufferer from migraine have this started by influenza, and I shall refer to this fact again later, nor have I found that the epileptic has any increase in the number or severity of his fits, but I need the experience of general asylum men to verify or correct this statement.

Besides nerve pain there *may be loss of power*. In some cases rather rapid general paralysis has developed, and in others there have been paraplegic symptoms, which have in the end passed away completely; in such patients there has been loss of power in lower limbs and defective control of bladder and rectum.

Various forms of insanity may follow influenza, and there is no direct connection as a rule between the gravity of the influenza and the neurotic sequelæ.

In some cases, however, with influenza there has been delirium with the increased temperature, and this delirium has given rise to acute delirious mania.

I have seen several such cases, in some there being further complications, such as the parturient state or alcoholism. In some the acute delirious mania has proved to be the acute onset of general paralysis of the insane.

Other acute forms of mental disorder have been met with following the acute stage of influenza; thus acute delirious melancholia, acute stupor, and acute delusional insanity, the last being in many respects like some of the more ordinary forms of acute confusional insanity, which may occur after the continued and other fevers.

In such cases after a sharp attack of influenza the patient, who generally in my experience has been young, has a period of sleepless restlessness, which is followed by a state of general mental confusion, the patient looking and acting as if he were in a dream; his whole attention is occupied by subjective sensations, and it is difficult to get him to attend to what is said to him; such cases generally have an irregular and often a rapid pulse.

Though acute mania, ranging from delirious mania to simple emotional disorder, may follow on uncomplicated influenza, yet in my experience a very large number of cases of mental breakdown have occurred in patients who have had pneumonia, or who have had other attacks of influenza.

Though any form of mental disorder may occur, mental depression, with various forms of melancholia, have been the most common. This depression almost always begins with sleeplessness, there is loss of appetite, and very commonly associated there are marked suicidal tendencies. A very large number of suicides during the past year have had influenza as one cause.

The melancholia may come on almost at once, but more frequently follows the influenza after some interval; so much has this been the case that very often the connection between the two has not been evident. Yet I believe the real relationship may be made out by linking the neurotic symptoms which arose with the influenza with the earlier signs of psychosis. Here, again, I would call attention to the frequency with which I have met a rapid pulse and a rather hot, dry skin in these melancholic patients. There is no special form of melancholia related to influenza, and though the majority of such cases recover they have been very tedious, and not without danger both to life and mind.

Such patients have often succumbed to a second attack of influenza, they seeming to be too much depressed vitally to overcome a second severe illness. All degrees of mental stupor have been met with, and though slow in their progress have generally ended satisfactorily.

The acute delusional cases have frequently led to the idea that the hallucinations and delusions must have been of long duration, and have thus given rise to an unfavourable prognosis which has proved to be wrong. A fair number of "nervous" patients have, after an attack of influenza, proved to be true cases of delusional insanity, and have remained subject to delusions of persecution and the like. Among such cases I have met several women who about the menopause have become insanely jealous or suspicious.

Though less favourable, such cases may recover. The most serious effect of influenza has been the starting into activity symptoms of general paralysis. In one case a youth after a neglected attack of influenza developed what Clouston has called developmental general paralysis, there having been no signs of the disease before. This patient came of a very unstable family.

In more instances, men of about 40, who were already showing signs of nervous wear, rapidly developed the symptoms of general paralysis after an attack of influenza. This was specially seen in men who had suffered from syphilis, alcoholism, injury, or had had great worry. The course of the disease was in no way modified by the cause.

Epileptic fits have been started by influenza, but I cannot give any case in which the epilepsy has become established as a result of the disease. In the same way glycosuria and possibly diabetes may follow on an attack of this disorder.

It has been said that the onset of influenza may modify mental symptoms in patients already insane. I have seen only a very few such cases, and the modification of the symptoms has been temporary only. On the other hand, I have met with some interesting cases in which neuroses of long standing have been for some time relieved thus; I have met with two cases of nervous deafness in which the deafness passed off with the influenza, though I must own that in more cases temporary deafness followed the disease.

I have also seen cases of spasmodic asthma relieved for the time, and in one or two patients who have suffered from migrain this symptom has not recurred after the attack of influenza, but one must wait for some time before one can look upon these as more than temporary reliefs.

And now, gentlemen, to conclude, the object of this paper was rather to obtain the experience of you who have had such good opportunity for seeing the effects of this epidemic in different parts of the country; many of you have, doubtless, had some experience in yourselves of the depressing effect of the malady, and may be able to contribute to the general stock of knowledge, and give some useful hints on the pathology and treatment of a disease which has rightly been called a pest.

Some Points connected with Criminals. By JOHN BAKER, M.B., H.M.C. Prison, Portsmouth.

Of late years considerable attention has been directed to the science now commonly alluded to as criminal anthropology. The workers in this field have been mainly continental alienists, notably the Italians, of whom one of the most prominent is Professor Lombroso; and the writings of Mr. Havelock Ellis have brought the subject into prominence in this country.

The main conclusions of the Italian school are that the born criminal is a being who, by reason of a combination of bodily and mental peculiarities, belongs to a distinct type, that he is morally insane, and, therefore, ought not to be punished as a responsible, but treated as a diseased individual.

These views have met with opposition from several German authorities, amongst others, Kirn and Lutz, and it is probable there will not be found many in this country disposed to accept them in their entirety, for, as Morrison states in "Crime and its Causes," it has not yet been proved that criminals present any distinct physical conformation, nor can it be established that their mental condition is one of insanity or verging on insanity, although, taking them as a whole, the criminal classes are, it is quite true, of a humbly-developed mental organization.

Anyone who is acquainted with prison life cannot help being struck with the fact that there is a gradual descent in the mental scale from the occasional criminal, whose crime is the result of imprudence or misfortune, to the insane criminal, who is the victim of positive mental disease. Judging them, therefore, according to the measure of their mental capacity, they may be broadly divided into four classes:—(1) The occasional criminal, who is, to all intents

and purposes, sane; (2) the born or habitual criminal, whose intellect is sound, but whose moral sense is more or less perverted; (3) the essential or natural criminal, who is, to a greater or lesser degree, intellectually and morally weak; (4) the insane criminal.

The various groups have no very distinct boundaries, but merge the one into the other. Linking the occasional with the habitual criminal is the professional criminal *per se*. With him it is surely a matter of calculation whether honesty is or is not the best policy; his gains are usually large, and he is quite prepared to undergo varied terms of imprisonments, regarding them fully compensated for by the periods of licentious liberty he now and then enjoys. His intellect is, as a rule, unusually keen. He is a criminal from choice.

As regards the habitual or born criminal, the case is somewhat different. In him, also, the intellectual faculties are usually good, but he frequently presents a perverted condition of the moral sense, which may best be described by the term moral obliquity. One of this class, on leaving prison, recently informed us that he would probably soon return, as he could not resist the temptation to steal, or, to use his own words, "I can't help it, sir; it's a maniar's upon me." Now this man was a clever tradesman and could easily have earned an honest living. The term mania employed by the convict, although expressive, was yet too strong to apply to his condition, for mania implies disease; but the craving "upon him" was not due to disease, but to a gradual perverted development of the moral sense. In some cases this moral obliquity is latent, it is hereditary, and becomes more and more intensified by education, habits, and surroundings. When quite young such persons embark on and continue in a course of crime, encouraged by the approval of elders and stimulated by the applause of companions. Bad these men are, but surely not mad in the strict sense of the term. We have not educated ourselves up to that point where we can say of the habitual criminal that he is morally insane, and, therefore, irresponsible. Different men display special aptitudes for different occupations; in some cases this mental development exists in a high degree, and because it takes the higher intellectual, instead of the lower moral direction, we call it genius, and recognize it as a gift, the result of an innate brain power. So it is with the born criminal; he displays an aptitude,

sometimes a genius for crime, but genius of this sort is not insanity, and, therefore, he must be held responsible for his wrong-doing. Plunder and gain are the objects he aims at, and there is method and plan in his operations, in which respect he differs from the weak-minded criminal, who displays little of either. In weak-minded criminals the mental defect assumes the form of both intellectual and moral weakness, the predisposing causes being a degenerate heredity, congenital defect, head injury and nervous disorders, *e.g.*, epilepsy. In such cases we approach more nearly the insane, and the question of responsibility becomes more difficult to answer; undoubtedly there exists, to a certain degree, a state of disease in the form of intellectual defect, more or less severe in different cases, and the moot point comes to be how far their offences are excusable, owing to the presence of this condition. On the mere dictum of a knowledge of right and wrong, they cannot be held irresponsible, yet it cannot be gainsaid that in many cases their crimes are the result, indirectly, at least, of the mental defect under which they labour.

Such individuals, when uncared for and left to struggle for existence, are cast aside in the busy world, and failing to find a means of subsistence in competing with others, almost of necessity have recourse to acts of an anti-social nature. Many find their way into asylums, but there exists a residuum which furnishes part of the prison population. According to Ellis, Marro, in Italy, found, amongst 500 prisoners, 4.2 per cent. of deficient intellect. In a population of 840, we found the percentage 2.5 per cent.; on the majority, sentence had been passed for repeated acts of petty larceny, the others had committed still graver crimes, *i.e.*, rape, arson, bestiality, manslaughter. When such persons are brought up for trial for minor offences, little interest is felt in the accused, and, as Mr. North has stated, except in cases of murder, where the sanctity of life is in question, their mental condition is seldom the subject of inquiry, offences of a less atrocious nature committed by such people rarely attracting attention, yet the same principles are applicable to many other forms of crime." . . . These remarks are applicable to the case of a man who was twice convicted of arson. There was a history of brain disorder in childhood, and one of his children was imbecile. On the second occasion the jury recommended him to mercy, on the ground that he might be of weak mind. The Court called no medical evidence in support of the recommendation, but was

content with the testimony of two lay witnesses, who said that the prisoner's manner and conduct were consistent with sanity. Were the individual psychological peculiarities of these weak-minded criminals strictly investigated, and their modes of life and family histories fully inquired into, the question of responsibility might be more frequently raised in their cases.

These natural criminals make bad prisoners; they are, as they express it, frequently "in trouble." They are extremely credulous, and are easily imposed upon by stronger-minded criminals, and induced to break established rules and practise malingering. Malingering is carried out in three different ways—either by inducing disease or inflicting self-injury, by feigning symptoms which have no real existence, or by pretending continuance of genuine disease after recovery has taken place. Amongst the weak-minded factitious injury is the most common form, as they possess little initiative power, and are incapable of contriving and carrying out any sustained course of feigned illness. With weak inhibitory will power, with a disinclination to work, and urged on by others, they have been known to sacrifice a limb in a moment of impulse. This self-injury was carried out to a marked extent in one case. The prisoner, whose family history showed both insane and phthisical tendencies, sustained concussion of the brain at the age of 19, owing to a fall from a horse. He was sentenced to penal servitude for placing a sleeper on the rails, but had previously undergone various terms of imprisonment for larceny, drunkenness, desertion, and arson. Whilst undergoing sentence he placed his arm under an advancing waggon, which crushed the limb, and necessitated amputation. At a later period he almost severed his tendo-achillis, and on another occasion he induced a severe attack of cellulitis by inserting pieces of copper wire into his leg. This is a very exceptional case, but it certainly points to a depraved and degenerate condition of the nervous system.

It occasionally happens that weak-minded prisoners feign insanity; rarely does this take the form of delusional monomania, but rather of simulated mania, alternating with periods of melancholia. They sing and shout, use filthy and obscene language, tear their clothing, smear their persons and cell walls with excrement, and conduct themselves generally in an extravagant manner, more especially so when they know they are being observed. We can remember one case of a prisoner of a low type who was in the habit of dashing his forehead against the walls of the padded cell

whenever he heard anyone approaching his cell door. However, he soon gave up the practice, and confessed his imposture. When they are physically incapable of keeping up the excitement any longer they proceed to the other extreme, and maintain a sullen demeanour, refusing to speak, and sometimes to eat, and so the cycle runs on until they give it up altogether, when it is by no means uncommon for them to confess they were acting at the instigation of another prisoner. It sometimes happens that even after confessing that they had been malingering a repetition of the same symptoms is indulged in. This may be accounted for in that they are stung by the taunts of their fellow prisoners on being detected.

Deteriorated mentally, many of these weak-minded criminals are degenerate physically. The following are the results of the examination of 25 such individuals (males):—

Their family histories showed the following record:—A tendency to alcoholism in seven instances, to insanity in five, to epilepsy in two, to phthisis in seven. Criminals as a rule, judging from post-mortem evidences, are extremely prone to tubercular affections. Ten had undergone a previous sentence of penal servitude, and 22, including the former, had been in prison for shorter periods, 23 were addicted to drink, six had suffered from syphilis, one from meningitis, two from rheumatic fever, six suffered from epilepsy (four acquired and two congenital), five had varicose veins, one heart disease, one hemiplegia, and one showed a peculiar condition, viz., marked atrophy of the scapular muscles.

The height ranged from 5ft. $\frac{3}{4}$ in. to 5ft. 10in., but the average only reached 5ft. $3\frac{1}{4}$ in., showing a stunted growth. The body weight on reception into prison varied from 116 lbs. to 154 lbs.

No safe diagnostic evidence of the criminal nature can be evolved from head-measurements, or from the shape of the cranium, yet in the majority of these 25 cases the forehead was generally low, ranging from $1\frac{1}{4}$ in. in the lowest type to $2\frac{1}{4}$ in. in the higher; the epileptic men showed a larger expanse of forehead than the others. The measurements of the antero-posterior curve varied from $10\frac{3}{4}$ in. to $13\frac{1}{2}$ in., and those of the circumference from $19\frac{1}{2}$ in. to $22\frac{1}{2}$ in. In 13 cases the orbits were large, and in the majority the frontal sinuses and zygoma were prominent. As a rule the lower jaw was weak, but in four of the epileptics massive and square. Perhaps the most remarkable, and certainly the most signi-

ficant, feature about the head was the frequent abnormality of the palate. In only six cases could it be called normal; in the remaining 19 it was more or less contracted, assuming a V shape in five, saddle shape in two, and in the rest the dental arches were approximated on a more or less narrow, flat roof. In 12 the mammæ were but ill-developed. Seven presented marks of tattooing, the designs representing love, religion, nautical subjects, etc. We cannot think that tattooing has any special significance as regards criminals generally, for it is mainly found on those men who have either been soldiers or sailors. The proportion of large and small ears was about equal. The hearing was generally good. In only three instances was it defective, and that not to a marked degree, whilst in seven cases the eyesight was weak. The patellar reflex was exaggerated in one man, and deficient in seven, markedly so in one case, where there was defective co-ordinating power of the lower limbs. Sensibility was in most of the cases dull, but this holds good in criminals as a rule. They bear pain well. The cause of all this degeneracy, both mental and physical, is doubtless that of a tainted inheritance, brought about by a combination of drink, insanity, phthisis, and syphilis. It is not an easy matter for such individuals to obtain employment, even if they wished it, and they naturally fall into crime. The measure of their responsibility ought to be judged by a careful examination into their modes of life, family histories, and individual psychological peculiarities. It is the duty of society to protect them, to make provision when necessary for their mental state to be inquired into at the time of their trial, whatever the nature or extent of their crimes, for if left to themselves, their end in most cases is a felon's grave.

Public Asylum Dietaries. Ought they not to be more varied?
By J. A. CAMPBELL, M.D., County Asylum, Carlisle.

I touched on this subject in a paper that I published in our Journal in 1883, and mentioned several changes which I had introduced into the diet scale of the asylum I have charge of. I suggested that an expression of opinion of various asylum physicians would be useful, and might with advantage appear in the columns of this Journal. Dr. Rayner, in the Presidential Address to our Society for 1884, made remarks somewhat resembling those I refer to, and called attention to the difficulties that exist in comparing

diet scales, owing to their inaccurate and faulty construction, and instanced the diet scale of the asylum in which he acted as an illustration in point. In offering some remarks on asylum dietaries, I at once state that I do not consider my mode of dealing with the subject as at all complete or exhaustive—access not only to facts which I cannot possess myself of, but also an extended series of observations would be required to enable one really to deal with the subject as its importance merits. A paper such as I present is merely suggestive.

As I am perfectly aware that the tendency of the age in which we live is to extremes in everything, I think it only proper to say that I individually hold no extreme views of my own on diet matters, and I think I am thus the better able to discuss the subject in a manner free of prejudice.

Physicians must often be struck by the extraordinary opinions they hear from otherwise clear-headed and educated people as to the nutritive powers of various diets. My experience goes to show that many people hold the idea that except from animal food you do not produce vigour, strength, or activity, and the idea that any other food tends to health or longevity is rather scouted. Yet we all know that in the animal kingdom the swiftness and power of the horse, the strength and endurance of the camel, and the immensity of stored force and intelligence as well as the capability of longevity combined under the wrinkled hide of the elephant are all produced by a vegetable diet; while the power of withstanding cold is possessed to the highest degree by the reindeer and musk ox. The different diets in use in different lands would well merit a full consideration, and might furnish useful hints; but unless viewed along with the death-register, and certain *data* concerning sickness which at present are unattainable, would not be of real value. The general results, however, go to show that stature, bulk, longevity, and a fair amount of vigour, physical and mental, and an unexpected amount of resistance to cold may all exist in persons whose food is almost entirely vegetable, or, with more strict accuracy, in persons who only at rare intervals are flesh consumers. I may instance the Arab on his bread and dates; the Spaniard on his bread, cheese, onions, and wine; the Hindoo on his rice and ghee; the Japanese on fish and rice; while the monks of the monastery of La Trappe du Pont du Salut, according to the account* of

* "Good Words," 1884.

Surgeon-General H. L. Cowen, take but one meal a-day and a slight refection, only eat milk, cheese, vegetables, and light beer, and for periods extending over months don't even use milk. "When a Trappist consents to eat meat he is at death's very door." Yet Dr. Cowen tells us they enjoy good health, and that three score years and ten seems to be the minimum of life at La Trappe.

Speaking generally, most people eat too much. Few people, who are at all well-to-do, as the phrase runs, retain up to 40 even symmetry of form. People who have lived many years, and who have been observant of habits and customs, assure me that they have noticed a marked and steady change in the diet of the working classes, a general improvement, and an increase in the animal food consumed. Many insane patients eat far more than is good for them. I dealt with the subject of the appetite in insanity in the "Journal of Mental Science" of July, 1886, and I then pointed out that in certain forms of insanity, more especially in certain stages of general paralysis, where voracity and a tendency to lay on excessive fat exist, it is well to restrict the food, or to give a bulky though less nourishing diet.

The prevalence of gall-stones in asylums points, I think, strongly to too much food and too little exercise. Out of 357 post-mortems I found gall-stones present in 28 cases, a percentage of 7.8. Haller* states that of 230 bodies dissected, in 14 were biliary calculi found, a percentage of 6.8, and he thought at that time that the climate of Göttingen fostered gall-stones. It is admitted that gall-stones are more frequent in females than in males; in my observations they stood as 18 to 10. Of course, it may be said that the apparent frequency of gall-stones in asylums is due to the age at death, for an asylum population in this country is almost entirely composed of aged and adults. I, however, think that asylum life tends to produce biliary calculi, and I know that they are proportionately more common in the case of patients who have had a long asylum residence than in those who die shortly after admission.

I think it is quite admitted that insanity is in most instances a disease of debility and deterioration of physical condition. Out of 500 sequent cases admitted into this asylum under 65 years of age, 109 were in weak bodily health. Dr. Macphail, in his careful and extended series of observations, clearly shows that in insanity the blood con-

* Haller, "Opus Pathol.," p. 77.

stituents are below that of sanity. I, however, believe that in cases of very acute and persistent excitement, as well as in certain cases of melancholia, the absorbents often fail to do their duty; and feed such cases how you will, the nourishment placed in the stomach and intestines is not taken up. I believe this is, in truth, the explanation of the tolerance that certain cases exhibit to heavy doses of narcotics and to noxious substances, such as laburnum seeds, which are known to have been picked and eaten by patients during attacks of excitement. I think this theory probably accounts for the absence of ill effects in those patients whom Dr. Clouston describes as taking a dozen eggs and seven pints of milk a-day, a diet by which most healthy people would be made what is called bilious. I certainly have had melancholics under my care who, although frequently and carefully fed with nourishing and easily-assimilated food, have yet become weaker, and have died without apparent lesion. I have also seen death occur during an attack of very acute excitement in a highly-nervously organized young woman without apparent cause except exhaustion from want of assimilation and absorption of nourishment, and in this case I administered food frequently with the tube, and at death found it unchanged in the stomach and small and large intestines, and found them much dilated, as if they had entirely lost their nerve tonicity.

In English public asylums the power of regulating the diet rests with the Committee of Visitors, the medical staff, of course, having power to order such extras as seem necessary; and I think in most asylums an ample ordinary diet, with certain extras on given days for the recent cases, the sick and aged, is the rule. It is, however, quite possible that remarks by the Visiting Commissioners in Lunacy, as to special meals or the absence of given items, might easily produce a feeling that in any given asylum patients were not well fed; even an expression by the Barrister Commissioner alone might produce this, and yet several members of the same body may have totally different views, or a body which changes as years go by, might see fit to change their views. In the meantime, a superintendent who advised some given change from a stereotyped scale might, at least, find himself at variance with the opinions of some members of a body who always must strongly influence the public as regards asylum treatment. This

should make any sensible medical superintendent consider the matter gravely before he made any great radical change in a dietary. The Committee of Visitors of the Cumberland and Westmorland Asylum, in arranging their diet scale when this asylum was started, wished to make it resemble in certain respects the accustomed food of the population in the district, and as it was not an habitual beer consuming population they decided not to make beer an article of diet. The absence of beer in the diet scale was touched on in each report from 1862 to 1865 by the then Commissioners; yet the general consensus of opinion now is that beer is not required as an article of diet, and it has been disused in the majority of asylums. Rhubarb with milk and bread and cheese have been given here for nearly 30 years as a summer dinner, and it is much liked by the patients; yet I have known it commented on as an unsuitable dinner, and mentioned disparagingly in a report. I do not make these remarks at all in a captious spirit, for I quite see that there must always exist a variety of opinions on every known subject, and many circumstances may make people see things in different lights.

Though in some parts of Great Britain the variations in temperature between winter and summer are, as a rule, slight, yet in other portions there is a very great change indeed in the mean temperature, and this change would, I think, warrant, on general principles, a change of diet during the hotter months of the year. In winter we all increase our day clothes and our bedding, and keep our rooms warm, and we naturally have a better appetite for fat meat and heat-producing food generally; in summer our appetite generally tends to the consumption of salads, green vegetables, and fruit, and less animal food. Yet, so far as I can find out, very little change occurs in the dietaries of our public asylums, or, if a change does occur, it is not noted on the diet scale.

We all see to the patients being more warmly housed, clad, and bedded in winter, and in most asylums the diet scale is ample, though monotonous; but should we not also provide for summer requirements? If we give an excess of heat-producing combinations we may only be producing restlessness, discomfort, and excitement in our patients. By giving a proper quantity of clothing by night and by day, and by housing warmly, undoubtedly one prevents in the human frame calls for so much food and for so much heat-

producing food, and by not requiring too much physical or mental exertion a good health standard can be maintained more easily on a diet much less nutritious than when exposure to cold and hard labour are exacted. So that, speaking generally, the chronic element of an asylum might quite well exist, and that comfortably, on the same diet that the working-class in the district from which they come exists, and being more warmly housed, and dealt with in large numbers, they ought to be more cheaply fed. Yet, I am sure, the average cost for food for each individual patient in the English county asylums is more than is expended on himself by a labouring man who receives, say, £1 a week, and who has to keep himself, a wife, and family on it.

I am certain from experience that good results follow from specially dieting patients who have certain forms of insanity. I merely mention this in passing. Violent, irritable, and quarrelsome patients become more tractable when put on milk diet and their animal food is stopped for some weeks. I do not think broth and soup is sufficiently used in most English asylums, or in fact by English people. In Scotland broth or soup is almost a daily portion of the dinner, and, I believe, to this difference in diet is due the want of abdominal protuberance—the comparative immunity from constipation, piles, and hernia in the Scotch asylums.

Circumstances and distance from the coast prevent the use of fresh fish in asylums to a certain extent, but why should not salt fish occasionally be used? I think the subject of asylum dieteries is of such importance that it would be advisable to have a committee of our society to consider and report on the matter, to draw up a week's diet scale, and to give a list of supplementary dinners, which could be substituted at will. The information, now in the possession of individuals, would be then accessible to all, and an expression of opinion by a competent committee on certain points would be practicably unquestionable. I would indicate the following as some of the points which should primarily receive attention, and on which a definite opinion should be expressed:—

1. How many days a week should butcher meat be given in winter?
2. How many days a week should butcher meat be given in summer?
3. What amount of cooked meat, free of bones, in summer and winter, would be required to maintain the chronic asylum residents in fair health?

4. Does soup or broth occupy the position it should in asylum dinner scales ?
5. Are farinaceous and milk compounds sufficiently valued as asylum foods ?
6. Do not potatoes from convenience, cheapness, and habit tend to exclude the use of other vegetables to the detriment of health ?
7. Is not the use of cooked fruit a matter to be more looked into now that its price allows of its freer consumption ?
8. In what form can fish be rendered most serviceable and least dangerous as an asylum dinner ?

It is admitted by all reasonable people that a mixed diet is not only indicated by the formation of the human teeth and the natural instincts and appetites of our race, but the experience of ages goes to prove that the more varied with judgment our diet can be, the more healthy and vigorous both body and mind may continue, and the more pleasant may life be, for although eating may not in itself be one of the chiefest ends to live for, yet its results are such that wise people should give it proper consideration if they wish to remain wise. Those entire vegetarians that have come under my observation have struck me as dull, quiet, and wanting in vigour of mind and body, inclined, in fact, to a mild melancholic state. Excessive flesh eaters are irritable, choleric, and apt to be non-resistant of disease. I have not myself had a large experience of those who mainly exist on fish and cereals or vegetables, but in a very excellent article "On fish as a food," which is contained in *Temple Bar* for June, 1891, the following statement appears: "No fishing community, so far as is known to the writer, has given to this world a great man. Men of mark, poets, preachers, lawyers, warriors, philosophers, and physicians have emanated in Scotland, at any rate from all classes except the fishing class."

I have looked over a return got up and lent me by Dr. Murray Lindsay, from the diet tables of forty English County and Borough Asylums. I propose at present to confine my remarks mainly to dinners, as this is the principal meal of the day. This return shows a marked disparity in the amount of butcher meat given in different asylums. I, however, do not intend to enter on a discussion as to the relative excellences of the various scales; in my opinion they all show sufficient quantity of food—some of them, I think, an excess of animal food, especially for a summer diet.

The diet scale at Garlands, examined and estimated,

shows the following, that the patients get butcher meat five days in the week, soup one day, and dumpling another. The total quantity of cooked meat which each male patient gets weekly is 23oz. The butcher meat which is consumed by patients shows that each male gets an average of 28oz. of raw meat with bone, and in addition 5oz. of tinned compressed corned beef weekly. My intention has not been to deal with this subject from the chemico-physiological aspect, but merely from the practical view-point of giving a dinner amply sufficient for health purposes at a moderate cost, with a possibility of changes at even a less cost than the fixed scale, that is, to give an optional or supplemental list of dinners which could occasionally be brought into use at a slightly diminished cost to make up for the trouble which the change would entail. I think everyone will agree with me that to know beforehand the rotation of dinners day by day, week by week, running on for years even, must be one of the most intense hardships of an enforced asylum residence; even an inferior dinner, which is a change, would be esteemed as a luxury, and a surprise dinner at intervals would be even more of a luxury. Here we give pickled cauliflower, beetroot, onions, and red cabbage, with mustard as a condiment on the cold meat days. We show an allowance of 12oz. of cooked vegetables on the diet scale, and, as far as possible, we try to give with potatoes, cabbage, or greens, carrots, turnips, parsnips, leeks, beans, and lettuce and radishes in season. When vegetables are scarce we give a ration of pease-pudding or haricot beans with potatoes. A ration of pease or beans such as we give costs $\frac{1}{4}$ d.

That our present diet is ample, I think our returns clearly prove. For 19 years our recovery rate has averaged 44·8 per cent., while the death rate during the 30 years the asylum has existed has been 8·04 per cent. on the total average resident. Though, as a rule, the patients admitted here are fairly fed outside, yet most of them gain weight here, and, I believe, considering the exertion they expend, they are over-fed, if anything. I took the ten stoutest-looking men I noticed in the male division and weighed and measured them; their average weight was 206·8lbs., while their average height was only 5ft. 9in. I found they had made an average gain of 25lbs. while here. The stoutest measured 50in. round what should have been a waist. These men look too bulky for their height. The 10 stoutest women average 61·8in. in height, and 182·2lbs. in weight,

and have gained an average of 48·6lbs. while here. Their forms are not sylph-like, though some of them are under 30. I do not believe that asylum patients would have their health lowered if, during June, July, and August, the butcher meat was reduced to four days a week for the men, and three days a week for the women.

I now submit the dinner scale at Garlands, with the cost at present prices as accurately made out as possible:—

		DINNER.											
		Bread.	Meat Pie.	Cooked Meat, free from Bone.	Dumpling.	Irish Stew.	Cooked Vegetables.	Potato Pot.	Broth.	Soup.	Milk.	Cheese.	
		oz.	oz.	oz.	oz.	oz.	oz.	pt.	pt.	pt.	oz.	Cost.	
Sunday	Men.....	3	—	—	—	22	—	—	—	—	½	—	3¼d.
Monday	Men.....	3	—	5	—	—	12	—	—	—	—	—	2¼d.
Tuesday	Men.....	7	—	—	—	—	—	1½	—	—	1½	—	2½d.
Wednesday	Men.....	3	—	—	—	—	—	22	—	—	½	—	3¼d.
Thursday	Men.....	3	—	5	—	—	12	—	—	¾	—	—	2¼d.
Friday	Men.....	3	10	—	—	—	12	—	—	—	—	—	3¼d.
Saturday	Men.....	—	—	—	16	—	—	—	—	—	—	—	1¼d.

DUMPLING.—For men, each 9oz. flour, 1oz. currants and raisins, one-sixth of an ounce of sugar, and 2oz. dripping. For women, each 7oz. flour, 1oz. currants and raisins, one-sixth of an ounce of sugar, and 2oz. dripping.

MEAT PIE.—For men, each 6oz. of uncooked meat, free from bone. For women, each 5oz. of uncooked meat, free from bone, and seasoned to taste.

IRISH STEW.—For 100 persons, 32lbs. of uncooked meat, free from bone, 6st. of peeled potatoes, with a suitable dilution of water, and pepper and salt to suit taste.

POTATO POT.—For 100 persons, same as Irish Stew.

BROTH.—For 100 persons, 28lbs. meat (necks, houghs, etc.), including bone, 10lbs. barley, liquor from stewed bones, thickened with bread crusts and vegetables, and seasoned to taste.

I also submit a supplementary list with the cost. I have experimentally given these dinners, at intervals, to divisions

of my patients, and they have always recognized the change as agreeable:—

	At present prices.
Tripe 5oz., done with milk and onions and 12oz. potatoes...	... almost 2d.
Bullock's heart 5oz., hashed with 12oz. of potatoes...	... above 2½d.
Bullock's liver 5oz., fried with 12oz. of potatoes ...	... 1d.
Salt cod 8oz., boiled with 12oz. potatoes ...	... 1½d.
Fish pie, containing 4oz. cod, 12oz. potatoes, 1oz. dripping ...	... 1½d.
Salt herring, two weigh 8oz., 12oz. potatoes...	... 1½d.
Fresh herring, two weigh 8oz., 12oz. potatoes ...	... 1½d.
Hominy and milk 1pt., bread 7oz. ...	... about 1½d.
Rice and milk 1pt., bread 7oz. ...	... about 2d.
Ground rice and milk 1pt., bread 7oz. ...	... about 2d.
Sago and milk 1pt., bread 7oz. ...	... about 2d.
Cornflour and milk 1pt., bread 7oz. ...	... about 2d.
Rhubarb, gooseberries, and stewed apples, and black currant tart 16oz., bread 7oz., cheese 1½oz.	

These last three dinners are subject to much change in price. We use them in summer, and, as the fruit is grown here, we consider it as a dinner cheaper than a meat dinner.

My wish is not at all to reduce the cost of maintenance of rate-supported lunatics to the lowest figure compatible with the preservation of their existence, but to give them as much pleasant variety of diet as is possible at a reasonable expenditure. I have not in my remarks attempted to give facts and figures for all my statements. What I wish is to enlist the co-operation and elicit the opinions of fellow superintendents who are interested in this subject. If my suggestion of having a committee appointed to draw out a diet scale is carried out, I am certain patients in public asylums will benefit by the result.

*Insanity and Divorce.** By A. WOOD RENTON, Esq.

In view of the interest which the subject is at present arousing, a critical analysis of the historical development of the law of insanity in its relation to divorce may be neither inopportune nor uninteresting.

The leading case of *Mordaunt v. Moncrieffe* (1874, L.R. 2, Sc. and Div. 374) may be taken as a convenient point of departure. Sir Charles Mordaunt was married to Miss Harriett Sarah Moncrieffe on 6th December, 1866. On the 28th of April, 1869, a petition charging Lady Mordaunt with adultery, and praying for a dissolution of the marriage, was

* In this paper I do not propose either to state the evidence in *Hanbury v. Hanbury*, or to discuss its effect.

presented by her husband to the Divorce Court. Two days later the citation was duly served on Lady Mordaunt, whose solicitors entered an appearance for her, but on a representation supported by affidavit that she was insane, the court on 27th July, 1869, appointed her father, Sir Thomas Moncrieffe, to act as her guardian *ad litem*. Issue was joined on the plea of Lady Mordaunt's insanity, and the question was tried by a special jury, who, on 25th February, 1870, found (and the form of the verdict deserves particular attention) that on the 30th of April, 1869, the day on which the petition for divorce had been served on her, Lady Mordaunt was in such a state of mental disorder as to be unfit and unable to answer the petition and to duly instruct her attorney for her defence, and that she had ever since remained and still remained so unfit and unable. On 8th March, 1870, Lord Penzance, on Sir Thomas Moncrieffe's application, stayed all proceedings in the suit, giving Sir Charles Mordaunt liberty to apply when he was able to affirm that his wife had recovered her mental capacity, and on 2nd June, 1870, this order was sustained on appeal by a majority of the full Court of Divorce. On 12th March, 1872, however, Dr. Harrington Tuke having made an affidavit that the recovery of Lady Mordaunt had become hopeless, Sir Charles Mordaunt applied to the court to dismiss his petition, the proceedings in which had on the former occasion merely been stayed, in order that he might appeal to the House of Lords. The application was granted, and the case came on for argument at the Bar of the House, the following common law judges attending to assist, viz.: Kelly, L.C.B., Martin, B., Keating, G., Brett, J., Denman, J., and Pollock, B. Sir George Jessel, then Solicitor-General, afterwards Master of the Rolls, was leading counsel for the appellant. Dr. Deane, Q.C., and Mr. Hardinge Giffard, Q.C., the present Lord Chancellor Halsbury, appeared for Sir Thomas Moncrieffe. Chief Baron Kelly, Mr. Justice Denman, and Mr. Baron Pollock concurred in holding that divorce may be asked and decreed on behalf of or against a lunatic—the Court appointing a guardian *ad litem* for protection. Mr. Justice Keating and Mr. Justice Brett were of opinion that the insanity of either husband or wife is an absolute bar to divorce. The House of Lords adopted the opinion of the majority of the judges. In *Baker v. Baker* (1880, L.R. 5, P.D. 142, and 6 P.D., 12), the decision in *Mordaunt v. Moncrieffe* was extended to the case of a lunatic petitioner, and it was fully and finally established that *supervening* insanity does

not arrest the progress of a suit for dissolution of marriage whether the patient is petitioner or respondent. The case of Lady Mordaunt did not, however, dispose of the question whether, and if so to what extent, the insanity of a respondent at the time of committing the acts of cruelty and adultery alleged against him would constitute a legal defence to a suit for divorce. This question, although constantly arising in private practice, was brought before the courts judicially for the first time in the beginning of the present year in the case of *Yarrow v. Yarrow* (1892, P. 92). In so far as it is necessary to state them, the facts were these. The parties were married in 1874. Shortly afterwards they went to Monte Video, where the petitioner was engaged in business as a corn merchant, and remained there till 1886, when they returned to England and ultimately settled in Herefordshire. There was no issue of the marriage. On the voyage out to South America the respondent confessed to her husband that before her marriage she had lived an immoral life for two years, and had contracted a disease. Up to the year 1890 they lived happily together, but in that year the respondent's feelings towards her husband underwent a complete change. She came up to town in July, 1890, to consult a doctor, took lodgings in Brunswick Square, and was proved by the landlady to have repeatedly committed adultery with men whom she brought in from the street. The respondent then wrote a letter to her husband, telling him that she had committed adultery, and intended to do so again, and suggesting that he should take proceedings with a view to obtaining a divorce. It appeared that she was labouring at this time under an insane delusion that her husband was endeavouring to poison her, and committed adultery with the knowledge that it might, and in the hope that it would, be the means of bringing about a divorce. Under these circumstances the question arose whether insanity of this description constitutes a valid answer to a suit for divorce. Sir Charles Butt held that *if the analogy of criminal law applied to such proceedings at all*, a point on which his lordship entertained doubt but expressed no positive opinion, then the respondent knew the nature and quality of her act, and that it was wrong within the meaning of MacNaghten's case, and consequently her insanity was no defence to the husband's petition. In *Hanbury v. Hanbury*, substantially the same question arose for judicial decision. In this case Clara Mathilde Hanbury petitioned for the dissolution of her marriage with Ernest Osgood Hanbury, on the ground of his

alleged adultery and cruelty. The acts complained of were scarcely, and at all events were not successfully, denied, and the only material defence was the plea of unsoundness of mind. Sir Charles Butt again expressed grave doubts whether such insanity as would entitle an accused person to an acquittal on an indictment for a crime would constitute a valid defence to a suit for divorce on the ground of adultery, held that, even if these doubts were ill founded, only evidence of "a lasting and abiding disease, something different from recurrent insanity, something requiring permanent incarceration," would support the plea, and left the general issue to the jury in the terms of MacNaghten's case. The jury found a verdict for the petitioner, and the learned judge entered judgment in his favour. The respondent appealed to the Court of Appeal, consisting of Lord Esher (the Master of the Rolls), and Lords Justices Lindley and Kay. The discussion, to which the present writer had the pleasure of listening, pursued the following course. At the outset of the argument, the Master of the Rolls took his stand upon the rules in MacNaghten's case, and finally put to the learned counsel for the respondent, Mr. Lockwood, Q.C., the following question. Suppose that a man under the influence of *folie circulaire*, accompanied, as you say it often is, by an irresistible sexual impulse, outraged a woman? Suppose that he knew what he was doing, and showed that he felt it to be wrong by immediately afterwards leaving the country. What is the law applicable to such a statement of facts? After some ingenious fencing with the question, Mr. Lockwood, who certainly did his best for his client, was obliged to answer, "I suppose it is governed by the *Queen v. MacNaghten*?" One was tempted to regret that the honourable and learned gentleman did not—following the lines suggested by Sir James Stephen—attack the authority and impugn the ordinary judicial interpretation of the rules in MacNaghten's case themselves. But he evidently felt and shrank from such a hopeless task. Lord Esher then proceeded to deliver judgment. Reserving the question whether recurrent insanity can, under any circumstances, constitute a valid answer to a suit for divorce, his lordship, to the obvious satisfaction of a large legal audience, proceeded to criticize *folie circulaire* and irresistible impulses, and then affirmed roundly (1) that scientific evidence, though uncontradicted, is not binding on a jury, and (2) that every man who, in committing a culpable or criminal act, knows its nature and moral quality, is responsible to the law whether his mind is or is not

affected by disease. Lord Justice Lindley went even further, and distinctly held that—since the Divorce Court exists for the protection of husbands and wives from each other's misconduct, and since the victim of recurrent insanity could not be confined in an asylum during the intermission of the disease—to allow this species of mental unsoundness to be a defence to a suit for divorce would be to negative the protection that the legislature intended to confer. If this ruling is upheld, the substantive law of insanity and divorce may now, probably, be stated thus :—Insanity is no answer to a petition for divorce unless (a) it prevented the respondent from knowing the nature and quality of his acts within the meaning of the rules in MacNaghten's case, and (b) is of such a character as to require the permanent incarceration of the respondent. The authority of MacNaghten's case will no longer be questionable in any tribunal short of the Privy Council and the House of Lords; but the *interpretation* of the phrase "know the nature and quality of his act" may still be open to forensic argument.

Gall-Stones in the Insane. By CECIL F. BEADLES, M.R.C.S.,
L.R.C.P., Assistant Medical Officer, Colney Hatch
Asylum.*

Gall-stones are stated to be most common in females of advanced years by all writers on the subject, but is the frequency of their occurrence in such cases fully recognized? There is a further question, one which more immediately affects the medical officers at asylums, and which it is possible to have answered. Do gall-stones occur more commonly in the insane than in others, and is it possible for insanity to have any influence on the formation of biliary concretions?

The second question arises from the fact that in making post-mortem examinations on the bodies of the insane (females), I was early struck by the great frequency with which gall-stones were found, and accordingly commenced to collect them with a view to discover what relation, if any, they bore to insanity. Although my numbers are as yet somewhat small, still I think they may be of interest. I hope, however, that I shall have an opportunity later, with more data to hand, of giving further information on this subject.

* Paper read at the Quarterly Meeting of the Medico-Psychological Association, May 19, 1892.

Out of 50 consecutive necropsies which I have personally performed on insane females at Colney Hatch, gall-stones were present in 18, that is to say in 36 per cent.

Now this percentage is exceedingly high, and, if maintained, is far greater than what is generally admitted, or, I believe, is possibly the universal case even in very aged women. That gall-stones are often met with in the insane after death is acknowledged by those who have made many examinations, but I know of no reference to this matter in any work on insanity, nor do I believe that insanity is a generally recognized cause of their occurrence. I do not wish it to be understood that I take it for granted, nor am I about to prove, that gall-stones are of a greater frequency in the insane than in the sane, for there are many factors to be taken into account when considering this subject, some of which I propose briefly to mention, although if this percentage were proved to be maintained it would, I think, show that there is some association between the two conditions.

There do not appear to be any trustworthy figures in existence of the frequency with which gall-stones occur whereby to compare these numbers. The most suitable subjects for this inquiry are, of course, the old people dying at workhouse infirmaries, for they belong to the same class as those that form the inmates of a pauper lunatic asylum, and have lived much the same kind of life. The result of an inquiry from the medical superintendents of several infirmaries was, as I had anticipated, that gall-stones in the very aged females were, at most, by no means uncommonly found after death, but unfortunately no record has been kept, and the percentage could not be given. My friend Mr. Dudley Cooper, however, who, whilst he held the post of medical officer at Highgate Infirmary, made over 200 very careful autopsies on men and women, and saw as many again, tells me that gall-stones were present in from 10 to 12 per cent. of the women. This he considered remarkably frequent. They occurred almost invariably in very aged persons. In the men gall-stones occurred in less than one per cent. of the cases. I may add that out of 63 post-mortem examinations made on females at the Cancer Hospital who had died of some form of malignant disease, at an average age of 49, there were only three cases in which gall-stones were found, and it is interesting to note that in each of these three cases the liver was the seat of a primary car-

cinomatous growth. Moreover, although the liver in a large proportion of these 63 cases contained secondary deposits, yet in no other of this series was that organ primarily affected.

None of the medical text books in general use give figures, but Thudichum,* writing on the frequency of gall-stones, says—

The question about the number of persons, members of a community subject to a census, who suffer from gall-stones, cannot, I fear, be answered. Assertions, therefore, concerning the frequency of gall-stone patients, the prevalence of gall-stone disease in certain districts, among certain classes, at certain times, must be received with great reservation.

A physician who, during forty years, had been engaged in a most active practice, had made notes of nearly eighty cases in which he was consulted or found calculi after death.

Wolff (Virchow's "Archiv.," xx., 1) observed 45 cases of gall-stone disease in living persons during a practice extending over forty-three years. Haller ("Opusc. Pathol.," p. 77) relates that, out of 230 bodies dissected in the anatomical theatre at Göttingen, two only had stone in the urinary bladder, but in 14 biliary calculi were found.

This last, which is the most suitable for comparison, is little more than six per cent. There can be no doubt but that gall-stones are of greater frequency, at any rate, in the old females in workhouses. But from what has been said I think we may conclude that a percentage of 36 is quite phenomenal. Of course it may be that there has been a singular run of cases, which will not be continued in anything like the same proportion, for it is a well-known fact in medicine, as elsewhere, that cases are apt to occur in remarkable series. Still, it will take a considerable amount of falling off to bring this percentage down to what one might call a more normal point. A remarkable statement, which I only mention for curiosity, has been ascribed to Heberden, that "in England few people attained their fortieth year without having been visited by gall-stones."

The 18 cases in which gall-stones were present are arranged in the accompanying table (pp. 386 and 387).

On referring to the table it will be seen that pneumonia was the most frequent cause of death. The first 10 cases died from complications following influenza. In only two, Nos. 12 and 18, can the end be said to have been sudden.

* "A Treatise on Gall-Stones," by J. L. W. Thudichum, M.D., London, 1863, to which work I am indebted for other observations.

In the whole of the 18 cases, with the exception of Nos. 16 and 17, there was some cardiac hypertrophy and dilatation, although valvular disease existed only in these specially mentioned. In the same cases there was some degree of atheroma of the blood vessels, always marked in the arteries at the base of the brain. In all the cases the kidneys were granular, with the exception of Nos. 5 and 10, where they were apparently healthy. There were no renal calculi present. These remarks apply in a like manner to the remaining 32 cases examined. In the whole of the 50 cases there was some morbid conditions of the brain; all had more or less thickening of the membranes, dilatation of the ventricles, with excess of fluid, either hardening or softening of the brain substance, with, in some cases, hæmorrhages of old date—in short, all the brains were abnormal, and were such as are met with in the insane.

In Nos. 2, 3, and 17 there was no fluid present in the gall bladder, the walls of which were tightly contracted over the stones. In Case 9 the gall bladder contained a clear, colourless, viscid fluid, in appearance similar to glycerine, apparently mucus, about three drachms in amount, and in Case 10 there was a similar fluid, but less in quantity. In the remaining cases ordinary bile was present. The gall bladder of Case 11 was of very great size, and reached down to the umbilicus; it was six inches in length, and was connected to the liver by a cystic duct of equal length. The bile ducts in the liver were much dilated, and were filled with bile. The livers varied much in weight, but were more often considerably below what is usually mentioned as the average weight for that organ in the female, viz., 40-50 ozs. The average of 16 of the cases was a little more than 40 ozs. (No. 13, in which hydatid disease of the liver existed, not being included. The liver tissue in this was much atrophied, and a large cyst, the size of a cocoanut, was present in each lobe). In most of the cases the liver was distinctly fatty, and the congested condition, when present, was probably dependent on the mode of death. It will be seen from the table that, as would be expected, the gall-stones varied greatly in number and character, and, with regard to their composition, cholesterin occurred in not quite two-thirds of the cases, the rest being almost entirely made up of bile-pigment and mucus. From their size many of these stones must have taken a considerable time to form.

The majority of these 18 persons died at a great age; 11

No. Ag.	Bodily condition.	Cause of death.	Form of Insanity.	Duration of Insanity.	LIVER.		Gall-bladder.	Weight in grains when dry.	GALL-STONES.		
					Condition.	Weight in ozs.			No. of stones.	Composition.	Character.
1	Emaciated.	Pneumonia and heart disease.	Melancholia.	12½ years	Congested.	35½	Distended.	300	74	Bile pigment and mucus.	Vary much in size; 3 larger ones are an inch in diameter; the rest are small. Triangular, and with facets, vary from 2 to 74 grs. in weight. Of a pale yellow colour. Size of pigeon's egg, with rough surface.
2	Emaciated.	Pericarditis and heart disease.	Mania.	½ "	Congested.	?	Tightly contracted over stone.	64	1	Cholesterin.	Measures 2½ in. by 1½ in. oval in shape, and has rough, irregular surface; greenish colour.
3	Well nourished.	Double bronchitis.	Recurrent mania.	30 "	Congested.	33½	Entirely occupied by stone.	385	1	Cholesterin and bile pigment.	Size and surface like that of mulberries, but of a yellow colour.
4	Fairly nourished.	Pneumonia.	Melancholia.	½ "	Pale and fatty.	44	Not enlarged.	20	2	Cholesterin and mucus.	Size of mulberries, but of a yellow colour.
5	Emaciated.	Pneumonia.	Melancholia.	24 "	Nutmeg.	33½	Do.	34	1	Cholesterin	½ in. in diameter, rough, and of a whitish brown colour.
6	Well nourished.	Pneumonia and pleurisy.	Recurrent mania.	4 "	Fatty and congested.	40½	Do.	24	4	Cholesterin and bile pigment.	Size of surface as of mulberries; deep orange in colour.
7	Emaciated.	Pneumonia.	Recurrent mania.	40 "	Small, fibrotic, and congested.	27	Very small.	90	1	Cholesterin	Size of pullet's egg, ½ in. in length, rough, and dark brown colour.
8	Fairly nourished.	Pneumonia.	Senile dementia.	3½ "	Small, congested.	30½	Not enlarged.	9	3	Cholesterin and bile pigment.	Like small mulberries, only of a reddish-brown colour.
9	Obese.	Pneumonia and heart disease.	Melancholia.	1½ "	Fatty and congested.	48½	Do.	35	100	Bile pigment.	Very small, most vary from ½ to ¾ grain in weight; half-a-dozen larger ones weighing about 2 grs., one of which completely obstructed the cystic duct. Dull yellowish-brown colour.

10	72	Fairly nourished.	Pneumonia and pleurisy.	Recurrent mania.	13½ years	Large and fatty.	66½	Small.	60	93	Bile pigment.	Vary from ¼ to 2 grains in weight. Yellowish-white colour, with shining facets. Of equal size; black-shining facets very soft, and crumble to pieces.
11	70	Much emaciated.	Phthisis.	Mania.	21½ "	Very small, fatty, congested in places.	26½	Greatly distended.	27	3	Bile pigment.	
12	58	Fairly nourished.	Meningeal hæmorrhage and pneumonia, and heart disease.	Recurrent mania.	9 "	Large, fatty, and congested.	46½	Not enlarged.	2	7	Bile pigment.	Irregular black masses of pigment of small size.
13	76	Much emaciated.	Heart disease.	Senile mania.	3 "	Hydatid disease, two large cysts replace much of liver substance.	98	Do.	4	1	Bile pigment.	An irregular black mass of pigment.
14	51	Obese.	Pneumonia.	Epileptic dementia.	1 "	Small and fatty.	33½	Do.	8	6	Cholesterolin and bile pigment.	Small round stones of yellow colour, with rough surfaces. One was firmly fixed in the cystic duct.
15	71	Obese.	Pneumonia and heart disease.	Mania, followed by dementia.	4½ "	Large, fatty; fibrotic in places.	64	Distended.	192	460	Cholesterolin and bile pigment.	Yellow stones with facets, mostly very small, the largest about the size of peas, and weighing 2 gra. each.
16	48	Extremely emaciated.	Phthisis.	Recurrent mania.	22 "	Fatty, soft, and congested.	32½	Not enlarged.	43	3	Cholesterolin	Of equal size, and of a buff colour.
17	44	Much emaciated.	Phthisis.	Melancholia.	18½ "	Fatty, nutmeg.	47½	Small.	82	1	Cholesterolin	Size of pigeon's egg, with rough surface and of a yellowish-green colour.
18	81	Emaciated.	Cerebral hæmorrhage.	Senile mania.	2 "	Small.	34½	Not enlarged.	27	13	Bile pigment.	Of equal size, with facets, and of a dark brown colour.

were over 60 years, the youngest was 42. The average age is a little over 65. The average age of the remaining 32 cases was 55; of these, however, one died at 27 from phthisis, and others died at 33 and 35. Thirteen out of the 32 died over 60 years of age. The bodily condition varied; in nine there was emaciation, six were fairly or well nourished, and three were abnormally stout. There was no relation to age. Adopting the divisions in general use it is seen that the form of insanity differed, and that the length of time the mind had been affected also varied very considerably. Mania and melancholia appear to be about equally frequent. In Cases 2, 6, 10, 11, 12, 13, and 16 acute attacks of mania lasted up to the time of death. The rest had for some time previously been quiet, dull, and more or less infirm. The duration of insanity varied from 40 years to three months; only nine of the cases had showed symptoms less than five years.

In none of these cases were there any symptoms pointing to the existence of gall-stones during life; that is to say, they had never been jaundiced, no hepatic colic had occurred, and no pain had ever been referred to the region of the gall bladder. This is not peculiar to the insane. The great majority of calculi found in the gall bladder after death have been found by accident, and were not suspected during life. This is the case with those in patients dying at infirmaries. In none of Mr. Cooper's cases were there symptoms, and in one a stone completely closed the duodenal orifice of the common duct, without even giving rise to jaundice, a condition, however, which must be extremely rare. At a recent discussion at the Medical Society of London,* following Mr. Knowsley Thornton's paper "On Cholecystotomy," it was suggested by some that whenever gall-stones could be felt they should be removed by operation, but Mr. Marmaduke Shield remarked that "gall-stones often existed without causing any symptoms, and were very frequently found (post-mortem) where they were by no means suspected," a statement agreeing with Murchison and others. Mr. Hutchinson said that "the public should not be taught to look upon gall-stones as substances which, like urinary calculi, when found ought to be removed; they were constantly found with no symptoms whatever." Those that advocate the removal of gall-stones in all cases where discovered by palpation would find Colney Hatch the best of

* "Lancet," April 2nd 1892.

schools at which to become proficient in the operation of cholecystotomy!

Attacks of excitement such as occur in recurrent mania might, one would have thought, dislodge the stones from the gall bladder, and by becoming fixed in the common duct give rise to symptoms or to colic during their passage to the duodenum. I have not found a stone in the common duct, and it is quite impossible to say if the passage of gall-stones took place in any of the cases. Cases have been recorded in which gall-stones have been passed per rectum, and in which there had been no previous history to point to their entrance into the intestine. In the case of the insane it is quite possible that, owing to the general dulling of sensation and of pain, such might more readily be overlooked than in others.

Now, as to the causes favouring the formation of gall-stones, authorities are fairly unanimous on some points. Wickham Legg, writing in Quain's "Dictionary of Medicine," says: "Want of physical exercise and indulgence in rich diet seem to favour their production." Taylor ("A Manual of the Practice of Medicine") says: "Sedentary occupations and over-indulgence in food seems to have some influence. The fatty and starchy constituents are thought to be more injurious." Austin Flint* says much the same. Bristow is more guarded: "There is reason to believe that they especially affect persons of sedentary habits. The influence of diet is unknown." Roberts ("The Theory and Practice of Medicine") writes:—"There are some important predisposing causes of gall-stones, namely, advanced age, the female sex, sedentary habits, habitual constipation, over-indulgence in animal food and in stimulants, and organic disease of the liver, gall bladder or bile ducts interfering with the escape of bile." According to Murchison † "gall-stones are particularly common in persons of stout habit, who consume large quantities of rich saccharine and greasy foods and alcoholic fluids, and who at the same time live sedentary lives." He adds: "From what has been stated it follows that gall stones are much more common in the middle and upper classes than among the labouring population and the poor." And in speaking of the treatment of jaundice from gall-stones he says: "It is necessary to counteract those habits on the part of the patient which

* "Principles and Practice of Medicine." Philadelphia, 1873.

† "Clinical Lectures on Diseases of the Liver," 1865.

experience has shown to conduce to the formation of gall-stones. He must rise early, and take plenty of exercise in the open air, sleep in an airy bedroom, live sparsely, drink little or no wine, and avoid all rich, fatty, and saccharine food and malt liquors."

Thudichum states that vegetable food predisposes more to gall-stone disease than does flesh food, and that mixed food affords the greatest predisposition to the disease. He says, however:—

"That persons of sedentary habits, such as authors or women following callings which entail little exercise of the body, are more liable to gall-stones than other persons of active habits has been alleged but not proved. So far as my own experience goes active habits, on the one hand, do give no protection from gall-stones if they are not joined with moderate habits of living; and sedentary habits, if not accompanied by excess in eating and drinking, do not by any means predispose to gall-stones. In the forty-five cases collected by Wolff sedentary habits could not be blamed for the disease, as most patients were of very active habits."

Thudichum is, moreover, opposed to the view that obesity predisposes to gall-stones, and thinks this view has exploded, it having held strong ground when cholesterin was believed to be a fat, thereby an explanation was founded that this substance was deposited in the biliary passages owing to the presence of an excess of fat in the body.

Amongst other predisposing causes that have been put forward at different times it may be mentioned that hard drinking water has been said to favour the production of gall-stones, but on very doubtful grounds. Our patients were for the most part derived from London and its neighbourhood, where a clay soil exists. It must be mentioned, however, that Colney Hatch Asylum is supplied with water from a well which passes down to the chalk, but some of the cases had been in the asylum a very short time. It has been said that renal calculi are often associated with gall-stones, and Murchison, who believed in their special frequency in persons who were the subject of lithæmia, quotes a number of observers, from Baglivi and Morgagni onwards, to show the co-existence of urinary and biliary calculi. I have only to say that in not one of my 50 cases was there a stone in the kidney or urinary bladder. Allied diseases, as gout and rheumatism, have been associated with gall-stones, as either occurring in the patient or in the family. Neither of my 18 cases had either of these affections. But Murchison includes

in the same category the nervous affections of neuralgia, migraine, and urticaria.

Other diseases have been associated with gall-stones; for instance, they are said to be frequently discovered in the gall bladder of persons who have died of phthisis, and also of malignant disease. Concerning the latter, the figures which I have brought forward distinctly oppose this, but even if this were so, as Fagge* says, "This may be merely a coincidence, for both cancer and gall-stones are apt to occur in persons advanced in years." When primary malignant disease of the liver exists, and it almost invariably starts in the neighbourhood of the gall bladder, it is possible, of course, that the stones owe their origin secondarily from stagnation of the bile through pressure and obstruction from the growth on the ducts, but I am personally in favour of the view that the new growth results from irritation set up by the pre-existing stones, although the rarity of cancer of this organ, compared to the frequency with which stones occur, is somewhat against this view. There is no doubt that in cancer the body functions become deranged, and that this is the case in phthisis, a fact which may have some influence in favouring the concentration of the bile and, perhaps, alteration in its composition. So in marasmus of age; Samuel Cooper† is said to have drawn attention to the frequent occurrence of gall-stones in bed-ridden persons.

Some climatic influences have been alleged, and it is quite possible that they may occur with greater frequency in certain districts, but evidence is wanting on this point. It is amusing to note, however, that it has been said that gall-stones are most common in the winter. Seeing that old women, in whom they are most often found, die more frequently at this than any other period of the year, it is true, but as remarkable a statement as that of a well-known physician, who said that tinia tonsurans occurs with greater frequency in fair-haired children.

It has been said that imprisonment predisposes to gall-stones, on which point the following passage occurs in Thudichum:—

Soemmering states that he found gall-stones in the bodies of most females and males who died in the prisons of Mayence and

* "Principles and Practice of Medicine," edited by Pye Smith, Vol. ii., p. 504.

† Thudichum.

Cassel. Bouisson also found them not rarely in the bodies of prisoners at Nismes and Montpellier, but not so often as had been stated by Soemmering. Besides these general statements, no data are in existence upon which to found any positive assertion, and, consequently, we are obliged to reject the hypothesis that imprisonment is favourable to the development of gall-stones.

And long-sleeping has been accused as a cause by Hoffmann, Van Swieten, and Haller.

In none of the text books in general use have I found insanity mentioned as a predisposing cause, but Mr. Jonathan Hutchinson* has lately remarked that gall-stones "were constantly found, for instance, in lunatics, especially melancholics, with no symptoms whatever."

Copland,† after mentioning sedentary occupations with rich and full living, names melancholic temperaments, with violent or depressing passions, under the causes favouring the formation of gall-stones. And recognizing the tendency to retardation of the secretions in the insane, he writes, when treating of insanity, "The state of the digestive organs, and especially of the biliary and the intestinal secretions, ought to be duly or even daily observed, and promoted whenever scanty or suppressed."

Dr. Goodhart,‡ in a recent article in "The British Medical Journal" on gall-stones, speaks of "stout people of sedentary occupation and high living" as the generally accepted condition of life believed to be present with cases of gall-stones, and then gives his own experience, which is in a contrary direction. He lays some stress on "the influence of mental worry in the production of gall-stones," concerning which he writes: "It seems likely enough that the lessening of the nervous flow, which must result from nerve exhaustion, may so retard the function of the abdominal viscera as in a true, albeit a vaguely-apprehended, manner to render the liver sluggish, and the various constituents of the bile would be then improperly formed, and some—as, for instance, the cholesterin—might become disproportionate in amount or thrown out of solution." He further adds: "I venture to suggest that errors of commission in diet have very little indeed to do with the production of gall-stones, and that their occurrence may be anticipated under any diet in a certain proportion of neurotics."

But "mental worry and anxiety" are the fashion of the

* Medical Society of London, *l.c.*

† "Dictionary of Practical Medicine," 1866.

‡ "British Medical Journal," Jan. 30, 1892.

day; the number of diseases that owe their origin to this cause is yearly increasing at an alarming rate, and we shall probably soon have "all the ills that flesh is heir to" put down to mental worry. At the same time, I do think that the nervous system may exercise some influence on the production of gall-stones through a general lowering of vital activity. In old age vital functions are depressed and there is a sluggish flow of the secretions of the body, and this would, I believe, be increased by the pathological conditions that produce insanity, and thus considerably aid the formation of biliary concretions.

A large number of the conditions that have been mentioned are present in lunatic asylums. In the cases now brought forward we have advanced age in females, combined, for the most part, with a sedentary and depressed condition, and the general dulling of the system associated with insanity. It may be mentioned that gall-stones do not appear to be more frequent in cases of melancholia, as might have been expected, for that form of insanity existed in not more than half the number of cases, and in some there was acute mania throughout the whole course of the disease. Mr Hutchinson's statement is, therefore, not entirely carried out. Concerning the diet of the patients, it may be remarked that it is a liberal one, and is more of a carbohydrous nature than a nitrogenous, starch, sugar, and fats entering largely into its composition. From what has been quoted, it appears that most authorities consider an excess of fats and sugars one of the most powerful predisposing causes of gall-stones, but this is directly opposed by Roberts and is apparently not believed in by Goodhart. As already noticed, half the cases were markedly emaciated, and only three were abnormally stout. The patients are in bed from eight p.m. to six a.m., but this would not represent ten hours of sleep in some of the cases of acute mania.

I have at present only referred to the causes predisposing to gall-stones, and not to the actual formation of these bodies, but there is a point in connection with the latter that may bear an important relation to our subject. Most authorities give as one of the starting points for gall-stones, plugs of mucus in the gall bladder, and Fagge goes so far as to state that in all cases "the immediate origin of gall-stones is apparently a little mass of mucus; to this bilirubin is attached, and so a nucleus is formed upon which cholesterin is slowly deposited."

I believe it to be an established fact that lunatics are particularly liable to catarrhal affections. We see this in sore throat, colds, bronchitis, and the frequency of pneumonia, which disease is one of the commonest causes of death in lunatic asylums. Remember, too, how severe the epidemic of influenza, a disease presenting catarrhal symptoms, has recently been in these institutions. Also attacks of diarrhoea are by no means uncommon. A catarrhal condition of the mucous membrane of the gall bladder probably exists with the same conditions elsewhere; there is then an increase of mucus secreted from that membrane. This being the case we have a further cause for our greater frequency of gall-stones in the insane. It may be mentioned that an actual inflammation of the gall bladder is mentioned by Austin Flint as a possible cause of gall-stones. The cause of the liability of lunatics to these catarrhal attacks is somewhat apart from the subject of this paper, but perhaps the exposure to draughts, to which these patients are liable, associated with the lowered bodily condition and perverted nerve action already referred to, may have much to do with their onset.

I have not brought forward gall-stones as a cause for insanity, nor shall I attempt to prove anything of the kind. I will merely observe that Murchison,* in speaking of the consequences of gall-stones when retained in the gall bladder, says, "It is very possible also that in persons of a nervous constitution they may be a centre of irritation from which may arise uneasy sensations and symptoms of actual disease in distant parts of the body, with great mental depression and hypochondriasis. Several cases which have been under my care have served to impress me strongly with this opinion."

My cases include only women, and the percentages of cases in which gall-stones occur holds good only for female lunatics. I have made inquiries from my colleagues as to the frequency with which they have found gall-stones in male patients, and am told that they are seldom found, probably not in one per cent. This agrees with Mr. Cooper's results at Highgate. Although the actual number may correspond with the accepted frequency in males, yet the proportion which this holds to that in females is not by any means so. As already has been said, all modern writers agree that gall-stones are of greater frequency in women

* *l.c.*, p. 543.

than in men, but do not give the proportion. According to the authorities, however, quoted by Thudichum, the difference in the two sexes is not great, for he says:—

Morgagni compared a great number of cases, and came to the conclusion that these concretions are almost as common amongst men as amongst women.

It nevertheless became a current opinion that women were more subject to gall-stone disease than men. This belief was first decidedly expressed by Ch. Etienne ("De dissect. part. corp. hum." lib. III., cap. 42), and was adopted and defended by Fr. Hoffmann ("De bile corporis," Hallæ, 1704), by the celebrated Haller ("Elementa physiologica," Lausannæ, 1777), and Sœmmering. Of the 91 cases examined by Walter the majority, namely 47, belonged to the male sex, and only 44 were females. For practical conclusions these proportions may be considered equal.

Out of 45 cases observed by Wolff (*l.c.*, p. 1) 15 were males and 30 females, giving a proportion of one to two.

Out of 620 cases analysed by Hein, 243 were males and 377 females, making a proportion of about two to three.

The proportions just given are very different from those found existing after death by Mr. Cooper. They are apparently from living persons, and it is possible that the want of agreement is dependent upon the fact that in men, owing to their more active life, gall-stones when present are more liable to produce symptoms and so their recognition.

Hein is also quoted in Fagge's "Medicine" to the same effect. If this were true in our lunatics we ought to find gall-stones present in something like 24 per cent. of the bodies of males examined in proportion to the 36 per cent. found in the females. What is the cause of this great difference in the sexes? Fagge, writing on the greater frequency in women, says: "Perhaps this is due to the fact that females over the age of forty are particularly apt to gain flesh and to lead sedentary lives." Although the latter may be true of asylum and infirmary patients, yet the former is not generally so. In this connection it must be remembered that the male inmates of an asylum do not, as a rule, live to anything like the age of the female, owing greatly to the fact that general paralysis is far more frequent in men. The men, therefore, are not subject to the same conditions of life, such as diet, etc., for so long a time; and on the whole the men lead a much more active life, and, perhaps, are liable to become more restless and excited than the majority of the women.

There is one more point on which I wish to touch. It is a remarkable fact that cholesterin, which enters so largely into the composition of gall-stones, is an important constituent of normal nervous tissue, where, according to Halliburton,* it is present in myelin or the white substance of the medullary sheath. From Baumstark's † analysis of the chemical composition of the brain we learn that in every 1,000 parts of the solids cholesterin occurs as follows:—

		In the white substance.	In the grey matter.
As free cholesterin ...	...	18·19 parts	6·3 parts
„ combined cholesterin ...	...	26·96 „	17·51 „

That is to say that cholesterin exists to the extent of rather more than 45 parts in the white substance and 23 parts in the grey to every 1,000 parts of the solid matter of the brain. There is evidently a serious mistake made by Allchin in Quain's "Dictionary of Medicine," where he says that cholesterin forms as much as "51·9 per cent. of the solids of the white matter and 18·6 per cent. of the solids of the grey matter of the brain." It is probable that here 1,000 parts is meant instead of 100 as written. It occurs also in far smaller quantities in the blood, and only to a slight extent in normal bile.

Cholesterin is generally regarded as a product of the metabolism of the nervous tissues, which should be eliminated by the liver in the bile, and, according to Flint, passes from the body in the form of stercorin. McKendrick ‡ says: "The mode of origin of cholesterin in the body has not been clearly made out; whether it is formed in the tissues generally, in the blood, or in the liver is not known, nor has it been determined conclusively that it is derived from albuminous or nervous matter. It is also doubtful if we can regard it as a waste substance of no use in the body, as its presence in the blood corpuscles, in nervous matter, in the egg, and in vegetable grains points to a possible function of a histogenetic or tissue-forming character." Cholesterin in the bile appears to be increased in amount in febrile and wasting conditions, a fact that may have some connection with diseases such as phthisis, and, perhaps, I may include insanity.

I do not know whether it has been shown that cholesterin

* "Chemical Physiology and Pathology," 1891, p. 531.

† "Lehrbuch der Physiologischen Chemie," Olof Hammarsten, 1891.

‡ "Physiology," i., 147.

is increased or diminished in the brain of the insane. One might be inclined to think that in the brain it would be diminished in amount on account of the replacement of the nerve fibres by connective tissue with a compensatory increase in the biliary secretion owing to its elimination from the body. This would be an exceedingly interesting subject for investigation, and one which might throw some light on the subject which I have ventured to bring before you to-day.

NOTE.—Cholesterin is probably an ultimate product of certain tissue changes, which has to be got rid of, but whether it is solely manufactured in the nervous system is not clear. In the blood it has been proved to exist in the red corpuscles, and not, so far as I know, in the fluids of the blood. Seeing that the red discs are incapable of taking up and conveying a substance such as cholesterin from one part of the body to another, and as the difficult subject of the existence of this substance in the white corpuscles does not appear to have been worked out, it is impossible to say if any of the cholesterin in the bile is derived from the nervous tissues. It may be noted, however, that Drs. Noel Paton and Balfour consider that the cholesterin in the bile owes its origin entirely to the destruction of blood corpuscles, for in observations on the composition of human bile, they say, "In connection with the cholesterin and lecithin there can be little doubt that these are derived from the stroma of the red corpuscles. The vague view that they are derived from the nervous system, taught by certain physiologists, is based upon no better evidence than the fact that both substances occur in these tissues." ("British Medical Journal," May 7, 1892.) The former, writing again in the number for May 21st, says, "From the well-known fact that an enormous destruction of hæmocytes goes on in the liver there is at least a fair basis for the view that the cholesterin and lecithin of the bile are derived from these constituents in the corpuscles." Whether this view is correct or not, it raises an interesting question. In those persons in whom gall-stones occur, is there an excessive destruction of red corpuscles taking place in the liver by which not only the cholesterin, but also the pigment, is increased in amount?

Note upon Hæmatoma of the Dura Mater. By EDWIN GOODALL, M.D.Lond., B.S., M.R.C.P., Pathologist and Assistant Medical Officer, West Riding Asylum, Wakefield.

The following facts appear noteworthy as bearing upon the morbid condition going by the names "hæmatoma of the dura mater" and "pachymeningitis hæmorrhagica interna." In the course of recent experiments I have had occasion to incise the dura mater of (anæsthetized) rabbits and apply Sp. Vin. Gallic. or diluted cantharidin to the cerebral cortex through the aperture so made. On killing one of the animals after the lapse of 48 hours and opening the skull almost the whole of the right hemisphere (that

operated upon) was seen to be covered with dark-red clot. This term is justified by the appearance of the exudate, whatever its origin may have been. On incising and reflecting the dura mater it was found that the clot lined the inner surface of that membrane, and had no connection with the subjacent structures. The vessels of the dura were unduly prominent and numerous, but there was no swelling of the membrane, and, apart from the clot, its inner surface was free from exudate. The clot was raised without difficulty, and washed gently in water; the colouring matter came gradually out, and left a delicate, greyish-pink, translucent, continuous pseudo-membrane of sufficient consistence to permit of manipulation. This was divided into two portions, which were stained with hæmatoxylin and safranin respectively. Microscopically the pseudo-membrane was found to consist of red and white corpuscles (the former in considerable majority), a meshwork of fibres (fibrin, apparently), and an amorphous substance, uniformly stained.

In this particular instance the irritant used was Sp. Vin. Gallic., which was also employed in the same amount in three other instances; in two others dilute cantharidin was applied. The five animals last mentioned were killed at dates ranging 24 hours to six days after the operation, but in no instance was there an inflammatory exudate upon the dura, or naked-eye evidence of inflammation of that membrane. Yet in some of these animals the duration of life after operation, and the strength of the irritant used, were greater than in the case of the animal presenting the blood-clot. These facts, together with the consideration that the measures employed were scarcely such as would bring about inflammation of the *dura* (which received but slight injury), render it difficult to explain the morbid appearance described above upon a theory of pachymeningitis *plus* irruption of blood into an inflammatory exudate. There is, moreover, the further fact that the red corpuscles considerably outnumbered the white; the latter formed only a small portion of the corpuscles visible. The large number of red corpuscles is explicable on the supposition of blood-extravasation into an exudate, but the small number of white would, on that hypothesis, still be unexplained. Even if we suppose that many of the latter underwent destruction shortly after the coagulation of the inflammatory lymph—thrown out as the result of pachymeningitis—the comparative scarcity is not, to my mind, accounted for. This paucity of white corpuscles,

indeed, is a most serious objection to the theory of pachymeningitis in the present case.

The blood-clot occurred in only one out of six cases, and I think it highly probable that in this particular case some vessel of the dura was cut accidentally when that membrane was divided, and that extravasation of blood upon the inner surface of the latter resulted. In consequence there was formed a blood-clot, pure and simple. Had the animal lived it is reasonable to suppose that organization of this clot would have taken place; to put the matter differently, this case presents the earliest stage of a hæmatoma of the dura mater. Possibly inflammatory exudation may sometimes constitute the earliest stage; but with this point I am not now concerned.

CLINICAL NOTES AND CASES.

Case of Cerebral Tumour. Read at meeting of Forfarshire Medical Society, 25th March, 1892. By JAMES RORIE, M.D., L.R.C.S.E.

A. A., æt. 60, from Dundee Combination Parish, admitted into the Dundee Royal Lunatic Asylum 1st Dec., 1891. Exciting cause cerebral tumour; predisposing cause, hereditary predisposition; symptoms those of senile paralytic dementia.

Statement.—Single; housewife and dressmaker; Protestant religion. First attack; cause unknown. Not epileptic; not dangerous to others; not suicidal. Her sister is at present in Fife and Kinross District Asylum. On admission patient was certified as follows:—

Medical Certificate I.—1. She is childish in her talk, has lost her memory, and had the delusion that her mother, long since dead, had gone out on a message, and she was wondering why she had not come back. 2. Her sister informed me that she often talked incoherently and often without any sense, and her conduct was childish, often singing and dancing.

Medical Certificate II.—1. She had entirely lost her memory; she had no idea of the day of the week or if it was morning or night. She was dull and stupid and did not understand questions put to her. 2. Her sister told me that being a dressmaker she attempted to make a dress and cut up the cloth into small meaningless pieces.

History obtained from her sisters. Has been going wrong for about four weeks. First symptoms observed were that she became stupid, and asked the same questions several times over, and doing other silly things. Has continued much the same up to the present time. An inability to look after herself has been steadily increasing. Her father died 32 years ago of typhus fever, and her mother nine years ago of bronchitis, age 72 years. Has four brothers alive and healthy, one died in infancy. Three sisters are alive and well, but one sister (next to herself as regards birth) is at present a patient in Fife and Kinross Asylum. Has had a good deal of worry and poverty since her mother's death. Habits as to drink quite steady; has always been a hard-working woman. Sleep very good—in fact, she sleeps almost day and night. Has taken food badly for some time past.

Physical examination made 3rd Dec., 1891. Hair light-brown, eyes grey, muscularity poor, weight 8st. 12lbs. Patient is an oddish woman with pale, flabby features, eyelids slightly puffy; dull, apathetic expression, and irritable, querulous manner.

Alimentary System.—Tongue clean; bowels regular; appetite fair.

Circulatory System.—Pulse 80, regular, very weak tension; heart sounds feeble. Second sound markedly accentuated and first sound inaudible in aortic and pulmonary areas.

Respiratory System.—Percussion resonant. On auscultation expiration prolonged, but nothing else discovered.

Urinary System.—A deposit of urates, S. G. 1030, acid; no albumen.

Nervous System.—1. Sensory: Tactile sense apparently normal, special senses normal; no hallucinations elicited. 2. Motor: Knee and plantar reflexes moderate. Motility somewhat impaired; complains of weakness in the legs in walking. 3. Cerebral and Mental: Intelligence impaired to considerable extent. Memory for both past and present events much impaired. Says she has been in this house for only three-quarters of an hour, and that her father died 12 years ago and her mother at the same time. Attention not sustained for any length of time. Speech fairly coherent. Has delusions that her sisters were very unkind to her, and called her names, etc., but none of a fixed nature. Sleep very good, patient falling asleep at any time during the day or night. Emotions depressed; volitional power very weak, patient being quite unable to look after herself; habits degraded.

Progress of Case.—Seven p.m., took tea. (Dec. 2.) Slept well but took no breakfast. (Dec. 3.) Taking food well, had good night. No marks on body; is of dirty habits. Seven p.m., has been quiet all day; has taken food pretty well; bowels regular. (Dec. 4.) About the same, but very irritable. Seven p.m., about same, takes food fairly well. (Dec. 8.) Seven p.m., takes her food well, and bowels regular.

From this date nothing occurred particularly to attract attention, till 8th Feb., 1892, except that the general paralysis and frailness steadily increased and the tendency to sleep got more marked, with increased mental weakness. This patient would walk along a corridor till she came to a door, and would then come to a stand and fall asleep standing. Sitting down to her meals she would drop over asleep in the act of taking her food. Another rather exceptional symptom, and apparently indicating a feeling of giddiness and insecurity, was that while she was sitting on a chair *if anyone passed quickly in front of her* she would lose her equilibrium and fall on the floor.

On the 8th Feb., 1892, at 6 p.m., she was seized with a sudden fainting fit, but rallied under administration of Digitalis and Sp. Ammon. Arom. (Feb. 9.), at 11 a.m. was in a very drowsy state. Had taken no breakfast, pulse was weak and irregular, and so digitalis, etc., were repeated. Paralysis seemed rapidly advancing, patient passing excreta apparently involuntarily; took no dinner. At three p.m. paralysis was more marked. Face perceptibly drawn to left side; gradually got weaker and died at 3.15 p.m.

Post-mortem examination made 11th Feb., 1892, at 10.15 a.m.; and recorded by Dr. P. H. Boyden.

General Appearances.—Body obese; pupils equal, three-fourths dilated. Rigor mortis slight in upper, well-marked in lower limbs. Hypostatic lividity well marked in back. Two superficial bed-sores, one situated over each tendo Achillis.

Head.—Scalp easily detached. Calvarium slightly thicker than normal and irregular in outline, being slightly constricted at anterior edge of squamose suture and most marked on left side. Dura mater non-adherent except to a slight extent at vertex. Pia-arachnoid thin, rather congested, and was stripped off with some difficulty. Meningeal and cerebral veins congested. No fluid in sub-dural or sub-arachnoid spaces. Surface of brain flattened. On making first horizontal section the grey matter was found pale and slightly atrophied. In right centrum ovale was a gelatinous softening the size of a marble, and a similar condition was observed at the tips of both frontal lobes. On slicing down to the level of the basal ganglia a large tumour was cut through, $2\frac{1}{2}$ inches by $1\frac{1}{2}$ inch, of a dull reddish-grey colour, occupying the site of the basal ganglia on both sides, along with that of the corpus callosum and fornix, with the exception of a small portion of posterior part of the right optic thalamus. It involved the whole depth of the basal ganglia, partially obliterating the lateral ventricles in front. In consistence it felt a little firmer than ordinary cerebral substance, and was apparently composed of interstitial tissues. A narrow tongue-shaped prolongation into the right frontal lobe was much softer, and presented a gelatinous appearance. In the left centrum ovale majus, and on a level with the large growth, was a smaller tumour, $1\frac{1}{4}$ in. by $\frac{3}{4}$ in., of an oval

shape, and of similar consistence to the other. No surrounding capsule could be made out. The lateral ventricles contained a moderate amount of clear fluid. The arteries at base of brain seemed healthy. Pons, medulla, and cerebellum were normal. Floor of fourth ventricle healthy. Striæ acousticiæ fairly well marked.

Thorax.—Lungs non-adherent. Pericardial sac contained a small quantity of clear fluid. Surface of heart loaded with fat. Left ventricle $\frac{7}{8}$ in. at thickest part. Chamber empty and contracted. Mitral orifice admitted tip of index finger. Valve shrunken and somewhat thickened. Wall of right ventricle fairly well nourished. Tricuspid orifice admitted three fingers. Aortic valve competent. A few small patches of atheroma on inner coat of aorta. Both lungs on section showed hypostatic congestion, with slight œdema of upper lobes. At both apices were the remains of old phthisis in shape of fibrous cicatrices, and in right apex was a minute cretaceous nodule.

Abdomen.—Abdominal parietes covered with fully an inch of fat. Stomach and intestines healthy, but loaded with fat. Liver apparently healthy. Gall-bladder filled with bile. Spleen small, and on section pale in colour (fatty). Both kidneys lobulated, and on section found considerably congested. Capsules stripped easily. Bladder empty. Uterus showed three hard fibroids size of hazel nuts (extra-mural), and a small pedunculated mucous polypus projected through external os. Weight of organs in ounces:—Total encephalon, $48\frac{1}{4}$; pons, medulla, etc., $5\frac{1}{2}$; heart, $10\frac{1}{4}$; right lung, $15\frac{1}{2}$; left lung, $12\frac{1}{2}$; liver, $39\frac{1}{4}$; spleen, 5; right kidney, $4\frac{1}{4}$; left kidney, $4\frac{1}{4}$.

Microscopical examination of tumour showed that the more dense portion was composed of large nuclei, spindle-shaped, and spider cells indicating its sarcomatous character, viz., a myxoma according to Gowers' classification. Probable time of growth, five months.

This case it will be seen is remarkable from the paucity of symptoms of diagnostic value in a tumour of comparatively large size. One of the most prominent symptoms in such cases is headache, and of this we have no evidence either in the history of the case previous to or since admission into the asylum. As to the existence of optic neuritis, there was no opportunity of ascertaining. The most striking symptoms were those of coma and somnolence and gradually progressing weakness, but these again are almost characteristic symptoms of progressive senile paralysis, where the only post-mortem pathological change revealed in many cases is cortical atrophy. The existence of giddiness was inferred from the patient frequently falling off a chair when

anyone suddenly and quickly passed her. The symptoms conspicuously absent, therefore, were headache, vomiting, marked focal symptoms, speech affection, convulsions, and affections of sensibility.

It must be remarked, however, that the demented state of the patient prevented a complete analysis of the symptoms being made in a satisfactory manner.

NOTE.—In the post-mortem examinations made in Dundee Asylum the occurrence of well-marked cicatrices, often having small cretaceous nodules in their centres has for a considerable time been noted, and seems worthy of further investigation. They seem capable of only one explanation, namely, that they mark the sites of what have previously been cavities; in other words, that the patients have previously suffered from phthisis. It is well known that in many instances chronic diseases disappear on the occurrence of insanity, and it would be interesting to ascertain how far the healing up of these cavities was due to this cause.

Case of so-called Katatonia. By R. PERCY SMITH, M.D.,
F.R.C.P., Bethlem Royal Hospital.

F. A. C., æt. 32, admitted to Bethlem Royal Hospital May 20th, 1889, single, formerly a governess. Supposed cause, "Anxiety."

Family History.—No phthisis, alcoholism, diabetes, insanity or other disease.

Previous History.—Always reserved and retiring; never had rheumatism or chorea. Has had fainting fits when in for examinations; no epileptic or infantile fits, measles, or whooping cough in childhood. No syphilis and no other disease except occasional sore throat. Sober; no previous attacks. Has been treated unkindly by her people at home in consequence of having changed her religion to Roman Catholicism. Catamenia usually excessive; missed the month before last.

Present Attack.—Five or six months ago began to prefer to lie in bed; would not eat or speak; thought her sister kept back her letters and went to her boxes. Thought she was pregnant, though the catamenia were regular. Not suicidal or dangerous; no hallucinations.

Certificates.—(1) "Refuses to speak. Have seen her furiously rushing about the room on her knees.

"Her mother tells me she refuses to allow her clothes or linen to be changed, contrary to her former cleanly habits."

(2) "She is in a state of stupor and speechless; she lies on the bed, and will make no answer by word or sign to my questions. At

times she makes spasmodic and apparently purposeless movements, and makes inarticulate sounds. She is apparently unable to comprehend at all completely what she sees or hears.

"Her mother tells me that she has not spoken for weeks, and that her habits and manner have changed greatly. Her sister tells me that she is passive and takes no interest in her old occupations and amusements."

On admission.—Of small stature and not well developed for a woman of her age. Pale face, of dark complexion. Had a fixed and confused stare; pupils dilated equally, but acting to light and accommodation. Her mouth was every now and then spasmodically puckered up. When first seen she would not speak for some ten minutes or so. Her knee jerks were very active, and on tapping the patellar tendon repeatedly the leg was forcibly extended and passed into a state of clonic spasm. On pressing up the foot, ankle clonus was found to be present. She then spoke for the first time, and tried to explain that the phenomenon was due to the tendons and blood running backwards and forwards, but her reaction to questions was slow and hesitating. Previous to speaking she kept her jaws closely clenched together. When about to speak sometimes the muscles of the mouth contracted spasmodically, and she was unable to speak till this passed off, after lasting for one or two seconds. Her lips were very tremulous. When first seen her limbs were in a condition almost cataleptic, but they did not remain for long in the position in which they were placed. She complained of some frontal headache, and also of pain over the mastoids, also in the neck along the line of the carotid artery; said she had pain in her shoulders, legs, and back, due to the blood running backwards and forwards in the tubes. Noticed bad smells, which she thought were possibly created to annoy her. Had nasty tastes in her mouth, and thought her food tasted peculiar. She considered someone had tried to poison her at home. Apparently had no hallucinations of sight or hearing. Thought her throat had become constricted, and for this reason she swallowed large pieces of food to keep the passage open, also thought this imaginary constriction interfered with her breathing. This feeling of narrowing of the throat was always present, and not coming on from time to time. Tongue clean and steady, appetite good, bowels regular, temperature normal, common sensibility normal. Thought that the bones about her wrist were soft and had a great tendency to break. No defect of sight or hearing. Memory for both recent and remote events weak. Heart and lungs normal.

The following are some of the notes from the case book:—

May 27.—Has spoken very little since last note.

June 4.—Is in a condition almost of stupor; will not speak, and is more or less cataleptic. She does walk a little of her own accord, but like one feeling her way in the dark, and walks on her toes,

the heels being quite raised from the ground, and the hands being held up.

June 30.—Does not yet show any improvement beyond having gained flesh, and is fresher in appearance than on admission. Still walks about in the same shuffling manner, saying over and over again, "I must be natural," in a rather monotonous voice, and says she will fall if she doesn't keep moving. She often stops in the middle of a word or sentence. Still in a semi-cataleptic state, holding her arms up in one position. She however manages to feed herself, but often eats standing or moves about while doing so.

July 29.—Takes no notice of anything, and constantly keeps her face covered with her dress or hands, as if she had some delusion respecting herself.

August 29.—Of late there has been an improvement in appearance, and she now answers fairly well when spoken to, and when told firmly not to stammer in her speech she does not do so, or at least to nearly the same extent as formerly, and she appears to take in more than one gives her credit for.

September 29.—Has of late become excited and emotional, with outbursts of causeless hilarious laughter, and very dirty in habits. She had for this reason to be moved to another ward.

October 19.—No improvement; speech and manner the same. Has to be washed and dressed; at times allows the saliva to trickle down her clothes.

October 31.—No change whatever.

November 27.—No change.

1890, January 15.—Speaks more than formerly. Appeals to an attendant whom she calls "Sabina" before every action, and requires her sanction before she says or does anything.

March 10.—Of late laughs at very little provocation; sings and dances at the command of "Sabina," who has power to prohibit all her actions.

April 13.—No improvement.

May 13.—Removed to a quieter ward again. Repeats all day the same sentence, "I must mind Letitia," in a monotonous voice and as if scanning. Takes no notice of anyone.

On July 29 I made the following note:—Patient is now fat and in good condition. Her expression varies, sometimes she laughs, and at other times looks annoyed, but her face as a rule is devoid of any marked expression, and she appears occupied with her own thoughts. She generally adopts rigid positions of the hands, the fingers being extended and approximated. There is a slight cataleptic tendency, but she does not long retain the position in which her hands or arms are placed. She generally stands with one foot in front of the other, balancing herself from one to the other incessantly. Knee jerks exaggerated; frequently before beginning to speak a sudden fibrillar twitching

affects the lip muscles. She will not protrude her tongue when told. If a hand be laid on her shoulder or an attempt made to open her mouth she will say something to the following effect: "Doc—Doc—Doct—Doct—Doctor Smith ta—ta—ta—take your hand away." This repetition of the initial syllable is very constant. At other times she seems to drop terminals, *e.g.*, "Doc—Smi—ta—your han—aw—." She often repeats the same sentence over and over again to herself; recently it has been "I was brought up as a lady." She certainly does not appreciate her surroundings, and does not occupy herself. She takes food well. Is unclean in habits. She mistakes the identities of the people around her, and has addressed the medical officers by titled names. She seems to be passing into dementia.

September 26.—For some days has been very noisy; laughs at anything and everything, shouts out absurd remarks, apparently without much meaning. Hesitation in speech not so marked.

November 19.—Discharged uncured; transferred to Camberwell House.

By the kind permission of Dr. Schofield I was able to see her on April 29, 1892, at Camberwell House, and I found the following condition:—Still has the same tendency to "verbigeration." Her facial aspect is rather expressionless, with a deficiency of the usual folds at the corners of the mouth, but occasionally while talking to her she bursts into laughter, and it is then evident that there is no real loss of power in the muscles, and there is now no marked tremor of lips before beginning to speak. There is some tremor of the tongue. The grasp of the hands is equal, but they are still held somewhat stiffly with the fingers approximated. When asked to walk she took very large steps as if she were trying to step over something, and she is said not to walk on the tips of her toes as formerly. She is liable to occasional lapses into the stupor she formerly had. She is still somewhat cataleptic, her arm remaining in the position in which I placed it while talking to her. The pupils are equal and act to light. The knee jerks are exaggerated. There have been no fits of any kind. There is some analgesia, but no anæsthesia. Although she was tidily dressed when I saw her, the nurse told me that she is often destructive to clothing, and is dirty in habits. She recognized me, but her memory appeared to be weak for past events. She remembered "Sabina," but could only tell me the real name of one of the nurses at Bethlem. She remarked to me, "Sometimes I fight, and *he* fights me," and she talked incoherently of "Albert." She is said to mistake one of the nurses for a man, and names her Albert. She also has a new name for each of the nurses. She takes food well and is in good general health. She told me that her bones were now all right, but said her two brains had been pounded. She told me she was a physician. I could not find any evidence of hallucinations.

This case seems to agree with the description of katatonia, and had in the most marked degree the symptom which is said to be absolutely special to it, namely, verbigeration; in fact, if cases with this symptom so prominently present were found to be of very common occurrence and always in association with fixed attitudes or spasmodic movements and stupor, one would feel inclined to allow the necessity, or at least the advisability, of adding another term to the already chaotic list of mental diseases. In the seven years I have been in residence in Bethlem Hospital, however, I do not remember to have seen an exactly similar case among over 2,000 admissions, though of course one is perfectly familiar with cases of stupor associated with catalepsy, or with fixed and rigid attitudes, and with liability to impulsive outbursts. With regard to the special symptom of verbigeration, I have at present under care a patient suffering from acute melancholia, with refusal of food and general resistance to all interference, and of a perfectly well recognized type, who repeats the same sentence over and over again, generally "I never said anything of the sort," or "I didn't say so at all," and who, therefore, must be said to have verbigeration, but to say that he is suffering from "katatonia" in consequence of this would seem to me absurd.

Dr. Goodall, in the last number of the Journal, refers to the fact that the term katatonia was not used in Bethlem Hospital in his experience, and although the patient whose case I have described (and who was admitted just after he had left us) was spoken of while she was here as one agreeing with the description of katatonia, yet I hesitated to definitely apply to her case a term which seemed so unsatisfactory. With regard to the attempt of Séglas and Chaslin to classify the motor symptoms of this condition under the head of hysteria, I cannot see that this brings us any nearer to their real nature, as I am not aware that anyone has yet thrown light on the true pathology of hysterical paralysis or spasms. One may, however, point to the fact that my patient had a feeling of narrowing of the throat and of difficulty in breathing, which is no doubt allied to the *globus hystericus*. The fact that the advocates of katatonia as a special form of mental disease do not hesitate to speak of katatonic symptoms in other varieties of insanity—for example, in general paralysis—seems to me to be an additional reason against the use of the dubious term introduced by Kahlbau.

Case of Cocainism. By R. PERCY SMITH, M.D., F.R.C.P.,
Bethlem Hospital.

M. D., *æt.* 39, a trained nurse, was admitted to Bethlem Hospital May 29th, 1889, as a voluntary boarder on account of cocain habit, of which she was anxious to be cured. The history she gave was as follows:—She was a German by birth, and when at home in Germany she worked hard as a teacher, her father being a schoolmaster. At the age of 10 years she began taking morphia injections for neuralgia, and went on doing so for 10 years, when she stopped it till four years before admission. A chemist then gave her some paregoric for intercostal neuralgia, after which she began to take laudanum, and continued it for five or six weeks. A year later she had hæmatemesis, which was thought to be due to gastric ulcer, and she again took laudanum to relieve the pain. This continued for about 10 weeks, when she got well and ceased taking the drug. In the October before admission she had two attacks of hæmatemesis, when a doctor prescribed cocain. This gave her great relief, and she went on taking it; she began with three-quarters of a grain and gradually increased it up to eight or ten grains as a usual dose, sometimes taking 24 grains and occasionally up to 36 grains at a single dose. She recognized that it was a bad thing to go on taking it, but she felt so utterly miserable when she tried to do without it that she always sooner or later broke her resolve not to take any more. For the first six hours after a dose of 10 grains she felt more able for and inclined to work—that is while sitting, *e.g.*, at writing or needlework—but at such times she could not go about, as the drug produced a feeling of weakness, and probably from her description it was a condition of inco-ordination in attempting to walk. At about the end of five or six hours she felt loss of inclination for work and could not apply her mind to anything, and so lay down to rest, feeling tired and exhausted, but was quite unable to sleep, and simply tossed about in a restless condition. About a quarter-of-an-hour after a dose, she usually suffered from vertigo for about an hour and from severe palpitation for some hours. She also had great dryness of mouth and thirst. Anorexia was also produced, so that she took nothing but milk and water. After a large dose there was difficulty in swallowing.

Mental Symptoms.—According to her account she had hallucinations of sight and hearing, so that she imagined she saw people walking about her room, principally those whom she knew, and also heard the voices of friends and others talking to her. She carried on conversations with these imaginary visitors and used to laugh at their jokes, the act of laughing arousing her from a sort of waking dream, so that she came to herself again. On one occasion she thought she saw two policemen at the door of her room, and

thought (before admission) they had come to take her to an asylum. She recognized that all these things were hallucinations. Her reasoning power did not seem to be affected, for, when asked how she knew that these were hallucinations, she said that her landlady often came and talked to her in French or German, although she did not really know these languages; therefore, she inferred the whole thing must be imaginary. She, from this, inferred that other like impressions were also imaginary, but expressed considerable difficulty in making out what was real and what fancy. She complained of frontal headache. She told us that she had tried to break herself of the habit by replacing the cocaine by morphia, but that this was of no avail, as the morphia had ceased to have any effect.

In the family history there was no evidence of any insanity, but there was the important fact that her mother suffered from the morphia habit. In the previous history, as given to us by her friends, there was no account of any disease other than those given in the patient's own history of herself. She was said to have been a very cheerful and good nurse, and very patient. There appeared to have been some home anxiety, her father having married a second time, and, perhaps, having been rather unkind to her. The catamenia had been irregular. Before admission to Bethlem she had been to several general hospitals to try and get cured of her habit, and quite recently she had been in St. Thomas's, where she improved very much, but became discontented. There had been no tendency to suicide.

On admission she was somewhat anæmic, and appeared pre-occupied, and suffered from the hallucinations described above. There were no hallucinations of taste, smell, or common sensation, and there were no delusions. She conversed quite intelligently. Her memory for recent events was slightly impaired for details, but the remote memory was quite good. There was no affection of gait, the grasp of the hands was equal and good, and the knee-jerks were equal and normal. Her appetite was good, there was never any dyspepsia or gastric trouble, the bowels were confined. She suffered a good deal from facial neuralgia, especially at night, and for this she had quinine and gelsemium, with local application of chloral hydrate, thymol, and camphor in equal parts, and under this she improved. She was somewhat fidgety, and was bad-tempered, indolent, and untidy, and never could be got to occupy herself in any way. She wanted to be allowed to smoke cigarettes, and used to ask for brandy at night. With complete cessation from the cocaine habit the hallucinations disappeared, and then she was anxious to leave the hospital. There was some difficulty in persuading her to remain voluntarily when the craving for the drug returned, but she was reasonable enough to see that it was almost her only chance of improvement. At the end of June, in order to render her voluntary restraint as little irksome as possible

she was sent to our convalescent establishment, and there she made steady progress. She took for a time liq. arsenicalis, and then ferri et ammon citras, with benefit to her general health. The craving for cocaine seemed to leave her, and she was discharged from the hospital early in September. In the following December she wrote to me: "I found after I left the hospital that at different times, when I felt tired or in pain, the craving for opiates returned so strongly that I have given up all idea of working as a private nurse in some institution, but am going where the temptation, if it comes, cannot be gratified. Thank you most sincerely for having at the most critical time helped me to overcome a weakness that was fast ruining me."

I have not since heard of her and, therefore, should like to infer that she has kept well. One is, perhaps, not justified in assuming that with any certainty, but it is at least highly probable that if she had had a return of the malady she would have again sought the help of the hospital.

Remarks.—This case differs from the history usually given in cases of cocainism in that the habit was not acquired as the result of an attempt to cure the morphia habit, but resulted from the drug being in the first instance given medicinally; the remedy, however, became worse than the disease. Fortunately the habit did not become sufficiently firmly established to lead to permanent mental disease, though the patient had come perilously near to certifiable insanity. The fact that she had previously been able to overcome the morphia habit was probably a strong fact in favour of her being able to resist cocain, though the latter drug seemed to exercise a greater fascination over her. There was no evidence of abnormal sexual excitement or of sexual hallucinations as in the cases described by Dr. Conolly Norman in the last number of the Journal. Hallucinations resulting from the use of cocain are said to be often of a terrifying nature, but were not so in this case. The very large doses occasionally taken by her are worthy of note, though 20 grains are said to have been taken with suicidal intent without fatal effect. The case is important as illustrating the value of the privilege of patients being able to enter institutions for mental disease voluntarily. No medical man probably would have ventured to certify her, and without some control other than her own will she would most likely have drifted from bad to worse.

OCCASIONAL NOTES OF THE QUARTER.

Hanbury v. Hanbury.—*Insanity as a Bar to Divorce.*

The report of the appeal in this case, as given in *The Times* of May 11, 1892, will be found in "Notes and News," as in this report all the essential facts are referred to, and the very distinct judgment of the Master of the Rolls is fully given.

It has long appeared to us that there were instances in which insanity might properly be pleaded as a bar to divorce, but the whole question is so mixed up with sentiment that the clear issues are hardly to be seen. Probably all of our readers have had patients under them who, as a result of brain disease, have suffered from the most overpowering lusts; neither dread of punishment nor higher motives have had any power of restraining, and yet too many such patients might appear to be responsible because they possessed many, if not most, of their faculties.

In these persons the lust was the direct result of brain disease, for which they could not be considered responsible, and it appears to us that in some such cases it would be just—we do not say convenient—that acts the results of insanity should be looked upon as acts for which the person should not suffer. We have known women in the earlier stages of mania, or when only partially recovered from a mental illness, commit acts of adultery for which they were neither morally nor legally responsible, yet so far no case has been tried on this plea.

The weak points in the case of *Hanbury v. Hanbury* were that the patient was not only immoral, but also intemperate in his periods of mental excitement, and the answer to the plea of insanity was that the insanity was but the insanity of acute alcoholism; the second weak point was that the term "folie circulaire" was introduced, and neither judge nor jury knew the term, and thought it a form of disease specially invented for the trial.

In the first trial, the late Sir C. Butt urged strongly that as the respondent knew that he was committing adultery he was therefore responsible. He also pointed out that even though it could be shown that he was insane at the time he committed the acts of adultery and cruelty, there was as yet

no precedent for staying the divorce proceedings on that account.

In the appeal Lord Esher went further, when he said "there remained a question of law." "Assuming a diseased mind, and that the diseased mind gave him certain impulses—he would not call it an uncontrollable impulse, as he did not know what that meant in such a case as this—the respondent knew what he was doing and that he was doing wrong. An act of adultery was a culpable act against the wife. He was prepared to lay down as the law of England that whenever a person did an act which was either a criminal or culpable act, which act, if done by a person with a perfect mind, would make him civilly or criminally responsible to the law, if the disease in the mind of the person doing the act was not so great as to make him unable to understand the nature and consequences of the act which he was doing, that was an act for which he would be civilly or criminally responsible to the law. Consequently, even though the respondent's mind was diseased, he was as responsible to the law as if his mind was not diseased." He left the other question untouched as to what the effect would have been if it had been proved that the respondent did not know the quality of his act. The general feeling expressed in the daily papers was that insanity is not now, and should not in future, be looked to as a bar to divorce. We have, however, strong views that in some cases gross injustice is done to mental sufferers and to their families by not recognizing that disease may be more powerful than interest, affection, or reason.

Alleged Impulsive Insanity.

An interesting case of alleged impulsive insanity was recently tried before the Sessions Judge at Belgaum, in the Presidency of Bombay. The prisoner, a native, was accused of having murdered a child for the sake of her ornaments. There was no doubt as to his guilt. The body of the child was found with its throat cut, its hands severed, and the bracelets removed, and it was shown that the prisoner had pawned the bracelets in question for a few rupees. Under these circumstances only the venerable plea of insanity was available. The accused alleged that at the time when he committed the deed he was tormented by a pain in the stomach, which irresistibly impelled him to murder the child,

and invited the Court to ascertain by an operation the truth of his plea. The Sessions Judge sentenced him to death, and the High Court of Bombay supported this decision on appeal. In Sir Woodbine Parish's work on Buenos Ayres a somewhat singular case is recorded (*Cf.* Mayo's "Expert Evidence," pp. 60-61). "Some years ago Juan Antonio Garcia, aged between thirty-five and forty, was executed for murder at Buenos Ayres. He was a person of some education, and rather remarkable for the civility and amenity of his manners. When the *vento norte* (north wind) set in he appeared to lose all command of himself, and such became his irritability that during its continuance he was engaged in continual quarrels and acts of violence. Before his execution he admitted that his present victim was the third man he had killed, besides being engaged in various fights with knives. When he arose from bed he told Sir Woodbine's informant he was always aware of its cursed influence upon him—a dull headache first, then a feeling of impatience at everything about him. If he went abroad his headache generally became worse; a heavy weight seemed to hang over his temples; he saw objects, as it were, through a cloud, and was hardly conscious where he went. He was fond of play, and if in such a mood a gambling house was in his way he seldom resisted the temptation. Once there, a turn of ill-luck would so irritate him that he would probably insult some one of the bystanders. If he met with anyone disposed to resent his abuse they seldom parted without bloodshed. The medical man who gave me this account attended him in his last moments, and expressed great anxiety to save his life under the impression that he was hardly to be accounted a reasonable being. But (adds the quaint old traveller) to have admitted that plea would have led to the necessity of confining half the population of the city when this wind sets in."

Deeming's Appeal.

Deeming's appeal to the Judicial Committee of the Privy Council ended, as everyone expected, in failure. The only strong points that could have been urged in the convict's favour, viz., the somewhat indecent haste with which the whole proceedings in Australia were hurried through, and the peremptory refusal of Mr. Justice Hodges to grant any adjournment, were studiously omitted from the petition, and

allegations that fresh evidence—with which the Privy Council in its judicial capacity had nothing whatever to do—was forthcoming were made in great part the basis of the application for “special leave” to appeal. The so-called evidence of insanity was insufficient to create even a *prima facie* presumption of irresponsibility. A criminal impulse that carefully adjusted itself to opportunity, selected the instruments of its gratification, and surrounded itself with every possible weapon of defence against detection, whatever else it might be, could not, with any fairness, be described as “irresistible.” The proofs of epileptic insanity smacked strongly of simulation, while instinctive criminalism is not yet, according to English law, an exculpatory plea. On the case as a whole we suspend judgment until his whole mental history from reliable sources is in our possession.

The Irish Question.

In the ranks of the Medical Profession in Ireland, it may be said that “the Irish Question” has for some time been centred upon the new rules of the Privy Council in regard to the abolition of Visiting Physicians to the Irish asylums. The Dublin newspapers have teemed with angry protests against the proposed change. Able letters have not been wanting on the other side defending the radical change which will in the future be effected in the medical staff of Irish lunatic asylums, should the new regulations be finally sanctioned by the Government. In our review of the Fortieth Report of the Inspectors of Lunatics in Ireland in this Journal, January, 1892, we observed that “a great advance in efficiency could doubtless be secured by doing away with the obsolete visiting staff, and replacing it with assistant medical officers. This is a reform which we have thought necessary to suggest many times during the last quarter of a century” (p. 108).

The position of the Visiting Physicians to an Irish public asylum has become a sinecure, and altogether an anachronism in consequence of the conditions having entirely altered since the time the office was first established, and when it was a necessary part of the medical management of an Irish asylum. This change must be recognized by English medical men before they can understand why in the course of time Visiting Physicians have been superseded by

the superintendents of asylums. In England the case is different. Even here, however, a great change has taken place. We are not prepared to say that occasionally an English Visiting Physician is not a distinct advantage. There are exceptions to every rule. It must be remembered that in the rare instances in England in which the office of Visiting Physician is retained, as at the York Retreat, the functions exercised are of a different character from those of the Irish medical visitors. Further, the latter differ as a rule from the former in this, that they have no special psychological training. The whole system as a medical visitation to Irish asylums has been found wanting, and the time has come when it should be swept away.

As will be seen by the Report of the Quarterly Meeting held at Bethlem Hospital, May 19th, 1892, Dr. Conolly Norman brought the subject before the members of the Association, and asked for its support in favour of the new Rule. His Resolution was seconded by Dr. Nicolson (Broadmoor), and is as follows:—"With reference to the order in Council issued by his Excellency the Lord Lieutenant, abolishing the office of Visiting Physician to District Asylums in Ireland as future vacancies shall occur, this Association desires to approach his Excellency with an expression of their opinion in favour of the proposed change in the official work of asylum administration in Ireland. The Association believes that this change will be found to act with decided advantage to lunacy work generally in Ireland, as has been the case in other countries where the corresponding office has been abolished."

Dr. Conolly Norman carried the Meeting with him, and we hope that the Lord Lieutenant will be encouraged by the above expression of opinion to remain firm in carrying out the new Rules. We are glad to notice that while the Governors of some of the Irish District Asylums have petitioned the Irish Government not to endorse the proposed rule, other asylums have warmly supported the alteration. Thus the Governors of the Mullingar Asylum have sent the following resolution:—"The Governors hereby express their approval of the new Privy Council rules, and are strongly of opinion that in the event of a vacancy occurring in the office of Visiting Physician, the substitution for that office of an additional resident medical officer would be an advantage in the interest of the patients."

PART II.—REVIEWS.

The Principles and Practice of Medicine. By WILLIAM OSLER, M.D., F.R.C.P., Prof. of Medicine in the Johns Hopkins Univ., etc. Edinburgh: Young G. Pentland.

Prof. Osler has not given his reviewers a chance; he has not written a preface. In spite of this we will, however, endeavour to gather something from a book of which the author's name promises so much. In the first place, it must be evident that to include the whole of medicine within a little over a thousand pages of very readable type must imply much—very much—compression, and very direct phraseology. This appears to us to be a feature of the book, the absence of waste words; but this method, of course, raises the *intension* of those which are used, and will perhaps mean some little difficulty to the student of the beginnings of medicine. If it were merely principles which Dr. Osler dealt with, these remarks would have less force, but it is not so—the details are not forgotten, and the amount of information contained is enormous, and up to date; this last statement is, perhaps, superfluous.

To the readers of this Journal, the nervous section will naturally be the most interesting. Turning to the subject uræmia, we find the two interpretations of the nervous phenomena—coma, convulsions, palsies, as toxic or as due to localized œdemas of the brain—both very briefly and clearly stated. The local palsies (hemiplegias, monoplegias) are here recorded, and their occurrence sometimes spontaneously, sometimes after a convulsion, with the further important fact that post-mortem no gross lesion of the brain may be found, “but only a localized or diffuse œdema. These cases, which are not very uncommon, may simulate almost every form of organic paralysis of cerebral origin.” We bear in mind a recent case in which a hemiplegia in a uræmic patient rapidly cleared up *pari passu* with the disappearance of the coma, and summarily disposed of our diagnosis of gross cerebral lesion. Among other cerebral manifestations of uræmia, Osler mentions mania, at times running a very acute course with violent delirium; in other cases “the delirium is less violent, but the patient is noisy, talkative, restless, and sleepless.” He also states that delusional insanity, Folie Brightique, is “by no means un-

common," and he refers to the asylum reports of such cases by Bremer, Christian and Alice Bennett.

In the chapter on multiple neuritis, attention is drawn to the peculiar gait of a person recovering from the disease. It is the so-called *steppage* gait, which suggests the idea that the patient is "constantly *stepping* over obstacles," and it is held to be due to persisting weakness in the extensors, *i.e.*, in those muscles whose paralysis yields the characteristic foot drop. The frequency with which œdema occurs in multiple neuritis is perhaps not made sufficiently prominent.

Optic neuritis is rather summarily dismissed, and under this heading we find no mention of its occurrence, generally in a mild form, in cases of fractured base, nor of its association with ear disease; in the latter case sometimes in so intense a form as to suggest most strongly the simultaneous presence of gross intra-cranial mischief. With the removal of the ear disease, however, the neuritis may rapidly and completely subside. We have seen two such cases. In a subsequent section, however, *viz.*, under abscess of the brain, this hiatus is filled up, and attention is drawn to these very cases of ear-disease simulating gross lesions within the cranium; this on the authority of Gowers.

On the subject of locomotor ataxy, the author contrives to include a very comprehensive survey within a small compass. From an interested point of view, we are glad to see that, speaking of the knee-jerk, he says, "taken alone" its loss "is of no moment, as there are individuals in whom the knee-jerk is absent;" but would not this be regarded by neurologists as making too light of the loss, or as suggesting a frequency of absence which is scarcely warranted? Personally, we should wish to accept Dr. Osler's position. With regard to the curious antagonism between the ocular symptoms (optic atrophy) and motor ataxia, he quotes Déjérine, to the effect that "of the enormous tabetic material at the Bicêtre, in not a single instance in which optic atrophy had come on early and progressed to blindness was the patient ataxic."

In the description of Friedreich's ataxia, there is no mention of the pupils as being normal, a negative characteristic, and the description of the speech as slow and scanning is scarcely complete; it is also decidedly slurring. Dr. Osler suggests that this disease should be called Friedreich's *ataxia*, not *disease*, since paramyoclonus multiplex has also been called after Friedreich.

Among the affections of the meninges, under the heading hæmorrhagic pachymeningitis, we find the statement that Virchow's view that a "delicate vascular membrane precedes the hæmorrhage is undoubtedly correct." Is this so? Can we take it that Prescott Hewett's view of the primary hæmorrhagic origin of these membranes, a view recently confirmed by Huguenin, is now finally abandoned? We had been under the impression that the view of the blood-clot origin of the hæmatoma of the dura mater had been gaining ground of late, and it is certain that there are strong points in its favour, *e.g.*, the mechanical limitations of these membranes, which are generally unilateral, which may spread up to the falx, and there be apparently arrested. The readiness with which in many cases the membranes peel off from the dura, exposing a *glistening* surface, which scarcely suggests inflammation, and, further, the occasional rare post-mortem find of an actual clot spreading over the surface of the hemisphere in just such a way as the hæmatoma spreads. On the authority of Gowers we have it that the origin of the affection is still undecided.

Insular sclerosis.—As Dr. Osler insists, the diagnosis may be very easy, volitional tremor, scanning speech, and nystagmus forming a characteristic grouping, but, on the other hand, the diagnosis may be very hard, not to say impossible, and the difficulty may remain for some years. Dr. Osler refers to this, and quotes Dr. Buzzard to this effect—the difficulty of differentiation lies between this disease and hysteria. But here, also, we think it would have been well to accentuate the point, for the mistake is a disastrous one. Dr. Buzzard urges that the come and go of symptoms, their fluctuation, which we have been accustomed to regard as characteristic of functional disease, will not serve us to exclude disseminated sclerosis. The high authority of Charcot testifies to the same effect, and indeed he goes so far as to say that marked ups and downs (*les hauts et les bas*) are characteristic of the *scélérose en plaques*. The importance of these points has been recently borne in upon us by a case which, originally diagnosed as hysteria, has, after some ten years, been relegated to insular sclerosis; yet, in this same case, there is neither speech affection, nystagmus, nor volitional tremor of the upper limbs.

In the account of general paralysis of the insane the author insists that the expansive delirium is not pathognomonic of the disease, for it may occur in other mental

affections, and it may be absent in general paralysis, being replaced by marked melancholia or hypochondriasis. In two cases, which we recall, the patients were curiously conscious of their own mental and physical failings.

On the subject of writing in general paralysis Dr. Osler does not refer to the peculiarities of irregular spacing of the letters, and to the tendency to drop letters or syllables, both of which characterize the paralytic's penmanship. These points are independent of the tremulous character of the strokes, which may increase up to complete illegibility.

The chapter on tumours is, in our opinion, too brief for the importance of the subject. Among localizing symptoms Osler does not fail to lay stress on Seguin's signal symptom, viz., the part first affected with spasm in a case of spreading convulsion; but another point has to be borne in mind in relation to this, viz., the relative explosiveness of the centre. For it is clear that other things being equal a disturbing cause in the motor area will first manifest itself in the centre or centres nearest to the disturbance, but that if the centres be unequally explosive the law of proximity may be overridden. It is thus that the operator, trusting to the localizing value of his signal symptom, may, after carefully trephining at the spot indicated, find no disease at that spot, but working upwards with the trephine discover finally the disease at considerable distance from the signal-giving centre. A highly unstable centre is that governing the muscles of the thumb, and it may in this way lead astray.

Under *diagnosis* abscess is not referred to, yet the differential diagnosis is one which may severely tax the powers of the medical man. The student will do well to bear in mind Byrom Bramwell's dictum in relation to this, viz., that he never commits himself to a positive diagnosis of intracranial tumour unless he has first excluded suppurative ear and nose disease.

Among general and functional diseases acute delirium (Bell's mania) will be found to correspond with the acute delirious mania of many authors. Under treatment we find the bold advice: "Even though bodily prostration is apt to come on early and be profound I would not hesitate to advise, in the case of a robust man, free venesection." Dr. Osler says further that: "It is not at all improbable that some of the many cases of mania in which Benjamin Rush let blood with such benefit belonged to this class of affections." We are afraid that this advice will shock alienists as a class, and the

more so that no reference is made to feeding, the sheet anchor of the routine treatment of this trouble. Dr. Osler does not inform us whether he has actually performed venesection in a case of this kind; for the benefit of the patient we hope he never will. We may add that the statement as to the uniformly fatal character of Bell's mania must be accepted as correct in regard to American institutions, but it could not be made in so unqualified a manner in respect of the acute delirious mania of our asylums in Britain.

Acute chorea is treated at length. Here we find mention of the curious circumstance, viz., the rarity of the affection among negroes, and, it would appear, amongst the Red Indians also. The remarkable discrepancy between the views of French and English authors on the one hand, and of German authors on the other, as to the relation between acute rheumatism and chorea, is commented on and explained on the supposition that the connection varies greatly in different localities. Dr. Osler's own figures give from 15-21 per cent. for the rheumatic ætiology; Gowers gives 24 per cent.; the B. M. A. collective investigation committee raises the figure to a possible 32 per cent. Osler puts the question, a suggestive one—Are the articular affections of chorea truly rheumatic? Of special interest to us is the so-called maniacal chorea, chorea insaniens, of which he pictures an extreme case with death on the 11th day from the first development of the symptoms, but inasmuch as psychical disturbances are very common in chorea generally, e.g., change of temper, emotional outbreaks, loss of powers of concentration, mental weakness, amounting even to dementia, hallucinations, etc., we may probably look upon these cases of maniacal chorea as extreme forms of this mental unhinging rather than as constituting a separate group. For clinical purposes, however, the subdivision is a useful one, and more especially is this the case since the mental symptoms may so overshadow the movements as to simulate a purely mental case. The simulation of Friedreich's ataxy is another interesting and practical point.

Under treatment we find that Dr. Osler advocates very large doses of arsenic. He says: "I have frequently given as much as twenty-five minims (of Fowler's solution) three times daily." He lays down precise rules with regard to the administration of the drug, and thus guarded we think that the pushing of the drug is clearly in the interests of the patients. It is the imbecility of practice

which, skipping from one medicine to another, never gives any a fair trial.

Under the treatment of epilepsy we find no mention of the value of chloral hydrate, given as a rectal injection in the status convulsivus vel epilepticus, yet its effect is striking, and it will be found far more useful than the bromides, and more efficient than chloroform inhalations.

Hysteria receives detailed consideration, and among the long list of diseases simulated by this affection we are glad to note that Osler insists on the close resemblance between true lateral sclerosis and its hysterical simulacrum, even to the development of a typical spastic gait, with exaggerated knee-jerk and ankle clonus. Gowers, it may be remembered, is chary of admitting the occurrence of a true ankle clonus; he assents, grudgingly it appears, to a spurious clonus. Buzzard, we believe, accepts the occurrence of typical foot clonus in hysteria. It is precisely in the occurrence of such very definite symptoms in hysteria, and of such very indefinite symptoms in some organic diseases—say, disseminated sclerosis—that the real difficulty of making a certain diagnosis lies. Among the rarer but most interesting symptoms which may occur in hysteria is fever. Dr. Osler mentions one case in which for 4-5 years a patient has presented an afternoon temperature of 102°-103°. This patient was well nourished, and though coming of neurotic stock did not herself present the hysterical stigmata. To no local condition could the fever be attributed. Then, even more deceptive, cases of fever with spurious local manifestations may occur. Thirdly, there are the cases of hysterical hyperpyrexia, about which mystery still hangs. The terrible difficulty of the matter lies further in this, that a patient with true organic disease, deeply situated, may be the subject of hysteria, and present this latter affection in typical form. There is hardly a physician of experience who has not come to grief in this matter.

A chapter on neurasthenia follows immediately. The term, as the author admits, covers a motley group of symptoms. Does this "motley group" deserve a separate name? We think not, and that Gowers is right when he says that to give such ailments as are here included "a definite name would involve more error than truth."

Dr. Osler does not include Grave's disease in the nervous section, though we think its affinities would be best satisfied by such an inclusion.

We must here end a criticism which necessarily is very one-sided or limited, for we have only allowed ourselves to consider one section. We hope we shall not have been credited with the desire to pick holes; indeed, we are possessed of too much admiration of the writer of this book to wish him anything but well, and accordingly to wish his book well. We think, however, that there will be room in future editions (may they be many!) for further development of the subsections on treatment in particular, for it is an essentially practical character which we should wish to see impressed on this work.

Wagner as I Knew Him. By FERDINAND PRAEGER. London : Longmans. 1892. Pp. 334.

As the most intimate record which has yet appeared of one of the greatest personalities of the century this book has considerable interest for the psychologist. Although we are here told that at one time Wagner suffered from melancholia and the persecution of imaginary enemies, it is perfectly clear that—unlike his royal master, the “god-like youth,” as he called him, Ludwig of Bavaria—he does not come within the province of the alienist, as that province is usually understood. But he exhibited the abnormalities so often found in men of genius in a high and typical degree, and this record of an intimate friend is valuable both on account of its frankness and of its genuinely sympathetic attitude. Mr. Praeger was, indeed, as Wagner acknowledged, the first to give him recognition in England.

Richard Wagner was the youngest of nine children, his father dying six months after his birth. He was a small and fragile baby, and remained delicate as he grew up. He was troubled by attacks of erysipelas all his life, and also by terrible fits of dyspepsia, which prostrated him for days. His personal appearance is thus described :—“In stature Wagner was below the middle size, and, like most undersized men, always held himself strictly erect. He had an unusually wiry, muscular frame, small feet, an aristocratic feature which did not extend to his hands. It was his head, however, that could not fail to strike even the least inquiring that there he had to do with no ordinary mortal. The development of the frontal part, which a phrenologist would class at a glance amongst those belonging only to the master-minds, impressed everyone. His eyes had a piercing power, but were

kindly withal. Wagner lacked eyebrows, but nature, as if to make up for this deficiency, bestowed on him a most abundant crop of bushy hair, which he carefully kept brushed back, thereby exposing the whole of his really Jupiter-like brow. His mouth was very small. He had thin lips and small teeth, signs of a determined character. The nose was large, and in after-life somewhat disfigured by the early-acquired habit of snuff-taking. The back of his head was fully developed. Its shape was very similar to that of Luther, with whom, indeed, he had more than one point of character in common."

Although showing remarkable mental energy, he was by no means a musical prodigy, and was, indeed, throughout life a very awkward executant, never learning to finger properly. On the other hand he was always skilful in athletic and acrobatic exercises, and even at the age of sixty would stand on his head to show his agility.

His nature, as is so often the case with men of genius, was full of strange contradictions, of which Mr. Praeger gives many examples. The great defect of his character Mr. Praeger considers was lack of self-denial. His university days were marked by a degree of profligacy (though this is perhaps too strong a word) of which he often afterwards spoke with regret; but throughout life he was unable to resist his love of luxury, even when he was suffering from poverty. Wagner's long bills from his dress-maker (with whom apparently he had more dealings than with his tailor), that he was not always able to pay, are now well known. Mr. Praeger's explanation of this love of luxurious clothing is interesting; he puts it down to his very delicate and sensitive nervous system. "Spasmodic displays of temper were often the result, I firmly feel, of purely physical suffering. His skin was so sensitive that he wore silk next to the body, and that at a time when he was not the favoured of fortune. In London he bought the silk and had shirts made for him; so, too, it was with his other garments . . . for Wagner could not endure the touch of cotton, as it produced a shuddering sensation throughout the body that distressed him." By Mr. Praeger's own showing, however, this cause will not entirely account for Wagner's choice of texture; probably it was sexual, for his lack of self-control seems to have been very conspicuous in his relations with women. His first wife, who was very devoted to him, at last left him, after they had lived together some thirty years, apparently worn out by his infidelities. She died shortly

afterwards, and Wagner, who had been living in Von Bülow's house, apparently induces his host's wife to change her religion in order to obtain a divorce from her husband, and immediately afterwards marries her; a few months later a son was born. This is an episode which Mr. Praeger passes over very rapidly.

Wagner took a prominent part in the revolution of 1848; in later years, when this was alluded to in his presence, he would petulantly try to minimize or explain away his participation, but it was considerable enough to lead to his exile. During the early part of his exile in Switzerland his health gave way; "constantly brooding over his enforced isolation from his countrymen induced melancholia." (It is interesting to note that "the major portion of his work was done at times when the horizon was dark for him.") He used to go out on the mountains with his dog and "declaim against imaginary enemies, gesticulate, and vent his irascible excitement in loud speeches," glad of the dog's sympathy. He was "passionately fond of his dog," Peps, who, he said, assisted in the composition of *Tannhauser*; the dog howled at passages he disapproved of, which were in consequence altered. When the dog died his master's grief seems to have been much greater than when his wife left him. He wrote to Mr. Praeger: "He died in my arms on the night of the 9th-10th of the month, passing away without a sound, quietly and peacefully. On the morrow, midday, we buried him in the garden beside the house. I cried incessantly, and since then have felt bitter pain and sorrow for the dear friend of the past thirteen years, who ever worked and walked with me. That the same fate should befall your young dog at almost the same moment has deeply affected me." It would not be difficult to draw up a long list of men of genius, including several now living, who have had an equally strong affection for either dogs or cats.

Wagner died on the 13th February, 1883, at Venice, where another of the chief artistic personalities of the century, Robert Browning, also died some years later. He left behind him an autobiography, which Mr. Praeger, who was privileged to see it, tells us will show how truly Wagner wished to be known as he really was. It appears from the dates given in this book that Wagner wished this autobiography to appear in 1891. But whenever the period arrives for its publication it will be a valuable document for the psychological study of genius.

L'Homme dans la Nature. Par PAUL TOPINARD. ("Bibliothèque Scientifique Internationale"). Paris: Alcan. 1891. Pp. 352.

The study of anthropology is at present entirely neglected in our medical schools, notwithstanding the attention given to comparative anatomy which leads up to it and is of far less importance to the medical practitioner. This is unfortunate. The medical practitioner, the alienist above all, is constantly brought face to face with abnormal phenomena which can scarcely be clear to him, and which certainly he cannot accurately measure and describe, without some knowledge of the facts and methods of anthropology. Virchow, the greatest living anthropologist, has recently confessed that it was the difficulties he met with in the scientific examination of the insane which led him to take up seriously the study of anthropology. The difficulties which attracted a Virchow would daunt an ordinary man—whence, no doubt, the more or less contented ignorance of anthropology and psychology usually found among British alienists—and it is to be regretted that no convenient handbook has yet been written for the assistance of the medical student of anthropology.

M. Paul Topinard, the best known French anthropologist, and a medical man himself—a pupil of Baillarger as well as of Broca—could, no doubt, write such a small handbook, as in his great work, the "*Éléments d'Anthropologie Générale*," he has already written a most admirable manual of anthropology on a large scale, and his earlier and smaller "*Anthropology*" (translated into English), though in some respects out of date, may still be read with profit. In the present work, however, his aim, as the title indicates, has been more general; it approaches man from the zoological rather than from the medical point of view. With this limitation it may probably be said that "*L'Homme dans la Nature*" is the best general introduction to anthropology, within moderate compass, which at present exists. Mr. Tylor's little "*Anthropology*," an admirable book, is, it should be added, rather an introduction to the broader aspects of ethnography than to anthropology in its strict and more anatomical form.

After a brief historical introduction, chiefly condensed from his larger work, the author discusses clearly and fully the nature of anthropology as a pure concrete science, essentially anatomical in its basis, and considers its relations to biology, psychology, ethnography and sociology, then passing on to

questions of division and classification. Chapter V. is devoted to the consideration of methods of examination, observation and description; as examples, the nose and the hair are dealt with in some detail. Chapter VII. deals with racial characteristics, as shown by statistics of the colour of hair and eyes and exhibited by the cartographic method; maps of France are given showing the distribution of fair and dark hair, of fair and dark eyes, and of both taken together. In the succeeding chapter, after briefly discussing the question of personal equation, M. Topinard gives various practical instructions concerning the examination both of the living and dead subject. Chapters X. and XI. deal with craniometry; they form a fairly full but very clear and able discussion of the subject. The cephalic index is dealt with in detail, and reference is made to the growing tendency to brachycephaly of the European races, and to the apparent (but not inexplicable) paradox that while Germany is a predominantly dolichocephalic country and France a brachycephalic country, the inhabitants of Munich are more brachycephalic than those of Paris. "There is no escape from the fact that the Germans and the French are not races, but simple nationalities, engendered essentially by the chances of war and of diplomacy, and, in a subordinate degree, by language. Anthropologically we are formed of the same elements, and only differ in the varying proportions of the mixture." In Chapter XII. M. Topinard reaches the kernel of his subject—man's relation to the apes. With the help of a number of excellent illustrations and diagrams he discusses admirably the various changes that have taken place in the human brain and skull as it has risen from a lower stage, while in its present form some characteristics of the human brain ally it to one of the apes, others to another. He attaches especial importance to the great limbic lobe (the developmental significance of which was first discovered by Broca) in its evolutionary phases, since it establishes an abyss between the primates and the other mammals, and among the former gradually decreases in importance until in man it has been definitely appropriated by the "intellectual" brain. He concludes this part of the subject by this summing up:—"In short, among all the characters brought forward to distinguish man from the anthropoids not one is absolute. All may be reduced to questions of degree of evolution, the superior degree being sometimes found among the anthropoids, the inferior degree sometimes in man. The most important sign of perfection is the development of the third frontal convolution."

After dealing in Chapters XVII., XVIII., and XIX. with the erect attitude, the spinal column, thorax, pelvis, and the organs of prehension and locomotion, we come to an interesting though somewhat too concise, chapter on abnormalities—retrogressive and progressive—and rudimentary organs. Among the abnormalities considered are the third occipital condyle, which has been regarded as a representation of the median basilar condyle of the reptiles and birds, though the batrachians do not possess it; the jugular apophyses, which are occasionally found below the external anterior angle of the occipital, and which correspond to the paramastoid apophyses of dogs, sheep, and other mammals; the interparietal bone which normally unites with the occipital during the third month of intra-uterine life, but may persist as in some mammals; the vermian, or median occipital, fossa—found in the lower apes, as well as in the human foetus—to which Lombroso attaches so much importance as a degenerative character. The malformation of the pterion, which produces a temporo-frontal suture—a well-marked character of inferiority in the scale of human races—is considered by M. Topinard, after examining no fewer than 1,673 animal skulls from this point of view, to be only an accidental variation, simulating a reversionary abnormality. Persistence of the median frontal suture is interesting, because it shows that every abnormality reproducing an anterior animal form must not be regarded as a reversion. Common among the lower mammals, and always present in the human foetus, this suture is rarely or never found in Australians, and in only about three per cent. Negroes, while it is present in about 10 per cent. Europeans. It is, therefore, in man a character of superiority, due to the development of the anterior parts of the brain. The chief progressive abnormality dealt with is the tendency to the diminution in the number of the teeth.

In his cautious concluding chapter to this able and interesting book, M. Topinard formulates briefly the results of natural history as applied to man. It is not probable that man has descended from any of the anthropoid apes, as they exist to-day, though there is less objection to the Chimpanzee than to the others; there are many arguments in favour of descent from a Miocene ape; there is something to be said for the theory of Prof. Cope that the Lemurs, having themselves issued from the Marsupials, form the particular branch from which we have proceeded.

Illegitimacy and the Influence of Seasons upon Conduct.

Two Studies in Demography (Social Science Series).

By ALBERT LEFFINGWELL, M.D. London: Swan, Sonnenschein. 1892. Pp. 159.

Dr. Leffingwell's name is not known in England, but this book shows that he approaches the subject of demography in a scientific spirit not too common among us, and also that he possesses considerable literary power in the presentation of his results, though sometimes his style is rather melodramatic. It is thus that he enters on his subject: "Against the background of history, too prominent to escape the observation from which it shrinks, stands a figure, mute, mournful, indescribably sad. It is a girl, holding in her arms the blessing and burden of motherhood, but in whose face one finds no traces of maternal joy and pride."

The first study ("The first treatise in the English language upon the subject of Illegitimacy") deals chiefly with the relative frequency of illegitimacy in England, Scotland, and Ireland, and with the causes generally of its varying prevalence in different countries. The rarity of illegitimate births among the Irish, their extreme frequency among the Scotch, and the intermediate position of England and Wales is well known; but Dr. Leffingwell, with the help of excellent coloured maps of the three countries, brings out clearly the curious and very considerable variations between counties and groups of counties. Thus in Ireland the rate of illegitimate births per thousand is, in Connaught 7, in Munster 17, in Leinster 22, in Ulster 40. A map of the religion of the Irish population shows an exact agreement in colour; in Connaught the Protestants are 5 per cent., in Munster 6, in Leinster 14, in Ulster 52. The author, however, while recognizing religion as an important element, by no means suggests that Protestantism and vice are synonymous terms. In England a line drawn below Norfolk and through the middle of Wales will leave nearly all the counties with a high rate of illegitimacy above it, and most of those with a low rate below it. Essex (34 per 1,000), extra-metropolitan Middlesex (35), and Surrey (40) have the lowest rate of illegitimacy; Shropshire (82), Hereford (76), and Cumberland (76) have the highest rate. In a few cases a county stands very differently, accordingly as we consider the ratio of the illegitimate births to the births generally or to the number of unmarried women; this is especially the case

with Cornwall, where the illegitimate rate is high compared to the legitimate rate, but low when the total number of unmarried women are taken into account. This may, no doubt, be accounted for by the fact that there is a very large emigration of men from Cornwall. In Scotland the illegitimate rate is low along the west coast, very high along the border and in the north-eastern group of counties, including Aberdeen. That is to say, that those parts of Scotland that are most prosperous, where education is most widely spread, and which have been most productive of remarkable men, are precisely those where illicit unions are most frequent.

In regard to causation, Dr. Leffingwell briefly-examines, only to dismiss them, several causes sometimes supposed to be of importance — poverty, ignorance, great cities. He then discusses more fully the three great causes to which, he considers, may chiefly be attributed the wide and apparently irreconcilable differences which exist in regard to the local prevalence of illegitimacy. These are (1) religion; (2) legislation, and legal impediments to marriage; (3) heredity, or the influence of race and ancestry. In regard to the influence of religion, Dr. Leffingwell has not much to say, and brings forward no definite conclusion, because, as he tells us, he purposes hereafter “to treat the larger question of its influence as a restraint against vice and crime.” Legislation, he considers, influences the rate of illegitimacy because every impediment to marriage tends to increase illicit relationships. When, in Bavaria, no young man was permitted to marry until he could prove reasonable ability to support a family, Bavaria stood first in Europe for the proportionate number of its illegitimate births. In Italy reliance on the religious ceremony alone has produced a large number of children legally illegitimate. In England the curious anomaly that the offspring of marriage with a deceased wife’s sister, legitimate in nearly every other part of the English-speaking world, are here illegitimate, is another legal cause for the production of bastards. It is, however, in the influence of race that Dr. Leffingwell finds the chief cause of variations in the rate of illegitimacy. “With few exceptions, the Northern nations of Europe, of Scandinavian or Teutonic origin, apparently show the strongest proclivity to those ante-marital irregularities of which illegitimacy is a sort of gauge.” In Europe the tendency is most prevalent in Norway, Scotland, Iceland, Sweden, Finland, Denmark, Prussia, Saxony, Austria, and

Bavaria. In England also, on the whole, the districts where Scandinavian blood is most marked (such as Norfolk and Cumberland—districts in other respects widely unlike) are those in which the rate of illegitimacy is highest; and the same is largely true of Scotland and Ireland.

In concluding his study of illegitimacy Dr. Leffingwell brings forward several other points of interest. He remarks, for instance, that the statistics of Denmark and of Sweden—the only countries where such statistics exist—show that illegitimate births are commonest, not at so early an age as one might imagine, but between twenty-five and thirty-five years. He also suggests that “quite independently of its ethical relations,” illegitimate unions “tend to level upwards the human race;” legal unions are usually upon a plane of equality; illegal unions tend to break down the barriers between class and class and between race and race, blending dissimilar elements into one great nationality. In this connection he has some interesting remarks about the American of the future: “One cannot travel through the States without noting that the thick lips, coal-black colour, low brow, and flat nose of the Guinea negro have almost disappeared in a hybrid race, with large admixture of English blood—changing not only the colour, but the intellectual capacity of the type; and I do not doubt that before half-a-dozen centuries have expired, the African will have as completely merged his race in the three hundred millions of the North American Continent, as Phœnician and Greek, Saracen, Roman and Norman have blended in the Neapolitan who basks in the sunshine on San Lucia.”

In the second essay—“The Influence of Seasons upon Conduct”—Dr. Leffingwell deals with six phases of human conduct in regard to which the action of a cosmic influence may be recognized:—(1) suicide, (2) crimes against the person generally, (3) murder and assault, (4) crimes against chastity, (5) attacks of insanity, (6) births, especially illegitimate births. This essay is slighter than the first, and scarcely takes sufficiently into account the considerable amount of work already accomplished in this field, notably in Italy.

In every country in Europe the maximum of suicides is reached in May, June, or July. In England and Wales fully sixty per cent. of all attempts at suicide occur in the warm months, and forty per cent. during autumn and winter. Almost the same proportions are found in Japan.

The influence of season in the production of insanity, as shown by the admissions to asylums, has long been recognized throughout Europe. Thus Dr. Ritti, of Charenton, writes in his last report:—"During the last ten years it is in the spring time that the admissions have been the most numerous; they have slightly diminished during summer, and reached their minimum during the last months of the year." The Lunacy Reports for Scotland give statistics accounting for over 38,000 admissions, which show precisely similar results. The maximum of admissions is reached in May, and there is then a gradual and almost unbroken descent to a minimum attained during December and January. There is thus a close coincidence between suicide and insanity, but, as Dr. Leffingwell points out, we are not, therefore, justified in considering the connection as causal; if we separate cases of suicide clearly due to other causes than insanity the same phenomenon is found. "We must look for some influence which is common to both phenomena as an exciting or predisposing cause of each." Crimes against the person are in this country commonest during July, August, and September, less common in the spring quarter, still more infrequent in the last quarter of the year, and least frequent of all in the first. The same influence is still more strongly marked, and in precisely the same order of gradation, if we take rapes and assaults against chastity. During the ten years 1878-87, 32 per cent. occurred in the third quarter, 28 per cent. in the second, 21 in the fourth, and 19 in the first. If we turn to the birth-rate, the maximum of legitimate conceptions takes place during March, April, and May in this country, as well as in Norway, Sweden, Belgium, Holland, and Italy, the minimum being during September, October, and November. In France there are most conceptions during June, July, and August. The illegitimate birth-rate shows an almost similar phenomenon in a more marked degree. With the help of diagrams Dr. Leffingwell brings out these phenomena very clearly.

What is the cause of this strange influence of the seasons upon human conduct? "I am inclined to believe," Dr. Leffingwell writes, "in the close relationship between the great mass of criminal, vicious, and passionate acts arising from the violence of the emotions, and an unsound mental condition. It need not be that complex and completely abnormal state which we call 'insanity.' . . . Either by

the gradual increase of solar light and solar heat, or else in some other manner quite mysterious at present, the breaking up of winter and the advent of spring and summer produces upon all animated nature a peculiar state of excitement or exaltation of the nervous system. Upon evidence, not yet sufficient for demonstration, I am disposed to believe that one effect, both in higher animals and in man, is an actual increase in the quantity of blood sent through the system, or that the heart in reality beats at a quicker rate, with stronger impulse, in April and May, than in November and December." Dr. Leffingwell does not bring forward any observations in support of this statement. It would not, however, be difficult to do so. Thus though opposed by Mr. Coste's daily investigation of the pulse rates through several years, it is supported by the investigations of Marey and others. Nor is there any reference to the mortality rates, although they have distinct bearing upon the question. The "theory of relation between solar influences and human conduct," Dr. Leffingwell formulates as beginning in the gradually increasing light and heat of spring and summer, producing upon men and animals increased heart action, and increased nervous action, which in time give rise to emotional exaltation, increased reproductive instinct, increased tendency to jealousy, increased combativeness, increased irritability of temper, sentimentality, mental depression, and enthusiasm for change; a perceptible and often very marked influence is thus exerted on the birth-rate, insanity, suicide, crime, divorce, duels, riots, revolutions, etc.

From the summary here given it will be seen that this little book, though sometimes rather slight and incomplete in its treatment, is full of interest and suggestion for the student of psychiatric and medico-legal questions.

Le Crime Politique et les Révolutions. Par C. LOMBROSO et R. LASCHI. 2 Tomes. Paris: Alcan. Turin: Bocca. 1892. Pp. 296 and 428.

The French edition of this very suggestive and comprehensive work, in which the political criminal is treated in his relations not only to psychiatry and criminal anthropology, but to law and penology, has been considerably enlarged. The authors admit in the preface that the term

“criminal” should not rightly be applied to the political offender, as it may lead to confusion with the instinctive criminal, who is only rarely found in political movements. The political criminal “is almost never such from the moral and social point of view.” The authors consider that the question of political crime is becoming every day of less actual urgency; since among all European nations the political criminal is dying out. They make, however, a very important, though not always clearly marked, distinction between revolutions and rebellions; there is between them “the immense distance which separates evolution from a cataclysm, natural growth from a pathological tumour; there is antagonism rather than analogy.”

It is impossible even to enumerate the varied contents of these volumes, but a few of the chief headings may be mentioned. The first volume deals chiefly with philoneism and misonieism—terms invented by Lombroso to signify an extreme attraction towards novelties and an extreme repulsion from them—and the part they play in political crime; with the influence of climate and of temperature, hot countries (such as Spain, Italy, and South America) being more favourable to revolts than to revolutions, and colder climates (such as England and Germany) more favourable to revolutions than to revolts, while, as is well known, political risings nearly always take place in the hot months; the influence of barometrical pressure, geology, altitude, etc. In an appendix a summary is given of the recent (and still rather embryonic) investigations of M. Gouzer as to the possible influence of the moon. Taking a very large number of revolutions, revolts, suicides, and rapes, it appears that in all cases they are most frequent at new and full moon, and that the first quarter always gives the smallest number. The remainder of this first volume is taken up with the influence of food, famine, and alcoholism; the influence of race and of density of population, and the relations of political crime to endemic and epidemic insanity, suicide, hallucinations, epidemic criminality, etc.; and finally the social, political, and economic factors of political crime are considered.

The second volume deals with the individual factors of sex, age, rank, and profession. Women take a small part in revolutions but a large part in rebellions. Among the martyrs of Italian independence only 15 out of 966 were women; while 27 per cent. of the persons arrested for

taking part in the Commune were women. In religious revolutions, however, women have always taken a large part. By a diligent examination of De Rossi's collection of the mortuary epigraphs in the catacombs of Rome, the authors find that as many as 40 per cent. were those of women, and in the recent Nihilist movement, which has a certain mystico-religious tendency, women have taken a large part. The part played by instinctive criminals and the morally insane is then examined; and the anatomy, physiognomy, heredity, etc., of insane political criminals and regicides is dealt with, various examples being given, such as Cola de Rienzi, Masaniello, Louis Riel, etc. The part played by political mattoids, hystero-epileptic altruists, occasional political criminals, political criminals by passion, and men of genius is also discussed in several chapters. The concluding part is occupied with the legal and political applications of the subject and the prevention of political crime, a very large number of measures of social reform which are outside the domain of the alienist and anthropologist being here briefly dealt with.

A point strongly insisted on by these authors is the importance of the distinction between revolutions and rebellions. The abnormal and degenerate—whether insane or criminal—are found chiefly in the latter; those who take part in revolutions frequently stand higher than the average of their race. Lombroso found that among 100 anarchists arrested in Turin on the 1st of May, 1889, eight were insane; while Régis found that nearly 50 per cent. of regicides are insane. The authors find among anarchists a considerable proportion presenting a low type of physical organization. This result is confirmed by our own observation of anarchists resident in London, although an exceptionally high type is also not uncommon. On the other hand, Lombroso found among 521 "martyrs of our national resurrection" 454 normal, 64 abnormal, of whom 23 showed but few degenerative characters, only three (or 0·57 per cent.) a completely degenerative type. This is four times less than the proportion (estimated at 2 per cent.) found among the ordinary honest population. Revolutions have multiple and profound causes. Rebellions are closely connected with climate; they are favoured by hilly and hot regions and by periods of famine when not excessive. They are common among brachycephalic and dark races, and they are closely related to alcoholism and to hot seasons. They are frequent among senile peoples,

exhausted by ancient civilization, and among barbarous races. Revolutions, unlike rebellions, are rare in hot countries, and especially rare in plains and on a volcanic soil. They are especially common in maritime countries, or where communication is easy, and are, perhaps, somewhat more frequent on a Jurassic soil. They are found among races of elevated stature, fair and dolichocephalic, and especially among mixed races. They are more common among certain races than among others. Thus in France they are most common in the Ligurian and Cimbric districts. They are favoured by the presence of great industrial centres. They are in direct relation with the increase of criminality, insanity, and neuroses, but the passionate and persons of genius take a larger part in them than the insane or criminal. Always rare, they require a long preparation, and are ultimately successful, even though the leaders perish. Rebellions arise among people who are not yet ripe for revolution; they are sometimes the first sign of revolution. "In short, revolutions are physiological phenomena; revolts are pathological phenomena." It sometimes happens, however, that it is impossible to decide at first whether a movement is a revolution or merely a rebellion, because at its outset every revolution has the appearance of a rebellion; only time can decide. "Thus to-day we do not yet know whether the anarchists are rebels or revolutionaries."

Such are some of the chief points brought out in this many-sided and suggestive, though, from the novelty of the subject, necessarily inconclusive work. It would require a much longer review to show the breadth of its range and the variety of subjects dealt with. To this breadth and variety it is doubtless due that the arrangement of the material sometimes seems to be defective, and that the same ground is sometimes gone over twice. There are a large number of trifling errors, especially in the spelling of proper names; it is to be feared that the authors rather than the translators are sometimes responsible for these. They are clearly, however, not responsible for the index, which is a delightful comedy of errors; among numerous other peculiarities, only less singular, the Chicago anarchist, Schack, is identified with the Persian Shah. On p. 88 of the first volume English readers will find novel information in the following passage:—"The Fen country, in the counties of Lincoln and Cambridge, an uncultivated region covered with steep rocks, and an ancient resort of brigands and rebels, became at the

epoch of the Norman Conquest the last refuge of the Anglo-Saxons. Those who retired thither long maintained their independence, protected by the rocks which rendered the country almost inaccessible."

Against minor blemishes must be set the large number of valuable portraits, diagrams, and maps. Thus one series of eight diagrams shows how political risings in Europe and America have always taken place in the hottest mouths. A coloured map of Europe shows the relative distribution of revolutions in Europe. Six coloured maps of France enable us to compare orographic characters, density of population, racial distribution, prevalence of agricultural or industrial elements, the distribution of genius, and the distribution of political parties.

Clinical Lectures on Mental Diseases. By T. S. CLOUSTON, M.D.Edin., F.R.C.P.E. Third Edition. London: J. and A. Churchill. 1892.

Insanity and its Treatment: Lectures on the Treatment, Medical and Legal, of Insane Patients. By G. FIELDING BLANDFORD, M.D.Oxon. Fourth Edition. Edinburgh: Oliver and Boyd. London: Simpkin, Marshall and Co. 1892.

Dr. Clouston is to be congratulated on the fact that his lectures have reached a third edition in the course of less than nine years. The author informs us in his preface that many practitioners have requested him to add a lecture on insanity as a whole, with especial reference to practical treatment and the right employment of sedatives. The result is to be found in Lecture XX., the contents of which may be gathered from the following:—Insanity as a disease; urgent questions to be faced as to causation, heredity, diathesis, former diseases; concealment of symptoms; mental symptoms; bodily symptoms; examination of patient; diseases that simulate insanity; dangers; treatment; nursing; home treatment; treatment in lodgings or hired house; asylum treatment; why a patient should be sent to an asylum; legal forms; food and feeding; food-medicines; alcoholic stimulants; tonics and nerve stimulants; exercise and fresh air *versus* rest; occupation and amusements; hypnotics, sedatives, and motor depressants; general prin-

ciples of use; dangers of abuse; what do we desire to attain; opium in melancholia; paraldehyde; sulphonal; the bromides and cannabis indica; hyoscine.

This will, no doubt, be a popular and useful chapter. One observation prompted by Dr. Clouston's large experience deserves quoting for the instruction of those who insist upon having certain single patients removed to asylums in accordance with a too rigid rule.

"I have treated almost every kind of case, from acute, violent, raving mania to the mildest melancholia, in private houses and in lodgings, and very many with success. It is largely a question of house, nurse, and money. It is, of course, very expensive, seldom coming to less than at the rate of seven pounds a week all told, and often much more if three or four nurses are needed."

The disadvantages, in addition to the expense, are not overlooked, such as the want of constant medical supervision, the risk of disturbing neighbours, and the monotony of life. The first objection does not, of course, apply to residence in the house of a medical man. Nor are neighbours disturbed in houses situated in the country, nor, indeed, always in houses in towns. The fact is no rule can be laid down in the matter. The author expresses himself strongly in regard to exercise and fresh air *versus* rest—we think almost too strongly in objecting to rest in bed. It may not be necessary or desirable to put every patient to bed for a day or two on admission for observation and quiet, but we regard it as anything but an irrational mode of treatment. On medical treatment Dr. Clouston observes that anything that implies that "medicine out of the bottle" only, will cure the disease is utterly to be deprecated."

The author justly maintains that "few cases of mental disease should be treated by hypnotics and sedatives alone." He points out the necessity of deciding whether a pure hypnotic is wanted or a general sedative. He puts "paraldehyde and chloral as the types of pure hypnotics; sulphonal as a hypnotic sedative; bromides and their combinations with cannabis indica, and hyoscyamus as the types of sedatives and diminishers of reflex irritability, cerebral and spinal; and hyoscine as the type of drug that especially depresses the functions of the cortical motor centres" (p. 689). Dr. Clouston once believed in chloral far more strongly than he does now. He has used paraldehyde and prefers it to any hypnotic which he has tried. The appetite is not

interfered with, nor does it disturb the bowels or cause headache. The dose to begin with is forty drops, or a drachm, increasing it up to two. He has given three, and even four, drachms, and in one case six. Recovery from the effects of an ounce given by mistake is recorded. Sulphonal is Dr. Clouston's second best hypnotic and sedative in doses of from ten to forty grains, and even a drachm, but very rarely. In doses of fifteen grains twice a day it is a useful sedative. Above all, "it does not excite a craving for its continuance, and it does not prolong the brain disturbance" (p. 694).

These references will suffice to show the practical character of this book. A series of axioms close the chapter and the book, which are well calculated to guide the practitioner in the right way.

The fourth edition of Dr. Blandford's lectures marks the wide circulation of a favourite book. He brings it up to the level of our latest acquisitions, especially in regard to new drugs. It may be mentioned that he recommends the use of paraldehyde as well as Dr. Clouston, having "found it to produce sound as well as pleasant sleep, the patient waking without depression or discomfort." His experience of sulphonal has also been favourable.

The new Lunacy Act has rendered it necessary for Dr. Blandford to introduce much new matter into his book which will be found a useful and reliable guide in the difficulties which have been created by recent legislation.

Dr. Blandford enters upon the relations between general paralysis and syphilis in a judicial spirit, and refers the reader to Dr. Jacobson's article on the subject in the "Journal of Mental Science," April, 1892. Dr. Blandford is not a convert to the opinion that the relation of cause and effect is established in those cases of general paralysis in which syphilis occurs, and he observes, "Certain it is that anti-syphilitic treatment never cures general paralysis in syphilitic patients" (p. 323).

Dr. Blandford acknowledges his indebtedness to the "Journal of Mental Science," "which constitutes a mine of information in this special subject, having, I believe, no equal." Its utility, we may add, has been vastly increased by the index to it, which Dr. Blandford himself prepared.

Les Maladies de L'Esprit. Par le Dr. P. MAX-SIMON.
Paris, 1892. J. and B. Bailliere et Fils.

The author is favourably known by his "Monde des rêves" and other works. Although this is a small book, it covers the ground to a remarkable extent. He commences with hallucinations and illusions, and, in a note at the end of the volume, he studies the sensations which are produced by anæsthetics, a subject deserving more study than it has received. He finds that, after a certain number of inhalations, ether produces a state of semi-intoxication, in which pain disappears or is lessened. If inhalations are continued, certain abnormal perceptions are experienced. The sense of hearing is especially affected. It is singular that at the same time there is a sound like a murmur, and if the eyes are shut violet colours are seen, showing that the retina is affected; with more ether, violet passes into green, then there are in addition reddish marks. It is when the sound is the most shrill that the sensation of red is experienced. The effects of chloroform and nitrous oxide are detailed. Other chapters describe, in order, the various forms of mental disorder, mania, melancholia, megalomania, delusions, etc. Moral insanity, of which he gives several examples, is referred to. We cannot, however, follow the author in detail, and must refer the reader to the book itself.

De la Législation sur les Aliénés dans les Iles Britanniques.
Par le Dr. RENÉ SEMELAIGNE. Paris, 1892.

It must be admitted that it is a great compliment to English legislation for the insane, that a French physician should be at the trouble to publish a *résumé* of our Acts of Parliament. The last Lunacy Act of 1891 is included. The author has executed his work in a very creditable manner. He visited England and made himself acquainted with the condition of the insane in many of our asylums, and published after his return an able and impartial account of the non-restraint system. To this we referred at the time in the Journal, and mentioned the circumstance that M. Semelaigne is a collateral descendant of Pinel. The brochure before us does not admit of review. We can only congratulate the author on the skilful way in which he has presented the subject from the Act of Edward II., 1324, to the present time.

Étude sur quelques Symptômes des Délires Systématisés et sur Leur Valeur. Par le Dr. A. MARIE. Paris, 1892.

M. Marie has already written several clinical articles, including one on the sight of idiots, and another on the ætiology of general paralysis. Systematized delusions have a great fascination for French alienists. Some interesting cases recorded with great care, and with several illustrations, make the memoir of very considerable value, which indeed is quite out of proportion to the size of the publication. Everyone studying the subject of delusional insanity ought to obtain this clinical study.

A Manual of Autopsies. Designed for the use of Hospitals for the Insane and other Public Institutions. By J. W. BLACKBURN, jun. Philadelphia: P. Blakiston, Son, and Co. 1892. With Plates.

We are glad to see that the Association of Medical Superintendents of American Institutions has issued this Manual. Dr. Blackburn is the pathologist to the Government Hospital for the Insane, Washington, and was requested to prepare a post-mortem manual with a view to its adoption by that Association. It is a *multum in parvo*, and cannot fail to be of great use to asylum men. We commend it to our readers, and hope it will have an extensive circulation in England as well as in the States. It certainly deserves it. The illustrations are excellent.

PART III.—PSYCHOLOGICAL RETROSPECT.

1. *Retrospect of Mental Philosophy.*

By W. C. COUPLAND, D.Sc., M.A.Lond.

Dr. Sully's "Outlines of Psychology," published eight years ago, supplied a want that had long been felt by students of mental science in this country. Up to that time there existed no treatise in our language that fairly represented the spirit of modern inquiry in the ever-extending sphere of psychological science. The works most in demand, such as Prof. Bain's "Senses and Intellect," "Emotions and the Will," Mr. Spencer's "Principles of Psychology," Dr.

Maudsley's "Physiology of Mind," and the late G. H. Lewes's "Problems of Life and Mind," either intentionally presented the science from partial points of view or did not attempt to furnish a synthetic treatment, such as a student, anxious to obtain a general view of a department of knowledge before entering upon special questions, naturally desires. Dr. Sully's book accordingly met with the full success it deserved. Having the beginner always in view, the author employed plain and simple language, led the reader on gently from step to step, and dealt very sparingly with controversial points. At the same time, the results of the latest research were sufficiently appropriated, and any one thirsting for fuller knowledge had only to follow the hints supplied at the close of the chapters towards wider study.

During the last eight years, however, whether stimulated by Dr. Sully's example or not, a number of writers have entered the field, and works for both tyros and advanced students have been produced of great excellence. It is sufficient to mention the names of Dewey, Ladd, Ward, Baldwin, James. It is evident that psychological science has gained enormously of late in public favour, and not unlikely will, in a very short time, receive adequate recognition as an essential branch of a liberal education. Dr. Sully, who had, in a way, played the part of pioneer in this pedagogic movement, has not been content to rest on his laurels, but has just produced a work of larger scope than his former volume, giving an account of the facts and laws of mind, with abundant criticism of the theories and researches of distinguished investigators, both English and foreign. Although, perhaps, among those who, like the ordinary school-teacher, are concerned with psychology only in its application to practice, and, in consequence, desire an acquaintance with bare generalities, the "Outlines" will still retain its popularity, the present work* will undoubtedly receive the preference of the thorough student. In the interval which has elapsed between the publication of the two works, the author himself has not stood still, and has seen cause to modify or develop his views on several points of prime importance. Moreover, with more space at his command, Dr. Sully has brought into greater prominence topics which

* "The Human Mind: A Text-Book of Psychology," by James Sully, M.A., LL.D., Examiner in Mental and Moral Science in the University of London; author of "Illusions," etc. In two volumes. Longmans, Green, and Co. 1892.

have previously hardly received their due, and has discussed matters which before had been wholly passed by.

The book is divided into five parts:—I., Introductory; II., General View of Mind; III., Intellection; IV., The Feelings; V., Conation or Volition. The first part treats of such topics as the aim, scope, data, and method of psychology, and the physical base of mental life. The scope of the science is clearly defined, and marked off with exactitude from the dependent practical sciences, logic, ethics, and æsthetics, as well as from theory of knowledge or philosophy in the proper sense. A vast deal of confusion is hereby avoided, for misapprehension as to the precise extent of psychology has led to the burdening of scientific manuals with disquisitions of a metaphysical character, as well as to indistinctness in the treatment of special points. The same care is manifested in the summary of the methods appropriate to psychological investigation. Dr. Sully contends rightly for the employment of the often disparaged method of introspection, insisting on its use as fundamental, if we are to have any real acquaintance with facts of mind, while allowing the utmost weight to the objective and experimental methods in controlling details and generally enlarging the view. Throughout the book indeed the equal attention paid to self-observation, or the older method of psychical analysis, on the one hand, and the resources of physical and physiological observation and experimentation on the other, is well maintained. The result is no "physiological psychology" in the stricter sense, but at the same time no physiologist can complain that the biological aspect of mental science has been in the least slighted. Although neurological manuals are sufficiently accessible we cannot but think it a pity, however, that the sections on the nervous system are entirely unillustrated either by drawings or diagrams. The same remark may be made *à propos* of the senses.

The "general view of mind" gives an account of the psychical elements which are summarized as sensations, element of feelings, primitive movements, and psycho-physical complications, followed by an examination of attention and the process of mental elaboration. The distinct separation of sensation from perception has become common in psychological manuals, but the place given to sensation by Dr. Sully before the general process of attention and the elaborative processes of differentiation and integration, which are themselves interpolated between sensation and sense-perception, is not usual.

Dr. Sully differs strikingly here from Prof. Baldwin, who goes so far as to treat sensation as an apperceptive function of intellect, while Prof. Wundt, with whose treatment of sensation and perception he is in general accord, defers the consideration of attention (and consciousness) to a much later stage. It appears to us a little doubtful whether it is desirable to sever sensation so completely from perception as is done by Wundt and our author. Dr. Sully himself admits the severance to be largely artificial, and the procedure is perhaps justifiable only as lightening the difficulties of the learner. Apart from certain details of logical order it is, however, in any case highly desirable that a full discussion of the factors involved in mental elaboration should take precedence of their concrete exemplification, and we regard it as a happy idea of the author's to explain the significance of differentiation (discrimination), assimilation, and association before entering on the treatment of memory and thought in particular. Part III., *Intellection*, deals with perception, reproductive and productive imagination, and the processes of thought, or conception, judgment, and reasoning. Dr. Sully's views on the vexed question of the nature of our space-consciousness do not differ from those expressed in the "Outlines." He still maintains, in opposition to Ward and James, that the space-percept is not given in any form of passive sensibility, and, with the Berkleian empiricist, that motor consciousness is an essential component of what is in truth anything but an original datum of sense. Apart from movement the closest we can get to the space-percept is apparently (as suggested by Stumpf and endorsed by the writer) the apprehension of massiveness of volume, such as we have in low musical tones.

Coming to memory and the laws of suggestion, Dr. Sully is equally judicious as in the question of space. As in regard to that problem he declines to side with either of the extremists, those who assume an original intuition of space, and those who regard it as nothing but succession of movements, but holds extension to be a development of a mode of consciousness rendered possible by certain fixed nervous conditions in the organism and experiences of motility; so in the revival of images he declines the one-sided course of dispensing with either contiguity or similarity as principles of suggestion, but while giving the greater prominence to contiguity insists on the indispensable function of assimilation, and the cognition of likeness in the midst of differences. Suggestion by contrast is ruled out as a third primary

principle, in accordance with current practice, but the stress is laid by our author on the fact of difference rather than of similarity, as by not a few theorists of repute. Perhaps the latter factor is hardly done justice to, for the resemblance of two widely contrasted images or ideas seems as immediately present to the mind as their extreme divergence. We fail to be convinced by the averment, "so long as we are interested in a relation of contrast, there is no room for any consciousness of similarity;" for the question is whether we *could* be interested in a "relation of contrast" if we were not equally aware of a relation of similarity. The cementing bond is after all the emotional effect produced by the opposed pair, and that surely is strong in proportion to the perception of extraordinary difference within ordinary resemblance or oneness.

The representation of time is dealt with at some length, a point to which attention should be called, as it commonly gets either no, or a very perfunctory notice, in the ordinary manuals. The points of agreement and difference with the space-consciousness are neatly stated. The account of conception is a considerable improvement on that given in the "Outlines." The nature of intellectual comparison is thoroughly examined before the steps of thinking are considered. The treatment of thought altogether is more distinctly psychological than in the earlier work, where the logical way of looking at the intellective function is somewhat too prominent. Part III. concludes with an excellent section on "Intellection or Knowledge." The various phases of belief are carefully described, and the distinction between belief and knowledge proper clearly explained.

This completes the first volume, dealing with the foundations and the rational side of mind. The second volume is devoted to an account of feeling and volition, closing with fourteen appendices treating of the history of certain leading topics, or touching on the philosophical aspect of various psychological doctrines.

The author does not enter so fully into the description of emotional states as Prof. Bain, but supplies what is usually wanting in psychological treatises—an ample and careful consideration of the conditions and laws of feeling generally. The conditions of pleasure and pain (so-called *neutral* feelings, or feelings without "tone" not being admitted) are considered under the headings—(a) Conditions in the stimulus; (b) Variation of stimulation; (c) Complication of

activities. It is contended that all attempts thus far to resolve the qualitative distinction of pleasure and pain into quantitative difference in the stimulus have failed. The effect of change in determining the character of feeling is well shown, and the diffusion of feeling as resulting in "a kind of unconscious sympathy or *consensus*" is stated with its limitations. The development of emotions is traced, and the instinctive and associative factors adequately recognized. Here, as elsewhere, the psychical phenonema of animal and infant life are effectively drawn upon, and the generalizations of leading evolutionists, as Darwin and Spencer, are utilized and independently criticized. The emotions are discussed under the heads:—(1) Specialized Instinctive—egoistic and social, such as fear, anger, self-feeling, attachment; (2) Concrete Representation or Sympathy in its various forms and grades; (3) Actual Sentiments, the intellectual, æsthetic, and ethical sentiments. The account of these last strikes us as particularly good, the examination of the moral sentiment being a veritable *multum in parvo*, as well as just and free from dogmatism.

Conation or volition is treated at about the same length as feeling, and is not the least valuable part of the work. For an account of will in all its degrees, from the rudimentary manifestations of voluntary movement to the most finished form of self-control and rationalized conduct, it would not be easy to find a parallel equally fair and complete. Students will be grateful to the author at this stage, and throughout the book, for the pains taken to bring forward and subject to close scrutiny divergent views of psychologists. It is a point of serious debate at the present moment what precise relation so-called volitional consciousness holds to other active phases of mind, as ideation and cognition. Older classifications of ultimate mental functions tended to a duality of thought and will, with submergence of feeling. Now will is falling, according to the theorizing of certain prominent thinkers, into a subordinate position, and there is a growing tendency to regard the peculiar *nisus* of conation as simply the mark in consciousness of the detaining power of particular ideas. As Prof. James recently writes:—"In closing in upon the more *intimate* nature of the volitional process, we find ourselves driven more and more exclusively to consider the conditions which make ideas prevail in the mind. With the prevalence, once there as a fact, of the motive idea, the *psychology* of volition

properly stops. . . . The *willing* terminates with the prevalence of the idea." In opposition to any view which assigns a derivative character to will, Dr. Sully holds that active impulse has not to wait upon the presentations and their interactions, but is an original element of our mental constitution. This primitive active tendency takes two directions, either outwardly as conscious muscular action, or inwardly as attention. In working out the details of early voluntary action, Dr. Sully follows mainly in the wake of Bain. Although not assigning the late place to desire in psychological development as Prof. Bain, our author is at one with him on the debatable point whether all desire is initiated by prospect of pleasure. The few pages devoted to this point are decidedly subtle, but fall short a little of perfect cogency. The time is, perhaps, hardly arrived for final decision, and the main interest in the discussion is after all ethical rather than psychological.

The concluding chapter is on "Concrete Mental Development: Individuality, Normal and Abnormal Psychoses." This chapter, though perhaps brief, having regard to the importance of the topics, is very much in place in a treatise aiming at an inclusive treatment of the life of mind. There are some good remarks on the relations and deviations of typical and individual development. Comparative measurement of individual psychical capacity, it is conjectured, will be rapidly advanced in the near future. At present there is little to refer to beyond Mr. Galton's tentatives and anthropometric schemes. We may take this occasion to remark that Dr. Sully is quite alive to the value of experiment in psychology, as exemplified in the measurement of discriminative sensibility, and the ascertainment of reaction-time in the process of attention, intellectual judgment, and volitional choice.

There are brief but pregnant references to *abnormal* aspects of mind. Dr. Sully was doubtless afraid of overloading his work, or, as the author of the admirable monograph on "Illusions," in the International Scientific Series, he was specially competent to have furnished an interesting summary of the phenomena of dreams and hallucinations of the healthy mind. The phenomena of hypnotism have too recently come within the province of the scientific investigator to call for examination in a general work on psychology, but the topic is not entirely ignored. As for the pathology of the mind, Dr. Sully has achieved all the ordinary reader

will desire by his half-dozen pages and references to standard writers like Maudsley, Mercier, Bevan Lewis, and Ribot.

The appendices will be valued in particular by the academic student. Many topics of mental science cannot be properly understood without some knowledge of the history of their investigation, while such information in the text is apt to be distracting and tiresome. Accordingly the various classifications of mental functions adopted at different times, various renderings of the laws of association, theories of time and space, of pleasure and pain, are well relegated to an appendix. And even more is this advisable in the case of certain great philosophical questions, the relationship of which to ordinary mental activities is of the closest, and which cannot be passed over without leaving an uneasy feeling in the mind of the reader that a psychological treatise which ignores them is a mutilated one. This applies to such subjects as external perception, nominalism and realism, objective knowledge, free-will, duty, and the problem in which empirical doctrine culminates—mind and body. In most of these appendices Dr. Sully has been particularly happy in seizing upon the salient points, and presenting important differences of view clearly and impartially. Readers with a speculative bent will be at no loss where to seek for further light, as the references to authorities are both abundant and well chosen.

2. *German Retrospect.*

By W. W. IRELAND, M.D.

Deceptions of Memory in the Insanity of Multiple Neuritis.

Dr. S. S. Korsakow has already described a form of amnesia in insanity following upon multiple neuritis, or, as he styles it, polyneuritic psychosis, and in the present paper ("Allgemeine Zeitschrift für Psychiatrie," xlvii. Band, 3tes and 4tes Heft) he describes a particular kind of delusion of memory which sometimes accompanies this form of insanity. It consists in the patient believing that he bore a share in some actions with which he never had anything to do. He will relate what he did in events which have happened in past times or distant places, and of which he has only heard or read.

Such delusions, Dr. Korsakow observes, sometimes are met with in paranoia, in melancholia, in periodical mania, in general

paralysis, and in senile dementia; but he has found them most frequently in polyneuritic psychosis. Sometimes the delusions of memory are fixed, at other times they will substitute one narration for another, covering the same period. In the cases which Dr. Korsakow met with, the patients were apt to have these false reminiscences connected with their favourite pursuits, such as hunting or drinking. In many cases the delusions of memory were connected with deaths or burials. Dr. Korsakow describes at length one patient 53 years old, affected with valvular disease of the heart, who had suffered from a severe attack of typhoid fever. He had remained for days comatose, and when consciousness returned the memory was found to be deeply impaired. There was also great prostration of strength, and recovery was slow. Pain was felt on pressure upon the nerve trunks, and the patellar reflex was diminished. On a slight examination there was no appearance of mental derangement, but it was observed that his memory was full of false reminiscences, which mingled with those of real events. One delusion especially had strong possession of his mind. He remembered that a young man, to whom he owed a debt of gratitude, had died in the house, and he felt it was his duty to bury him. On being assured that there was no dead person in the house, he asked to be allowed to look through it. On being shown that there was no dead body anywhere, he said that the body must be in another house in Moscow, which he indicated. He was taken to the house and asked the porter, who said that no person had died there. On returning home, he remained for a time sunk in thought, and then modified his delusion. He said that the young man must now be buried, and wished to pay his rent and the cost of his funeral. He remembered distinctly hiring the house for the young man, and the other circumstances. In the hope of satisfying his mind, it was arranged that the porter should say that the occupier of the house had changed to another in the same street, where lived a doctor who had agreed to receive payment for these imaginary transactions. The man's conscience being eased in this way, he was quieter for a time, but soon afterwards wanted to go back to inquire about some articles belonging to the young man. At last he went to the door of the house, rang the bell, and asked to see the gentleman, but was told he had gone abroad. About the same time the man's intelligence had so far returned that he was able to go back to his employment. He ceased to talk about his delusions, though it seemed doubtful whether he had lost faith in them. Sometimes he speaks about going to travel, and mentions the name of the town where he was told the gentleman had gone. It appears that the patient's children had been ill, and that he had been afraid of losing them, and that he had lodged them in the neighbourhood of the street where he had placed the death of the young man for whose lodgings and burial he had paid. Dr. Korsakow

describes another case of a similar character occurring in a woman who had also suffered from typhoid fever. At the end of his paper he presents the following conclusions :—

1. In polyneuritic psychoses deceptions of memory, based upon the same delusion, are not infrequent.

2. Under this delusion the patient may relate things of an incongruous character, but sometimes his remarks are quite coherent.

3. One of the most frequent characteristics of the delusion, and of deceptions of memory in polyneuritic psychoses, is the idea of someone's death, of the dead person, and of the funeral.

4. Sometimes the false reminiscences and the insane ideas obtain such great power over the attention of the patient as to give the appearance of partial insanity.

5. The false reminiscences in polyneuritic psychoses are generally firmly rooted in the memory of some real event.

6. These traces of memory may be held to indicate the continuance of nerve function, though in a feeble degree.

7. We may, therefore, assume that these latent traces unite themselves to a healthy group of associated ideas.

8. False reminiscences most probably arise owing to the union of the traces in the unconscious sphere of the mind with the already existing groups of association. These associations thus formed may enter into consciousness, and, presenting themselves as reminiscences, delude the mind.

9. In all probability defects in the processes of idea association are necessary for the existence of such groups of association causing deceptive memories. In this way union becomes possible with lapse of some links in the chain of association which does not fail in the normal conditions of the mind. On this account deceptive reminiscences are most frequent in psychoses in which there is an alteration of the conjunction of ideas.

Insanity Treated by Hypnotism.

At the meeting of German physicians at Weimar in last September ("Centralblatt für Nervenheilkunde und Psychiatrie," October, 1891) Dr. Binswanger reported upon his trials of the therapeutic value of hypnotism. He strongly deprecated hypnotizing by the attendants in asylums. As a therapeutic agency he had hitherto found suggestion often fail, but it is most likely to be useful in hysterical cases. By too frequently repeating hypnotic experiments, he had in some patients seen the symptoms aggravated instead of improved. Dr. Krafft-Ebing agreed in general with his colleague. Hypnotism should be used only as a means of subjecting patients to suggestion. He observed that many insane persons could not be hypnotized. In general it was only those who retained a certain amount of lucidity, attention, and concentration of thought who could be hypnotized. Suggestion

might be used to combat insane feelings, and trains of thought, and abnormal longings and propensities, and especially sleeplessness. It might be used against imperative ideas, but did not appear to promise much against delusions and hallucinations. He had no great faith in the remedy, and had been induced to make experiments, mainly from the importunity of relations or of the patients themselves. His most favourable results were in melancholia without delusions, and alcoholic and hysterical insanity. Drunkards and dipsomaniacs were in general easily hypnotized. The evil effects Dr. Krafft-Ebing had noticed from hypnotism were the tendency to fall spontaneously into the hypnotic state, and increased susceptibility of the nervous system. Against the first disadvantage suggestion might be used and hypnotism should be suspended. The physical method of hypnotizing (Charcot's) seems the most liable to produce bad effects. On this account Krafft-Ebing prefers Bernheim's method.

An Asylum in Japan.

Dr. Hasime Sakaki gives in the "Allgemeine Zeitschrift für Psychiatrie" (xlvi. Band, 1 and 2 Heft) some statistics from the asylum at Tokio. The number of patients treated during the year 1888 and 1889 was 423 males and 238 females = 661. Of these there were discharged recovered 121 males, 55 females = 176. Improvement was observed in 187 males and 115 females. There died 74 males, 42 females = 116. The cases of general paralysis were two per cent. of the whole.

The disease called kakke beriberi, akin to multiple neuritis, is common in Japan. It appeared as a complication of insanity in 7.5 per cent. of the cases, and was a cause of 19 deaths, that is 16.4 per cent. of the whole mortality. Of those affected in the asylum with beriberi 59.3 per cent. died.

Dr. Sakaki shows that insanity in Japan is much more prevalent amongst married people than the unmarried. This he supports by comparing the number in his asylum to the statistics of the general population. He says it would take too long to explain the causes of this surprising result.

Some of the patients admitted were taken from the Buddhist temples, for there are many people in Japan who still believe that insanity is sent as a punishment for some great sin, or the effect of possession by animals such as the fox or the dog. On this account they go to the temples to be cured by readings from the Buddhist Scriptures.

Legal Provision for Epileptics in Prussia.

We learn from the "Centralblatt für Nervenheilkunde und Psychiatrie" (October, 1891) that an important change is imminent in the condition of epileptics in Prussia. In the law of 1875 the

care of lunatics was committed to the provincial unions, but neither epilepsy nor idiocy was provided for. Pastor Bodelschwingh, to relieve necessitous cases, formed the asylum at Bielefeld, in which he showed great zeal and power of organization. As many as 1,300 epileptics were collected and cared for; but insufficient provision was made for medical treatment. Other institutions for the cure of epileptics sprang into existence in different parts of Germany, principally supported by private contributions. In May, 1890, a law was introduced by the ministry into the Prussian Parliament to secure the aid of the State for such epileptics as were in a condition to need assistance, and it is decreed that by the 1st of April, 1893, asylums should be erected for such patients. It is, therefore, very desirable that the provincial councils should have some idea of the number of epileptics likely to demand such assistance; but for this purpose the available statistics are by no means to be trusted. In the projected asylum it will be found necessary to have training schools for young epileptics whether idiotic or not. Of course, separate classes would be required for those whose intelligence had not suffered much. These should be like open hospitals and be under medical superintendence. Chronic insane epileptics might be either sent to ordinary asylums or special institutions erected for them.

In the same number of the "Centralblatt" M. Lacour points out the deficient care of epileptics in France. There is a compartment devoted to epileptics in the hospital at Lyons, and three institutions for epileptics under clerical management in other parts of France. Epileptic children are also admitted into the idiot department of the Bicetre, which is conducted with so much spirit and diligence, owing mainly to the incomparable energy of Bourneville.

German Translations of Lombroso's Works.

The new work entitled "Political Criminals and Revolutions in their Relations to Anthropology, Law, and Politics," by C. Lombroso and R. Laschi, has not yet been translated into English. Inquirers who read German better than Italian can take advantage of the translation* which has recently appeared. It has been executed by Dr. Hans Kurella, the editor of the "Centralblatt für Nervenheilkunde," and was published at Hamburg in two volumes octavo, with nine pages of engravings. I have not seen the Italian original, but Dr. Kurella's skill as a linguist is well-known, and the translation is clear and readable. This is a very learned and elaborate work, and it is specially interesting from the information it gives about the mental character of the revolu-

* "Die Politische Verbrecher und die Revolutionen," &c., von C. Lombroso und R. Laschi, unter Mitwirkung der Verfasser, Deutsch herausgegeben, von Dr. H. Kurella. Hamburg, 1892.

tionary leaders of the present day. It contains the latest views of the well-known Italian professor, which are at present making no little stir in the world.

His other works, "L'Uomo Delinquente" and "L'Uomo di Genio," have also been translated into German.

PART IV.—NOTES AND NEWS.

MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

The Quarterly Meeting of the Medico-Psychological Association was held at Bethlem Hospital, London, on Thursday, May 19th, 1892, Dr. Whitcombe, President, in the chair.

The PRESIDENT announced that the annual meeting of the Society would be held on July 21st, at York.

The following candidates were unanimously elected:—

Percy Rutherford Adkins, M.B., B.S., Junior Assistant Medical Officer, Burntwood Asylum, Burntwood, near Lichfield.

Cecil F. Beadles, M.R.C.S., L.R.C.P., Assistant Medical Officer, Colney Hatch Asylum.

Matthew Cameron Blair, M.B., C.M.Glasgow, Second Assistant Medical Officer, Leavesden Asylum, near King's Langley, R.S.O., Herts.

Robert Henry Cole, L.R.C.P.Lond., M.R.C.S.Engl., Assistant Medical Officer, Moorcroft House, Hillingdon.

Alexander Charles Farquharson, M.D., M.C., D.P.H.Camb., Senior Assistant Medical Officer, Burntwood Asylum, Burntwood, near Lichfield.

William John Haslett, M.R.C.S., L.R.C.P., Resident Medical Superintendent, Hallford House, Sunbury-on-Thames.

Reginald Harry Noott, M.B., C.M.Edin., Senior Assistant Medical Officer, Broadmoor Criminal Lunatic Asylum, Crowthorne, Wokingham.

Frederick Edward Bainsford, M.B.Dublin, Second Assistant Medical Officer, City and County Lunatic Asylum, Fishponds, near Bristol.

Dr. CONOLLY NORMAN—As you are aware, sir, I have asked your permission, and that of the Council of the Association, to propose a resolution as a matter of urgency. A few months ago the Lord Lieutenant and the Privy Council of Ireland issued a new copy of rules and regulations for the management of District Lunatic Asylums in Ireland, which contained a provision, among others, slightly different from the former rules that had obtained in that country. This altered rule provided for the abolition of the office of consulting and visiting physician in the Irish District Asylums as vacancies should occur in that office. The Lord Lieutenant and Council have been approached by certain medical bodies in Ireland with a view of calling upon his Excellency to reconsider and rescind this altered rule. It would greatly contribute, I believe—and I think I am at one in this respect with the greater number of the members of the Association—to strengthen the hands of the Chief Secretary, if this Association were to adopt a resolution upon the subject. I therefore propose that the following resolution be adopted and forwarded by the Secretary to the Chief Secretary and the Lord Lieutenant of Ireland:—"With reference to the order in council issued by his Excellency the Lord Lieutenant, abolishing the office of visiting physician to District Asylums in Ireland as future vacancies shall occur, this Association desires to approach his Excellency with

an expression of their opinion in favour of the proposed change in the official work of asylum administration in Ireland. The Association believes that this change will be found to act with decided advantage to lunacy work generally in Ireland, as has been the case in other countries where the corresponding office has been abolished."

Dr. NICOLSON—I beg to second the motion. I am quite sure that the expression of opinion on the part of other superintendents connected with the Association would be unanimous in supporting our Irish brethren in their attempt to remove an office, which, however desirable, perhaps, in itself, becomes in conjunction with the work done by the medical superintendent to some extent an inconvenience, not to use a stronger term. I therefore think that we have ground before us to support the Irish branch of our Association and lunacy work in general by sending in such an expression of opinion on our behalf.

Dr. MERCIER—I should like to ask if any notice has been given of the resolution?

The CHAIRMAN—None. It has been allowed to be brought before the Council and recommended to this meeting as a matter of urgency.

Dr. MERCIER—It seems to me a matter of some seriousness to be brought forward without any notice at all. I think we ought to have time to make up our minds before sending in an official resolution in behalf of the Association. It may be a very admirable thing to do, but it is rather rushing the thing to ask us to do it without having time to consider the matter at all.

Dr. MURRAY LINDSAY—I think the matter is urgent and should be dealt with now. It is a question in which I have taken some interest for a good many years. I well remember that two years ago, on the occasion of the meeting of this Association, I argued this question, which was then raised by the College of Surgeons of Ireland. The same arguments were then brought forward as have been brought forward now, and I think they are unreasonable. They were chiefly two, first, that the visiting physicians were a link connecting the inner with the outer world, and then that they were a guarantee that everything would be properly done in the Irish asylums. Those arguments have been raised now. I have had the opportunity of carefully perusing the Privy Council rule, and also an important rule to which Dr. Conolly Norman has not alluded; it is virtually a substitution of the resident assistant medical officers for the office of visiting physician. To my mind, and I think in the opinion of the majority of the members of the Association, there can be no reasonable doubt that asylums and the inmates of asylums would derive far more benefit from an additional resident medical officer than they could possibly derive from a visiting physician, however eminent. It is true that these visiting physicians are generally leading practitioners in the town, but that is only a reason why they should have less time to devote to the work of the asylum. I think the matter is an urgent one. I have read the Irish papers, and there appears to be a storm coming on. Some decision will no doubt be come to by the Chief Secretary, I hope in the direction of adhering to his present rule. No doubt a resolution come to to-day by this Association would greatly strengthen his hands. I think we should never be doing better work than we shall be doing in supporting our Irish brethren in this matter. I have great pleasure in supporting the resolution, and I hope the Association will not be led away by any appeal for delay. I may mention, too, that I have had some experience of visiting physicians in Scotland. At the Royal Murray Asylum of Perth, in my time, I had charge for thirteen months in the absence of my brother. I visited the asylum daily, and I had the opportunity of seeing the practice of the visiting physician. He was a leading practitioner in the town and a very able and highly respected man. But it was an utter farce, and the medical business was reduced to nil. He could not be said to treat the patients. He was there and made himself very pleasant, but as for any

real medical treatment or assistance, I think such a thing hardly existed. The office in Scotland was abolished many years ago, and with great advantage to the institution.

The PRESIDENT—I feel sure that every gentleman who has followed the discussion which has taken place in Ireland on this matter will feel the fullest sympathy with the medical superintendents of Irish asylums. Personally, I have great pleasure in putting the resolution to you.

The resolution was unanimously adopted, and the Hon. Secretary was directed to forward a copy to his Excellency.

Dr. BEADLES read a paper on "Gall-stones in the Insane." (See Original Articles.)

The PRESIDENT—It is a little unusual for us to elect a gentleman as a member of the Association at one moment and to hear from him such an interesting paper at the next. I congratulate Dr. Beadles upon his paper. I am sure it augurs well for his future as regards the Association and the interest that he will take in it.

Dr. EDWIN GOODALL—I may mention that out of 1,400 post-mortems in the W. R. Asylum, there were 284 patients with gall-stones. Out of these 143 were men and 141 women; 49 cases occurred below the age of 40, and 149 above 50. Most patients were epileptics and demented, and that is in accordance with the view that sedentary life and farinaceous diet have to do with the production of gall-stones. I think nothing is more remarkable in the paper than the fact that practically we know very little as to the ætiology of gallstones, especially among the insane. As regards the association of cancer with gall-stones, in only two of these 284 cases was there any account of the cancerous growths, and in one of these it was doubtful whether the growths were cancerous. That fact is not in favour of the supposition that cancerous growths are disposed to by gall-stones. I think the fact that the pia mater and the other parts of the brain showed the changes that have been described is not of very great interest considering that so many of these patients were demented, and epileptics, and chronically insane, who would show such changes in any case. I feel much obliged to the author for his very interesting paper.

Dr. CONOLLY NORMAN—Though I have had inferior opportunities to those possessed by the reader of the paper, and the gentleman who has just spoken, for examining the bodies of the insane after death, I have been struck with the frequency with which I have found gall-stones, particularly in women. I am not prepared, however, to give the exact statistics. One is inclined, I think, rather to adopt the commonly received opinion that the prevalence of gall-stones in female lunatics is due to sedentary habits. There were a number of cases in which I found gall-stones where there had been no symptoms during life to suggest their presence. In one case the gall-bladder was packed with gall-stones, and biliari cirrhosis existed, which showed itself by jaundice before death. In two other cases there had been attacks of jaundice. In a third case an attack of acute jaundice came on for the first time and despatched the patient, and we found a gall-stone impacted in the common duct. My experience with reference to cancer slightly differs from that of Dr. Goodall. I had four cases of cancer of the liver in which there were gall-stones in the bladder. In one of these the cancer of liver was primary, and it had not attacked the gall-bladder. In another case the cancer was secondary. In two cases it existed in the gall-bladder. I found a large gall-stone not long ago in the bladder of a man who had died of a large endotheliomatous tumour of the lesser omentum with secondary infiltration of the liver. In this case the gall-bladder had been caught and squeezed between the superior surface of the tumour and the inferior surface of the liver, and it contained a large gall-stone. That, I think, rather suggests that in these cases of cancer of the liver and cancer of the gall-bladder, in which we find gall-stones in the gall-bladder, the cause is a mechanical one, and not occasioned by the irritation of cancer as some have held.

Dr. NICOLSON—There is one point that occurs to me with reference to the statement made by the author in quoting a medical writer, to the effect that most persons who died were found to have gall-stones. That is not my experience amongst convicts. My recollection is that a larger proportion of gall-stones were shown than one would find in ordinary life; but alongside that statement, it has to be borne in mind that persons dying suffer so long from disease of so many organs that the degeneration generally pervades their systems, and it would be less surprising on that account to find gall-stones present than it would be under ordinary circumstances. The prison diet is also somewhat less abundant in fats and oily substances than is the general diet outside. I think that any statement which gives prisoners a monopoly, as it were, of making gall-stones is altogether beyond any practical experience in this country.

Dr. SPENCE—I think the Association may congratulate itself on finding that the younger members are coming forward and reading such excellent papers. I am bound to say, however, that a good deal in the paper to which we have listened is ancient history to those who have had much to do with the insane for many years past. There is one practical point to which I may refer. I remember some fifteen or sixteen years ago taking as much interest as the reader of the paper has done in the subject of gall-stones. I made out that instead of the proportion, as in the case of those not insane, being two to three, it was something like ten to one. Of late years I think it has been considerably less. I wonder whether that is to be attributed to the fact that, thanks to the exertions of the Commissioners in Lunacy and the superintendents, female patients get a great deal more exercise than they did in olden days. Instead of seeing women cooped up in the wards day after day, simply turned out perhaps for an hour in the morning and in the afternoon, you now see troops of women walking out, and spending perhaps an hour and a half in strolling about the lanes, and having a great deal more exercise than formerly. I do not know whether we may attribute to that a fact that I have noticed at post-mortem examinations that the disproportion between males and females in whom we find gall-stones is not so great as it used to be some years ago.

Dr. MURRAY LINDSAY—I think there are two points that the theories advanced in Dr. Beadles' paper do not satisfactorily explain. Taking the results of post-mortem examinations, gall-stones certainly have diminished considerably of late years. It may be a question whether that is a mere accident. We certainly used to see a great number of gall-stones, but lately they are of uncommon occurrence. I know of no reason to account for it except the one advanced by Dr. Spence, which appears to be a probable one, that of late the patients get more exercise than formerly. With regard to the question of water, Dr. Beadles says that hard water predisposes to gall-stones. I can only say that our patients for 40 years have had to drink very hard water, double the hardness of the London and Surrey water, namely, 32°—the London and Surrey being 16°. They are now taking the same water, but they get more exercise, and the gall-stones are diminishing.

Dr. MACPHAIL exhibited, for Dr. N. A. Campbell, some specimens of biliary calculi, and read a communication from that gentleman.

Dr. SAVAGE read a paper on "Influenza and the Neuroses." (See Original Articles).

Dr. BAKER—Dr. Savage's paper is an extremely interesting one. I may mention that last year I had to pass through two attacks of influenza, and as Dr. Savage was reading his paper it appeared to me that he was describing my own condition during a great portion of the time. We had very few attacks in the asylum over which I preside, but several in my own house, and I only recovered from one attack very soon to have to pass into another. One gets into a condition of ill-health, being unable to take food, restless at night, and ultimately in a condition of complete exhaustion, followed naturally by a state

of profound despondency. You have the feeling that you can do no work, that you have no heart in it. In my own experience in the second attack, which was very severe, I found that nothing would do me any good except to flee from lunacy, and go to Switzerland.

Dr. GOODALL—I should like to ask Dr. Savage whether in his cases there was any history of alcoholism. Van Deventer lays stress on the fact that many of his patients had chronic alcoholism. With regard to the question of the increase of epileptic fits by influenza, in my experience there has been no difference in the quality or quantity of the fits as a result from an influenza attack. I note that Van Deventer and Erlenmeyer state that epilepsy and Jacksonian epilepsy had come on in influenza in persons who had been predisposed to epilepsy. With regard to the modification of existing psychosis, I have not seen any modification, and I have noticed that most German writers state that no modification has taken place. Some, however, state that an unfavourable effect has been produced, others say that an actual cure has occurred in such chronic and incurable maladies as paranoia. One interesting point is the fact that without much febrile disturbance, and with only a short duration of the malady, such a profound effect can be produced upon the nervous system. That remark, however, is by no means new. It was remarked long ago by Mendel that most of the disturbance must, in his opinion, be ascribed to a toxic influence. The evidence in favour of a toxic influence has very much increased of late, since the description of the influenza bacillus by Pfeiffer and others. I think that influenza differs from other maladies arising at convalescent periods in the fact that the preceding disease was not of long duration, and not attended by severe complication. From influenza, I think, we may pass on to the consideration of the mode of action of those inflammations and cellulitic affections of a local kind, which are mainly supposed to exercise their influence locally. My own opinion is that the modification of existing mental disorders which such maladies often produce are due rather to the action of a circulating toxine than to a local irritation. Such a toxine would be produced in quantity by the pyogenic cocci present at the seat of inflammation.

Dr. COBNER—In the Bethlem Hospital there have been 35 cases in which I could trace influenza definitely as the cause—19 females and 16 males. There was neurotic inheritance in 21 cases out of the 35, including not only insanity, but epilepsy, hysteria, alcoholism, suicide, asthma, and diabetes. In 28 of the cases the attack of insanity was the first attack. Sixteen of the patients have already recovered, one was discharged relieved, and there are 15 under treatment, many of them being well on the road to recovery. Three died, one from syncope, one from pneumonia, and one from peritonitis. What struck me chiefly was the difficulty of diagnosing simple post-influenzal insanity from general paralysis of the insane. There have been 16 male cases of post-influenzal insanity in Bethlem. One was definitely a general paralytic; there were absolutely no symptoms before the influenza. He developed epileptiform seizures shortly after the influenza, and was admitted before diagnosis. It was uncertain whether he was a general paralytic at first, but he turned out to be a general paralytic of the slow variety, with general weak-mindedness. Of the other 15 cases nine were melancholiac and six maniacal. Of the 16 males one was a general paralytic, and seven of the other cases were admitted as general paralysis of the insane, but several have recovered. A good many were melancholic, and of course in such patients one does not expect to find many physical signs of general paralysis of the insane, but they have had various physical signs which suggested general paralysis of the insane. Tremors were the chief marked symptoms—tremors of the tongue, tremors of the face, tremulous and hesitating speech, tremors of the hands, exaggerated spinal reflexes which one would expect to find in all cases in which the brain was extremely exhausted, and so to a certain extent cut off from the spinal cord. In some cases we found unequal pupils, and in others there were seizures, some epileptiform, some

syncopal, and some mere lapses of consciousness. In one patient there was definite hemiplegia, apparently due to thrombosis. The great difficulty has been to diagnose between simple cases of insanity accompanied by post-influenzal neuroses and cases of general paralysis of the insane. With regard to mental cases coming on immediately after influenza, the greater portion were melancholic—in the proportion of 10 to 6. I certainly expected a greater proportion of maniacal cases, but it was not so. Of the seven cases looked upon as doubtful general paralytics, three have already been discharged well, and one is now at the Convalescent Home.

Dr. BLANDFORD—Influenza is a disorder which is attended by such a number of sequelæ attacking almost every part of the body that of course it is not extraordinary that among those sequelæ we should find insanity. Dr. Savage has so clearly spoken about the attacks of insanity following influenza that I do not propose to say much about it. We have all no doubt seen a good many people attacked by insanity after influenza. But there is an interesting point to which Dr. Baker has indirectly alluded, but about which much has not been said—that is, the immunity from influenza which the insane in our asylums seem to have experienced. During the first of the two epidemics I do not think I saw a single case of influenza among our patients, numbering 70 or 80. In the last epidemic, at the beginning of this year, we had perhaps half-a-dozen cases. The experience of most gentlemen to whom I have talked on this subject has been something of the same kind, namely, that there have been very few cases among patients in asylums, and that as a rule there have been many more cases among the attendants than among the patients. With regard to influenza modifying the course of insanity, I had one interesting case that I may mention, the case of a gentleman who was a general paralytic and had been under care for quite three years in his own house, being one of the quiet and demented kind of patients. At the beginning of the year he had a slight attack of influenza confining him to bed two or three days, with no great rise of temperature, and no very marked symptoms. When he got well of this attack of influenza and came downstairs again he had a most extraordinary lucid interval. He was in a state of dementia; his speech was so thick that you could hardly understand what he said. Yet in this advanced state of general paralysis, for three or four days he had a lucid interval, and his mind cleared up in a way which could hardly be believed. He inquired who were about him, asked his wife questions about affairs, and spoke plainly. He not only recovered his mental power, but to a great extent his power of speech. He gradually clouded over again and went back to precisely the same condition that he was in before the attack. It is an interesting case of a lucid interval occurring at such a late period of general paralysis. I do not think I ever before knew it happen after so long a time. I may mention that we have among us a member of the American Association of Psychological Physicians, Dr. Walter Channing. I am sure we shall be glad to hear what his experience is on the other side of the water.

Dr. WALTER CHANNING—I did not come prepared to say anything in this discussion, but I am glad to have the opportunity of adding a word to what has been already said. Dr. Savage has given a very lucid account of what he has found in connection with influenza. Our experience in America is that the number of cases of insanity that can be traced to influenza (or the grippe, as we have the bad taste to call it) is rather small. Some of you may remember a paper which was read about two years ago, after our first epidemic, upon cases occurring at Denver's Asylum, where the average number of patients is about 800, the admissions being between 400 and 500 a year. Of the total admissions during the months that the epidemic prevailed there were only 30 in which there was influenza, and of these there were only six in which influenza could be fairly called the cause. The nature of the last epidemic has been rather different. There was more febrile disturbance, a greater rise of temperature, and there were more general physical symptoms in the first epidemic than in

the second. In the second there were more nervous symptoms. Of course it is as yet rather early to give any percentages of cases which have followed that epidemic, but the total number of cases of which I have had any knowledge during the last epidemic among the insane where influenza has been a factor in the causation has been comparatively small. The second epidemic has not been so widespread as the first, but one's attention has been specially directed to it as an indirect factor in the causation of insanity. When a patient is admitted to an asylum the question is always asked, "Has he had the grippe?" and it is surprising to discover that in quite a large percentage of cases the person has had the grippe, has had it during the epidemic, has got over the direct attack, but never again recovered his ordinary health. How much the grippe has had to do with it is not easy to determine, the causation being more or less a matter of difficulty in the majority of cases. In some way apparently the patient's health was undermined, so that the ordinary exciting causes had more influence than they would have had if the patient had not had influenza. The effect has been an indirect one, but taking the total number of cases due to influenza I should say that it was smaller than you have experienced here. I am surprised to hear from Dr. Savage that so many cases do directly follow influenza. Apparently the number admitted to this hospital is comparatively small—35 cases—I do not know out of how many admissions, or during how long a period.

Dr. THOMPSON—In support of the last speaker I should like to ask if we are right in attributing so much to influenza as Dr. Savage would have us do. He says he has seen a large number of cases of insanity directly attributable to influenza. I think we must really be careful before we attribute an attack of insanity to any particular cause. I remember a discussion in this room two or three years ago on this subject, when reference was made to the singular headings of the Commissioners of statistics, and it was shown how absurd the great majority of those supposed causes of insanity were. Take even the puerperal state and intemperance. When you come to consider the great prevalence of these conditions, and how small a number of cases of insanity do actually arise from them, it ought to show us that we should be careful in assigning a particular cause, and confusing post hoc with propter hoc. I do not think the statistics of the Commissioners will bear out the assertion that after the first epidemic there was a great increase in the number of patients admitted to asylums. I am sorry that I have not actually examined them, but if that fact had been published since the first epidemic I think we should have heard of it. I am inclined, therefore, to protest against the ready acceptance of influenza as the cause of so many supposed cases of insanity.

Dr. E. WHITE—May I ask if it is possible to adjourn this discussion until the next meeting, because there must be many gentlemen present who are prepared with statistics and able to discuss this matter more fully.

The PRESIDENT—The next quarterly meeting will not take place until November.

Dr. WHITE—That will give all the more time for the collection of statistics, and it will give time for the development of nervous symptoms.

Dr. THOMPSON—There is one practical point on which I should like to ask a question—what is the average period Dr. Savage has allowed to elapse between an attack of influenza and the supposed resulting attack of insanity, that is, what limit of time does he put upon the period when he reckons influenza as the causation?

The PRESIDENT—There is no proposition before the meeting.

Dr. WHITE—I will move that the discussion of this interesting paper be adjourned until the next meeting.

Dr. ROGERS—I beg to second the motion, and I would suggest that it be at the annual meeting instead of the quarterly.

Dr. WHITE—We could not have a more interesting subject.

The **PRESIDENT**—We have a Presidential Address at the annual meeting, and we shall have to bow to the President as regards the subjects which there may be time to bring forward after his address. I entirely agree that a discussion of this kind should be continued. I think that the discussion of papers at our meetings is of the utmost importance. I do not think that we have allowed a sufficient time for the full discussion of papers so as to get the benefit that we might derive from them. Indeed, I have long felt if we had two days at our annual meeting instead of one it would not be too much to take in our scientific work. At this meeting we have only from half-past four to six o'clock for the reading and discussion of two very interesting papers, either of which might take up the whole time. I agree, therefore, with the proposal that has been made, but I think it is doubtful if we can take the discussion at the annual meeting, when we have to discuss the President's Address. If it is your pleasure, gentlemen, the paper can be put down for the annual meeting, and if it should turn out that there is no time, it can then be postponed until the following November. In the meantime we shall have the benefit of reading Dr. Savage's paper in the Journal.

The motion was unanimously adopted.

The **PRESIDENT**—This will be the last quarterly meeting held here, at any rate under my Presidency, and I wish before we part to propose that a hearty vote of thanks be given to the Governors at Bethlem Hospital for their kindness in allowing us the use of this room for our meetings. I have long felt strongly that we should have a local habitat of our own, but until we do it is our bounden duty to acknowledge the very great courtesy and kindness shown us in this hospital. At the same time I cannot help feeling that to Dr. Percy Smith himself we are under a very great obligation, inasmuch as at every quarterly meeting we turn him out of his sitting-room and use it as a business-room. I do not think we ought to be in such a position, but while we are the least we can do is to return our hearty thanks to the Governors and to Dr. Percy Smith.

The proposal was unanimously adopted.

Dr. **SMITH**—I thank you for your kind remarks, and I would only say that I shall be sorry if the Medico-Psychological Association meets anywhere else permanently.

CELEBRATION OF THE CENTENARY OF THE YORK RETREAT.

We are mainly indebted to the *Yorkshire Herald* for the following notice of this Celebration, which took place at the above Institution, May 6th, 1892.

The establishment of the York Retreat is so identified with the commencement of the movement which brought about so beneficent a revolution in the treatment of the insane that its Centennial Celebration claims an amount of attention which is not limited either to those immediately interested in the Institution or to members of the Society of Friends, with which it is particularly associated. That the event was regarded with some such feeling was evidenced by the extent of the celebrative gathering which took place at the Retreat last night, and a peculiar interest was imparted to it by the presence of descendants of the Founder of the Institution, and of men and women whose names are revered for their unselfish devotion to its interests, as also by the presentation of several mementoes.

Under the presidency of Mr. James Hack Tuke (Hitchin), at one time the Treasurer of the Retreat, a conference commencing at 5.30 was held in the recreation-room of the asylum, a photographic picture of the company grouped near the front entrance of the main building having been first secured.

The **CHAIRMAN** said they must all feel that their meeting that day to

celebrate the 100th anniversary of the founding of the Retreat in 1792 was an occasion of no common or merely local interest, inasmuch as it not only celebrated the founding of the institution, but commemorated the initiation of a movement for the humane treatment and care of the insane which had profoundly benefited that most afflicted and helpless portion of the human race throughout the world, many of whom had hitherto been consigned to "mad houses" where the accepted "treatment" consisted chiefly in imprisonment and chains in filthy cells and other barbarities. If the Founder of the Retreat and his friends could be aware of the marvellously beneficial change which had taken place in the past hundred years, would they not join with them in profound thankfulness to the Giver of all good that so great a result had attended their belief in and steadfast following of the Divine law of love and kindness? It was a pleasant thought to him that William, Henry, and Samuel Tuke, representing three generations of his family, were permitted to work together in a cause so dear to each. He believed he owed the distinction of presiding on this occasion to the fact that he was the oldest living descendant of William Tuke, bearing his name, and the only member of his family who could remember to have seen the Founder of the Retreat. Although in the lapse of time the fact had necessarily grown dim, yet he did just remember going when a little over three years of age to take leave of his great grandfather and receive his dying blessing in 1822. It had always been with sincere pleasure that he had witnessed the various important improvements which had from time to time taken place in the Retreat during the last forty years. None of these had seemed to him of greater importance than the extension of the villa system in addition to the old institutional style of building, a system which he hoped would develop still further in the numerous asylums in this country, in which so many huge and unhomelike structures were to be found. The Chairman then called upon Mrs. Pumphrey, the daughter of a former Superintendent of the Retreat (Mr. Thomas Allis) to read a paper entitled "Recollections of the Retreat as it was Fifty Years Ago."

The paper, not intended for publication, contained a number of incidents and references to former patients, many of them of a droll character.

The CHAIRMAN announced the presentation to the Retreat of a number of portraits of those who had been connected with the Institution and had passed away, including several superintendents. The pastels were by H. S. Tuke.

Dr. ROBERT BAKER, the present Medical Superintendent of the Institution, then read a paper on the "Ministry of the Society of Friends to the Insane," in the course of which he said it was good for all of them, whether as communities or individuals, to pause periodically amid the hurry and worry of life's fitful fever and to attempt to climb to some relatively high mountain apart and survey the landmarks of the memorable past. Dr. Baker observed it was nearly a hundred years ago* that there came into the heart of the great alienist-physician Pinel the belief that the insane could be safely, satisfactorily, and humanely cared for without the use of chains. It was one of the most interesting chapters in the history of the treatment of the insane to read how bravely and courageously Pinel acted out his convictions in performing the dangerous duties he undertook. Dr. Baker proceeded to point out that it was a hundred years ago that a similar conviction was reached at York, and it was resolved to introduce a humane system of treatment of the insane. Hence the Retreat, wherein commenced what was long since described as "a government of humanity and consummate skill." Dr. Clouston,

* Pinel's nephew, Casimir Pinel, discovered in the registers of Bicêtre that the exact date of his noble inspiration was 1793. "On doit croire que ce fut vers les derniers mois de 1793, et non de 1792, que Pinel se presenta à l'hôtel de ville pour demander l'autorisation à la Commune de faire enlever les chaînes aux aliénés de Bicêtre."—"Lettres de Pinel," 1859. M. Semelaigne, the great grand-nephew of Pinel, gives the date of his nomination to Bicêtre as August 25, and the day of entering upon his duties there as Sept. 11th, 1793.—"Philippe Pinel et son œuvre," 1888. Then followed the like humane deed at Salpêtrière.

when, as President of the Medico-Psychological Association, he spoke at York in 1889, described the system of treatment adopted at the Retreat as "the keynote, the example to every succeeding hospital in the country. There was no doubt," he adds, "that York was the very Mecca of the mental physician." Probably most of them were aware that in England there were three distinct classes of asylums: 1st, the vast county asylums; 2nd, private asylums; 3rd, eighteen hospitals for the care and treatment of the insane. The York Retreat belonged to this latter class, where all the funds derived from the patients who paid were spent on the patients who could not afford to pay. No doubt many of them were deeply attached to the name of the Retreat, but it was good for them to remember that the Retreat was actually and legally a registered hospital for the medical treatment of persons in mental ill-health; and it was good for all of them to think of that famous institution not so much as an asylum as a hospital for the cure of those many forms of brain disease which collectively were designated insanity. The great lesson that their ancestors taught in entering on their ministry to the insane was that they ought to regard the insane as human beings in affliction, needing not irons and strait-jackets, but kindness, gentleness, patience, and forbearance. Not only did they recognize the fact that insanity was only a form of ill-health, and not a Satanic possession, but that each special case needed to be ministered to according to its own special needs. (Hear, hear.) They would agree that in their recent developments at the Retreat, the Society of Friends had acted wisely and humanely in building several villas in their grounds and in obtaining Belle Vue House, and Gainsboro' House Convalescent Home at Scarborough. (Applause.) By means of these villas a higher and healthier classification of their patients was possible, inevitable annoyances of asylum life were minimized, and the prospects of cure considerably promoted. If they visited those villas they would see that they were made gay with plants and flowers, and that home comforts abounded. Asylum surroundings were conspicuous by their absence. There was yet another ministry to the insane, which the Society of Friends had partially adopted at the Retreat, but which they should at no distant date carry out to a much larger degree than had as yet been attained to, and that was the employment of a gradually increasing number of ladies and gentlemen to tend and to associate with the Retreat patients, so that they might be ministered to by someone specially called to his or her high vocation, and endowed with as many as possible of the attributes of the ministering angels of God. In conclusion, Dr. Baker spoke of his impending retirement, after rather more than twenty consecutive years' residence among the insane, and said that he believed that to be called to minister to the insane was to be called to the highest of all ministries but one.

Mr. J. S. ROWNTREE hoped the result of their meeting together would be to excite renewed interest in the Retreat. He believed that the Retreat, in common with other institutions of the Society of Friends, had suffered some loss of interest from the origination of those great movements which had called their sympathies out of the narrower channel in which they had hitherto flowed into the wider and more national ones. He thought there was great force in the remarks of Dr. Baker respecting the employment and special training of young people for association with the insane.

After an interval for refreshments,

Mr. WILLIAM PUMPHREY submitted a paper, entitled, "The Retreat Hospital for the Insane Viewed as a Social and Financial Factor," in the course of which he sketched the various changes which had taken place in the constitution of the Retreat, detailed its mode of working, and gave statistics of its financial position. The original amount of the donations was £30,000. The society had benefited in consequence of the low rate of charges to poorer members to the extent of £65,000, and the property of the institution was now valued at £52,000.

Dr. D. HACK TUKE then read a paper, entitled, "A Retrospective Glance at the Early History of the Retreat, its Objects and Influence" (see Original Articles).

Dr. BAKER moved a vote of thanks to Mr. Tuke for his kindness in presiding.

Mr. FRYER seconded, and Mr. JOSEPH ROWNTREE supported the resolution.

The CHAIRMAN having responded, the proceedings became of a conversational character, and shortly afterwards terminated.

AFTER-CARE ASSOCIATION.

A special meeting of the Association for the After-Care of Poor and Friendless Female Convalescents on leaving Asylums for the Insane was held at the Colney Hatch Asylum, by kind permission of the Visiting Committee, on June 1st, 1892, and proved a successful occasion.

Dr. HACK TUKE took the Chair, and observed that it is thirteen years ago, on the 5th of this month, since the first meeting was held at the house of Dr. Bucknill to consider whether an Association should be formed, having for its object the "*After-Care*" of *Poor and Friendless Female Convalescents on leaving Asylums for the Insane*. A paper was read in its support by the Chaplain to the Colney Hatch Asylum, Mr. Hawkins, and the decision was arrived at that such an Association should be immediately formed. Those who wish to understand the motives that led to this step being taken—one that everyone could foresee would involve a large amount of time and thought—cannot do better than read Mr. Hawkins' paper. The following passage may be quoted now. "Those whose need is sorest are patients—young and middle-aged women, without relatives or friends; wives deserted by their husbands, widows, single persons in various callings, as governesses, sempstresses, shopwomen, domestic servants, employés of different kinds, who, after treatment in asylums, having sufficiently recovered to justify their discharge, have no relatives or friends to receive them, no home to return to, no situation or employment awaiting them in which they can earn their bread." "Those who are familiar with the inmates of public asylums will probably be able to call to mind cases of female convalescents whose actual dismissal, though warranted by the state of their health, is delayed—postponed from month to month because they have no friend who can or will undertake their charge on their first return to the world. Some may be literally friendless, others are estranged from their parents, or so remote from them as to be beyond reach of their assistance. The friends of others are sometimes so poorly lodged as to be unable to receive, even for a limited period, an additional inmate into their rooms. In some cases, it is to be feared, relatives would be better pleased that the convalescent should find in the asylum a permanent abode, than that she should leave it and so possibly become more or less burthensome to themselves" ("Jour. Ment. Sci.," Oct., 1879). Now it is important to recognize the fact that the real proposer of this Association (Mr. Hawkins) and those who took the initiative in forming it were or have been intimately associated with public asylums, and in recommending that an After-Care Association should be formed, were practically acquainted with the needs of patients discharged therefrom. It is clear, therefore, that if this Association fails for want of material, it has either been ill-advised and misled by the very men who ought to know most about the subject, or we fail to reach the class we wish to benefit as much as we should do. Dr. Bucknill, Dr. Lockhart Robertson, Dr. Claye Shaw, and Dr. Savage were not likely to advise the step which we then took without knowing and feeling from practical experience that there was a real need for this Association, on pecuniary and moral grounds, which it was decided to attempt to supply. We also know that Lord Shaftesbury wrote

"*the subject has long been on my mind,*" and he would not have so written had not a number of cases come to his knowledge which stood in need of kindly care and help during the interval between leaving the gates of the asylum and entering once more upon the duties and avocations of life. Further, I would point out that since the establishment of this Society not a few medical men continually engaged in public asylum life have urged the importance of supporting the objects which it has in view. Why I thus refer to the history of the Association is to show that it was *founded by practical men*, and was the *outcome of a practical want*. It is well to revive this fact from time to time, as we wish to do to-day, and there is an obvious appropriateness in our meeting at *this* asylum, seeing that it was from it that the proposal to found this Association really emanated. In view of these facts it has all along been evident to me that the superintendents of county asylums and the guardians of the poor must place themselves in close relationship with the "After-Care Association," and be good enough to take some little trouble in supplying us with the necessary information in regard to the nature and character of cases likely to be benefited by having help extended to them by the funds and the cottage homes which this Association supplies. Without this it is obvious that the wants of convalescent patients will not be brought to our knowledge, and the Association may languish, not for lack of funds, but for *want of material being brought within their reach*. This would be a lamentable result, and another event would be equally deplorable, the application of needy cases suitable for care and help, but relapsing into mental derangement for want of the interest of the public, from whom we must derive the sinews of war. The object of such a meeting as this is, therefore, *twofold*, having reference to both *demand* and *supply*, and it is to be hoped that these objects will be advanced by our meeting here to-day.

The Secretary, Mr. H. THORNHILL ROXBY, gave a statement of cases relieved, especially from the Colney Hatch Asylum, which showed that a large amount of good had been effected since the Association was established.

It was proposed by Dr. RAYNER, "That this meeting, approving the objects and work of the After-Care Association, engages, as far as practicable, to promote them." Dr. Rayner said that they had heard from their Chairman the history and objects of the Association, and their Secretary had given interesting examples of the work done by it. They could have no doubt, therefore, of the necessity for such an Association or of the ample scope for its operations. Dr. Tuke had quoted that from one asylum the estimate was given that nearly one-fifth of the females discharged recovered were suitable objects for such assistance. Now there were discharged recovered last year from the English Pauper Asylums 3,000 women. A fifth of them would give a total of 600 needing help. From this, however, considerable deductions had to be made. In the more rural parts of the country the proportion would probably be much less. The difficulty of the Association at the present time was to get into communication with these discharged patients, and to this end it was necessary to obtain the sympathy and co-operation of those who had the care and treatment of them, it being almost impossible to appeal directly to the sufferers for obvious reasons. It was, therefore, necessary to keep the medical officers and committees of asylums and guardians of the poor interested in the Association, and informed of its increasing ability and experience in rendering assistance. This was a very important part of the work of the Association, but, besides this, it was necessary to obtain the aid of ladies in various parts of the country, who would recommend suitable cottage homes for the boarding-out of cases, and take a share in the supervision and finding suitable employment or situations for them. And, lastly, but not least, help was needed in increasing the funds of the Association.

Mr. J. PEEKE RICHARDS, late Medical Superintendent of the Female Department of Hanwell Asylum, said he felt some little diffidence in seconding the resolution proposed, from the fact that for some years after the Association was

formed he had not been a member or given it his support, as he had experienced but little difficulty in providing for the friendless female patients who were discharged convalescent from the Hanwell Asylum. Of late he had altered his views, and he believed that the Association would meet a great want, more especially in providing suitable homes for those convalescent patients belonging to the middle classes, who from misfortune were not able to be placed in private asylums, but had to be classed as paupers in the county institutions. These were the people who required help, and he could not help expressing the opinion that at the present time, when so much was being done for the working classes by the legislature, etc., that they were able to look after themselves, but that the reduced middle classes were those that required more especially our sympathy and support. He suggested to the ladies present at the meeting that they should each try a discharged convalescent patient as a domestic servant in their own households—not as was so frequently, he feared, done—those who professed themselves interested in the after-care of these friendless convalescents asked some friend to take them, but would not venture on the trial themselves. Mrs. Richards had herself taken a patient into her household and with marked success. He cordially seconded the resolution, which was carried unanimously.

Dr. SEWARD, in proposing the next resolution, expressed the hope that a local branch of the After-Care Association might be able to do much good, not only by contributing to the funds, but especially by helping to find openings for convalescents, which would enable them to return to a life of usefulness. Having under his care in the Colney Hatch Asylum more than 1,300 female patients, he had been much impressed by the necessity which exists for such an organization as this Association, and by the excellent work it is already doing in a quiet and unostentatious way. From the four asylums of the London County alone, about 400 women are discharged every year. It may be safely estimated, at least, that about one-tenth of these are friendless, and must return to the workhouse, unless the Association steps in to give them a fresh start in life. If to this class there be added an equal number, whose friends are too poor to do much for them, and who greatly need further assistance, it will be seen that the work of the Association is not likely to languish for want of suitable cases from the London district alone. Dr. Seward said that while well aware of the multifarious duties of the Medical Superintendents of County Asylums, he did not regard it as a hardship to fill up the necessary forms required by the Association in regard to patients leaving asylums and requiring pecuniary or other aid. He bore testimony to the benefit which the Association had conferred upon patients leaving the asylum of which he was the superintendent. He concluded by moving, "That the formation of local branches of this Association would greatly assist its work, and that a Colney Hatch branch be organized."

The Rev. F. HALL warmly supported the resolution, which was carried.

It was proposed by the Honorary Secretary, the Rev. H. HAWKINS, and seconded by Mr. PAWLE, formerly one of the Visiting Justices to the Cane Hill Asylum, and carried by acclamation, "That the kindness shown by ladies here and elsewhere towards many of the infirm in mind merits grateful recognition." The proposer of this resolution enumerated the various ways in which ladies had shown their kindness towards the infirm in mind, viz.: As lady visitors to patients during many years; the ladies' local "Dorcas Society," to make clothes for some discharged female patients; the lady correspondents, from various localities, with patients; ladies attending the London monthly meeting; and lastly, lady visitors to Cottage Homes.

Dr. EDGAR SHEPPARD had great pleasure in proposing a vote of thanks to the asylum's sub-committee for permission to hold the meeting in the asylum, and to Dr. Hack Tuke for presiding on so interesting an occasion. He said he felt a real pleasure in doing this because he had so often returned thanks in that room for kindnesses received during the many years of his superintendent-

ship of the asylum, and because the Chairman, by his antecedents and his practical knowledge of insane life, was so admirably suited to preside over the meeting and support the Association of which the Rev. H. Hawkins was the founder and the mainspring. Dr. Sheppard was free to confess that he had not at first been very sanguine as to the success of the "After-Care." But he ought not to have had any doubts upon the matter, as the earnest Christian zeal and potential energy of Mr. Hawkins were a guarantee for the growth and progress of everything to which he put his hand.

Dr. SAVAGE seconded. Carried by acclamation.

ANNUAL MEETING OF THE AFTER-CARE ASSOCIATION

The Annual Meeting of this Association was held at Hampstead, at the house of Dr. Rayner, who occupied the chair, June 20th. Amongst those present were the Hon. Dudley Fortescue, Rev. W. St. Hill Bourne, Rev. Henry Hawkins, F. C. Pawle, J.P., Drs. E. Parker Young, S. Rees Philipps, J. Peeke Richards, Hack Tuke, Fletcher Beach, Norman Kerr, Savage, etc., etc.

The Report stated that 73 cases had been before the Committee during the year. Some had been boarded-out in Cottage Homes, grants of money and clothing had been given, and assistance had been rendered by finding suitable occupations. The number of Members and the subscriptions and donations had increased. Through the kindness of Dr. Heurtley Sankey, £20 was obtained from the profits of Sale of Work at Littlemore. Will not other Superintendents follow Dr. Sankey's example? For furnishing and fitting up a proposed Cottage Home contributions had been received to the amount of £46. The Report stated that the success and utility of the Association depended upon the warm co-operation of the Medical Superintendents of Asylums throughout England.

A number of addresses were delivered in support of the Association, and it was decided to form a branch for Hampstead and district.

[In consequence of the date of the Meeting falling so late in the quarter we are unable to give a fuller report of the proceedings.]

The Meeting terminated with a vote of thanks to the Earl of Meath, the President, for allowing the Council to hold their meetings at his house, and to Dr. and Mrs. Rayner for welcoming the Members and friends of the Association at Hampstead for their Annual Meeting.

SUPREME COURT OF JUDICATURE.—COURT OF APPEAL.

(*Before the MASTER of the ROLLS, LORD JUSTICE LINDLEY and LORD JUSTICE KAY*).

HANBURY V. HANBURY.

This was an application on behalf of the husband for judgment or a new trial in a petition by the wife for a dissolution of marriage upon the ground of the adultery and cruelty of her husband. The acts of cruelty alleged were committed in 1883 and 1884, and the acts of adultery charged against him were alleged to have been committed with Fanny Young, in October, 1886, and with Alice Pullman and Emily Ireland in June, 1890. The respondent denied the acts of cruelty and adultery, and he further pleaded that when he committed the acts complained of he was a lunatic and of unsound mind and incapable of understanding the character and consequences of such acts. He further

pleaded that all the acts of cruelty and some of the acts of adultery were condoned by reason of the execution by the wife of certain deeds dated August 5, 1885, and March 29, 1888. The action was tried before the President (Sir Charles Butt) and a special jury in March last, when the trial lasted five days, and a great deal of medical evidence was given as to the state of the respondent's mind. The medical evidence was to the effect that the respondent was suffering from a disease which deprived him, as long as the attacks lasted, of all control over his actions and drove him to drink and other excess. The jury, in answer to questions put to them by the President, found that the respondent committed the acts of cruelty and adultery charged against him in the petition, and that when he committed the acts of cruelty and adultery he was capable of understanding their nature and consequence. The learned President held as a matter of law that the execution of the deeds did not amount to condonation of the acts of cruelty, and pronounced a decree *nisi* for dissolution of the marriage.

Mr. Lockwood, Q.C., and Mr. Bayford, Q.C. (Mr. Witt, Q.C., and Mr. A. D. Home with them), contended (1) that the verdict was against the weight of the evidence; and (2) that the respondent was entitled to judgment upon the ground that the evidence showed conclusively that the respondent, when committing the acts charged against him, was under an uncontrollable influence and was not responsible for his acts. The parties were married in 1875 and there had been six children of the marriage. In March, 1883, one daughter died, and it was suggested that the loss of this child developed the disease from which the respondent subsequently suffered. In July, 1883, the respondent, when under the influence of drink, struck the petitioner, and he was then bound over by the magistrate to keep the peace. He then voluntarily went to Dr. Stewart's Home for Inebriates. In January, 1884, he returned to his business, and in June, 1884, he had a further attack of insanity. The form of insanity was known as "folie circulaire" or recurrent mania, due to hereditary causes. The disease recurred at intervals, and when it did he broke out into drinking habits and other habits of excess, being driven to it by an uncontrollable impulse. The form of the attack was as follows:—First exaltation, then delusions, followed by drinking, and then depression. Between the attacks he was perfectly sane. The medical evidence showed that the drinking was the result of the mental disorder. In June, 1884, he threw some brandy and water in his wife's face, and on June 23 he was placed at Moorcroft Lunatic Asylum, kept by Dr. Stilwell. On June 26 the wife filed a petition for judicial separation, and in August the respondent left Moorcroft in improved health. Negotiations took place between the solicitors to both parties, with the result that on August 5, 1885, the petition was by consent withdrawn, and two deeds were executed under which the respondent agreed to allow his wife £500 a year, and to settle £8,000 for the maintenance of herself and children. There was no agreement for separation. The parties lived together again from November, 1885, to July, 1886, when he was again attacked with the disease, and he was removed to Moorcroft Asylum, where he remained until September. In October 1886, he committed adultery with Young, at Peckham, and in November, 1886, the wife filed a second petition for judicial separation, and also petitioned for an inquiry in lunacy. On March 29, 1888, this petition for judicial separation was withdrawn by consent, and a deed was executed giving the wife £300 a year additional, and giving the husband the custody of two of the children. This was not a separation deed, but the parties did not live together after July, 1886. In December, 1888, the respondent was removed to Wanford House Asylum, near Exeter, and from there he was transferred to a lunatic asylum at Virginia Water, and then to Moorcroft Asylum until May 23, 1889, when he was discharged. In September, 1889, the respondent became ill again, and, under the advice of Dr. Davy, of Exeter, he placed himself under the charge of Dr. Powne, of Chard, and he remained at Dr. Powne's house (not an asylum) until 1890, and in April, 1890, while he was there

he had an attack. In June, 1890, he went to Exeter, and the acts of adultery with Pullman and Ireland were committed at Exeter and Exmouth in that month. The evidence of the medical witnesses of special experience in mental disease showed that this disease, when an attack came on, drove the respondent to drink and to other excess. The medical evidence was all one way. [Lord Justice Kay: But when the respondent went to Exeter from Dr. Powne's he had made no attack upon him, or else Dr. Powne would not have let him go. Can you show any attack which in its inception was not accompanied by drinking?] The evidence of Dr. Davy showed this. This disease was not produced by drinking; the disease produced a craving for drink. [The Master of the Rolls: But is the jury bound to accept the opinions of the medical men? It is not like a question of fact; it is a question of opinion. One knows that some doctors say that everyone is mad. Moreover, the evidence does not show that the respondent did not know what he was doing.] The evidence showed that when the attacks came on the impulse to excess was uncontrollable. [The Master of the Rolls: But is that sufficient in law?] Yes; if the respondent had no will in the matter, he would not be responsible for his actions. They also contended that the deeds of August 5, 1885, constituted a release as regards the acts of cruelty.

Mr. Inderwick, Q.C., and Mr. Bargrave Deane, for the petitioner, were not called upon.

The Court dismissed the application.

The Master of the Rolls said that, with regard to the alleged release, there was nothing in the deeds which amounted to such a condonation as constituted a release. There was condonation of the acts of cruelty and adultery by the subsequent cohabitation of the parties, but the acts of adultery subsequent to the cohabitation revived the acts of cruelty and adultery committed before the cohabitation. The question, then, was whether the acts of cruelty and adultery were acts for which the husband was responsible. It was admitted that the acts charged were committed, but it was said that the husband was not responsible by reason of the condition of his mind at the time when the acts were committed. Medical men of great eminence stated that his mind was a diseased mind when the acts were committed. They called it an insane mind. They designated the disease of the mind as "folie circulaire," and the principal medical witness stated that the disease could not have originated in the man, but must have been hereditary, caused by a degeneration of mind in one of his ancestors, and that the disease lay dormant until he was exposed to excitement such as drinking, and that then the disease developed itself. The evidence stated that in the first two stages of the disease the victim would have an uncontrollable impulse to indulge to excess, which, as far as he could see, consisted in committing adultery as often as possible and ill-treating his wife. In his opinion, that was evidence which the jury were entitled to disregard altogether, even though it was not contradicted. It was a piece of scientific evidence, and the jury, upon such a matter, were the sole and ultimate judges; and, however scientific and however influentially supported the evidence was, the jury would have a right to reject it altogether. One question was whether, supposing there was such a disease, this man was a victim to it. The doctors said that it must be hereditary, through one of his ancestors having a degenerated mind, and that it could not be brought on by any amount of drinking. There was not the slightest evidence given of a degenerated mind in any of the respondent's ancestors. The jury might well find that this man did not suffer from this supposed disease. The case, however, did not shape itself thus. The jury found that the respondent knew what he was doing when he committed the acts, and understood their nature and consequences. The rule of conduct of this Court was that a new trial would not be granted upon the ground that the verdict was against the weight of the evidence unless the verdict was such that a jury, viewing the whole of the evidence reasonably, could not reasonably find.

The jury were perfectly entitled to come to the conclusion they did, and he thought that it was the only sensible conclusion at which they could have arrived. There remained a question of law. Assuming a diseased mind, and that the diseased mind gave him certain impulses—he would not call it an uncontrollable impulse, as he did not know what that meant in such a case as this—the respondent knew what he was doing, and that he was doing wrong. An act of adultery was a culpable act against the wife. He was prepared to lay down as the law of England that whenever a person did an act which was either a criminal or a culpable act, which act, if done by a person with a perfect mind, would make him civilly or criminally responsible to the law, if the disease in the mind of the person doing the act was not so great as to make him unable to understand the nature and consequences of the act which he was doing, that was an act for which he would be civilly or criminally responsible to the law. Consequently, even though the respondent's mind was diseased, he was as responsible to the law as if his mind was not diseased. The judgment of the learned President was therefore right. There was a larger question which the President touched upon, but did not decide—namely, whether, even if the respondent's mind had been such that he did not know the nature of what he was doing or that he was doing wrong, the petitioner would or would not be entitled to a divorce. It was unnecessary to decide that question, and he desired to leave it open.

Lord Justice Lindley concurred. It was very curious that, until the death of his daughter in 1883, no trace of insanity was discovered in the respondent. He then took to drinking. Giving every weight to the medical evidence, it did not come to more than this, that the respondent suffered at the time he committed the acts from acute mania, and could not control his actions. Whilst in this state, whether caused by drink or not, he committed adultery and beat his wife. Was the wife to be deprived of the protection of the law? He did not think so. It was a mistake to introduce questions of criminal law into these questions. The case seemed as plain a case as could possibly be for a divorce.

Lord Justice Kay concurred, saying that he had nothing to add.

DEWAR v. DEWAR.

The appointment of a *curator bonis* to manage the estate of a person of unsound mind is an ancient and valued prerogative of the Supreme Court of Scotland. It is a speedy and economical procedure compared with inquisition in England, which resembles the still more ancient and formidable process of *cognition*, a trial before a jury.

The appointment of a *curator bonis* is made by summary petition before a Lord Ordinary of the Court of Session. The petition is accompanied by two medical certificates, setting forth on soul and conscience that the person is incapable, and the appointment lasts until recalled upon petition or annulled by death. A recent statute has further reduced the cost of this procedure by making it competent for the Sheriff to appoint a curator to a person of limited means.

In the case of *Dewar v. Dewar*, the petition was at the instance of a wife for the appointment of a *curator bonis* to her husband, at the time confined in an asylum under warrant of the Sheriff. It was proved by medical certificates that he had a clear and intelligent comprehension of business matters, and in particular of his own financial affairs, but that he suffered from delusions with regard to spiritualism, and entertained groundless feelings of mistrust regarding members of his own family, which might affect the propriety of his directions respecting the management of his own property.

The facts of this case are concisely summarized in the opinion of the Lord Ordinary (Kincairney), subjoined—

“From the petition and answers it appears that Dr. Dewar had been, on the instructions of the petitioner’s agents, visited by Dr. Grainger Stewart and Dr. Heron Watson; by Dr. George W. Balfour, by Dr. Littlejohn, by Dr. Clouston, and Dr. Byrom Bramwell.

“The certificates of these gentlemen disclose some difference of opinion about Dr. Dewar’s mental condition. Dr. Grainger Stewart and Dr. Heron Watson state that they felt it impossible, at the date of their examination on 20th May, to grant a certificate for the appointment of a *curator bonis*. They recommended delay and a further examination after the lapse of a month or six weeks for the purpose of deciding upon the necessity of appointing a curator.

“Drs. Balfour and Littlejohn express the opinion in general but unqualified terms that Dr. Dewar was of unsound mind, and incapable of managing or of giving directions for the management of his affairs.

“Drs. Clouston and Bramwell state that on their visit they found Dr. Dewar coherent and acute in regard to business matters, but taking into account the whole of the facts elicited at a prolonged examination of his mental condition, they felt unable to give a certificate that he was yet fit to manage his affairs or give directions for their management.

“I rather understand that the course of making a remit to the Sheriff suggested by the respondent’s counsel has not of late years been regarded very favourably, and I consider that I had hardly a right to devolve on the Sheriff a duty which appeared to be my own, and ultimately I came to think that the safest step I could take was to make a remit to a medical gentleman who had not been employed by either party, and whose opinion I could regard as of weight and authority.

“Having ascertained that Sir Arthur Mitchell had not been consulted in the case in such a way as to affect his absolute neutrality, I, on 9th July, remitted to him to examine the petition and answers and productions, and thereafter to visit Dr. Dewar, and to report whether in his opinion Dr. Dewar was in such a state of mental derangement as to render him incapable of managing or of giving directions for the management of his affairs. Sir Arthur Mitchell has now returned a report, stating his opinion ‘without hesitation or difficulty’ that Dr. Dewar is at present of unsound mind, and as a consequence incapable of managing or of giving directions for the management of his affairs.

“Sir Arthur Mitchell’s report is expressed in general terms, but he was good enough to call on me and to explain his views in more detail. It appears that Dr. Dewar is, in Sir Arthur’s opinion, subject to delusions related to what is known as spiritualism, of such a nature as to render him quite an unsafe guardian of his own property, and which might render him liable to be very readily imposed on by designing people who were aware of his weakness. He entertains, besides, Sir Arthur informs me, feelings of mistrust towards his family which cannot be altogether disregarded.

“The agents of Mrs. Dewar and for Dr. Dewar have been again heard, and it has been strongly pressed, on behalf of Dr. Dewar, that he showed an intelligent comprehension of his own affairs—which seems to be true—and that he could safely be trusted with them, and in particular, that he could not, or ought not, to be deprived of the control of his own property without the verdict of a jury obtained on a brief from Chancery, under the provisions of the 101st section of the Court of Session Act.

“I think that my duty is to appoint a *curator bonis*. My appointment is, of necessity, substantially, though not nominally, an interim one, if it shall hereafter appear to the Court that the condition of Dr. Dewar’s mind should be submitted to the consideration of a jury. It rather appears to me, however, to be better for Dr. Dewar that a *curator bonis* should be appointed than that his present state of mind should be submitted to a jury. For should he shortly recover—and I have not heard anything which precludes that hope—it will be

much easier to restore to him the full control of his affairs than it would be if he were found by a jury to be insane."

In anticipation of the discussion upon the reclaiming-note, two additional medical opinions were obtained at the instance of the respondent's agents.

The first of these was given jointly by Drs. Howden and Ferguson upon 23rd October, and *inter alia* contained the following passage:—"We found him calm and self-possessed in manner, of a high degree of intelligence, with a mind widely and accurately informed, and able to reason on many subjects in a clear and rational manner. He appeared thoroughly familiar with the condition of his financial affairs, and alive to his interest in regard to them." And the conclusions of these gentlemen upon the question of the respondent's mental condition are summarized thus:—"We are of opinion (first) that Dr. Dewar is a person of unsound mind; (second) that if at large, Dr. Dewar might be dangerous to the persons who are the object of his suspicions, and that the nature of his delusions unfits him to treat with fairness the members of his own family and household, and renders him liable to be biassed in a similar manner against others; (third) that, nevertheless, he is capable of clearly appreciating his worldly interests in many ways; (fourth) that if management of his affairs includes a just and natural regard to the interests of his family, we do not consider he is worthy of being entrusted with their management; but (fifth) that we are not prepared to say that his mental condition, as ascertained by us, incapacitates him from administering his affairs in other respects."

The second opinion was that of Dr. Yellowlees, who, while saying that he found Dr. Dewar "acute and intelligent in conversation," concluded as follows:—"I believe that Dr. Dewar is conversant with his business affairs and investments, and that he could give directions concerning them, but such directions would be influenced or swayed or determined by the presence of delusions as to relatives or others conspiring against him, or desiring to injure him, and might be influenced by insane ideas as to spiritualism and its devotees, supposing Dr. Dewar to entertain such delusions and ideas."

Argued for reclaimer—(1) To deprive the respondent of the management of his property it was not enough that medical certificates should be produced in evidence of mental incapacity; he was entitled to retain the management until found incapable by verdict of a jury upon a brieve of cognition issuing from Chancery in terms of section 101 of Court of Session Act, 1868. (2) In this case the evidence did not warrant the appointment. The fact that a person was of unsound mind was not enough, for the particular unsoundness may not interfere with an intelligent view of business matters.

Argued for the petitioner—No case quoted showed that a curator had been refused by the Court when the person of unsound mind was actually resident in an asylum. It would be competent enough for his relatives to sue out a brieve of cognition from Chancery under sec. 101 of the Act, but that process the relatives did not desire to adopt. The inquiry before a jury would give both to his relatives and to the respondent much pain, and would probably injuriously affect the latter and delay his recovery, while if he did recover he would again require to have his sanity tried in a declarator of reconvalence.

At advising—

Lord President—I do not think it is disputed as a general principle of our law that a man of full age is not to be deprived of the management of his own affairs except by the verdict of a jury finding him incapable of managing them. There has, however, been a practice in observance from very early times of appointing factors or *curators bonis* to persons in an infirm state of mental health where it appeared, or was thought probable, that the infirmity was of a temporary character. I do not say that the statutes, and particularly the last statute, regulating the procedure in cases of cognition of the insane (*viz.*, the Court of Session Act, 1868, sec. 101) positively confine the issuing of a brieve from Chancery to the case of a person in permanently bad mental health; but I do say, generally speaking, that that is the kind of case which is with

propriety submitted to a jury. Where, on the other hand, there is a case of merely temporary incapacity, the appointment of a *curator bonis* is the more expedient and proper remedy, and if there is any doubt as to whether the incapacity is permanent or temporary, I still think the appointment of a *curator bonis* is the more judicious procedure for the parties interested and for the Court to adopt. The jurisdiction of the Court in appointing such officers existed and was exercised long before the year 1730, but the words of the Act of Sederunt of that year are important as showing the class of cases to which it was intended to apply. It defines the class whose estates factors were appointed to administer as "pupils not having tutors, and persons absent that have not sufficiently empowered persons to act for them, or who are under some incapacity for the time to manage their own estates," and the object of the appointment was "to the end that the estates of such pupils or persons may not suffer in the meantime, but be preserved for their behoof and of all having interest therein." Now, it is to be observed that the Pupils Protection Act of 1849 recites in the preamble the identical words, showing obviously that the intention of the Legislature was to continue the special remedy provided by the Act of Sederunt, and to confine it to the case of pupils or absent persons, or of persons suffering "for the time" from incapacity. It therefore appears to me that the question is whether this ought to be dealt with as a case of permanent or of temporary insanity, and that question depends upon the special circumstances we have before us here. If it was clear from the papers in the case that this gentleman's condition of incapacity was hopeless, I should be of opinion that the proper course would be to sue out a brief of cognition from Chancery. But these are not the facts of the present case, for although Dr. Dewar appears to labour under delusions of a singular and complicated character which render it very unsafe at present to entrust him with the management of his own affairs, he still retains a considerable amount of mental energy and acumen, and I do not see anything in the medical reports to discourage the hope that his mental capacity may be completely restored. His residence in the asylum has already wrought an improvement in his condition, and that being so it would be a strong proceeding upon the part of his relatives, to whom alone it is competent to sue out a brief from Chancery, to apply for a brief with the object of having him cognosed insane and permanently deprived of the administration of his affairs, unless he should be reinstated by a formal declarator of reconvalescence. Everything points to this case as one for the application of a temporary remedy, and the only temporary remedy known to our law is the one asked for in this petition. As to the expression of Dr. Dewar's own opinion in this matter, I confess I do not attach much importance to that. Neither he himself nor his legal advisers thought fit to set forth in the answers to the petition a demand that the question of his mental capacity should be submitted to the judgment of a jury, but on second thoughts Dr. Dewar writes to his agents in these terms:—"Having to-day seen a copy of Sir A. Mitchell's report, I still maintain that I am perfectly competent to manage my own affairs, and I wish you to insist on the question of my capacity being tried by a jury. I cannot consent to the appointment of a *curator bonis*; still, if one must be appointed, I wish Mr. William Mitchell, S.S.C., to be appointed;" and Dr. Dewar's agents, in terms of this letter, lodged a minute in process asking that the present petition should be superseded by an inquiry upon a brief of cognition. Now, if this suggestion had come from anybody else, I would have said it was the suggestion of an enemy, for I cannot conceive anything more likely to retard his recovery than his being exposed to a trial before a jury upon a brief. If there is one course indeed more than another which would be likely to render him permanently mad, it is the course suggested in that letter and minute. I see no reason to doubt that in the first place the respondent's condition is such as to render him unfit in the meantime to manage his own affairs; and in the second place, as it is quite possible, if not indeed probable, that he may at some time so far recover as to be restored to the uncontrolled

management of his estate, I think the Lord Ordinary has taken the proper course in appointing a *curator bonis*.

Lord Adam—I agree, and have very little to add. I am of opinion with your Lordship that the proceeding by way of appointment of a *curator bonis* upon the estate of a person of unsound mind is independent of the ordinary process of cognition upon a brieve from Chancery, and is further the more suitable procedure to adopt where the unsoundness of mind is not likely to be enduring, which is the case here. That is my view upon the competency of this petition, and the only remaining question is as to the expediency of the appointment in this instance. The main matter for consideration is, what is the course most conducive to the benefit of the respondent himself? Now, his case is peculiar in this respect, that he is now in a lunatic asylum, and is admittedly of unsound mind. He does not himself say in the answers that he is of sound mind, but that he is not of unsound mind to the extent of being unfit to manage his own business affairs. But upon the evidence before us in the form of medical certificates—and some of these were obtained at his own instance—it is clear that his mental unsoundness goes further, and is not of the partial character contended for by the respondent's counsel. [After referring to the contents of the medical reports in detail in support of this view, his Lordship proceeded]—The question before us is whether it is right and proper that a person so described should have the management of his affairs in his own hands, and to that question I say no.

Lord M'Laren—The case has not been argued so much upon the power and jurisdiction of the Court to make the appointment which is here resisted as upon the expediency of the appointment being made, and whether the matter of the respondent's mental incapacity should not upon his demand be submitted to the verdict of a jury. That is undoubtedly the appropriate mode of trying the question where it is raised on a brieve of cognition proceeding from Chancery, but I should be sorry to give countenance to the supposition that a brieve of cognition is the only method by which such a question can be raised and settled. Alongside of that method there have for centuries subsisted other modes of ensuring protection of the property of the insane. Your Lordship has traced the history of one mode by means of the appointment of factors and *curators bonis*, and there was also another method which consisted in the appointment under the powers exercised by the Court of Session of tutors-dative to insane persons; and although there are not many applications nowadays for this latter appointment—owing probably to the fact that the office is a gratuitous one—still in both these cases the means of inquiry adopted was the same, and we have proceeded upon the reports of professional persons obtained by the parties themselves, or upon the initiative of the Court for its own guidance. I am far from saying there are not cases where a mere formal proof should be exacted—it might be, for instance, that an absolute contradiction in point of fact was disclosed in the petition and answers—but we have no such issue in the present case. Here the question raised is merely whether the cerebral disease and mental unsoundness admittedly existing are of so serious a character as to necessitate a temporary withdrawal of the respondent's affairs from his own management. I apprehend this is a matter entirely within our discretion, and while thinking that the right and suitable course of inquiry has been adopted by the Lord Ordinary, I also agree in the propriety of his judgment.

Lord Kinnear concurred.

The Court confirmed the appointment.

On appeal to the House of Lords, at delivering judgment, Lord Herschell said:—It appears to me that, so far as authority goes, there is no authority for the proposition that in every case the Court is bound to make a judicial inquiry, or to remit the case to the Sheriff in order that he may do so. And it seems to me that there is authority for the course being taken which was taken in the present case, for in *Forsyth v. Forsyth*, 24 D. 1435, the Court made a remit to two men of skill in order to have the advantage of their opinion upon the subject. In the present

case a remit was made by the Lord Ordinary to Sir Arthur Mitchell, a man, as I have said, highly competent to fulfil such a function, and the Court had the advantage of his report before arriving at any conclusion. Therefore, my Lords, there appears to me to be no authority justifying the assertion that the Court can only act by taking proof itself or having proof taken before the Sheriff. There is authority for the proposition that the Court may act, and has been in the habit of acting, upon a remit to a medical man, or medical men of skill, to assist it in forming its conclusion. But all these authorities together leave, without any doubt, the impression upon my mind that in every one of these cases it is for the Court to form its own conclusion, and it is for the Court to determine in its discretion what assistance it will obtain towards forming that conclusion. That assistance has been of a different character in different cases, but whatever its character has been, whether in the way of proof before the Sheriff or not, it appears to me only to have been such assistance as the Court thought right to acquire in order to enable it to come to a conclusion as to how the discretion reposed in it ought to be exercised. My Lords, if that be so, I think it disposes of the whole of the contentions which have been put before your Lordships on behalf of the appellant, and it shows the course taken in this case to have been correct. I therefore move your Lordships to affirm this judgment, and to dismiss the appeal.

Lord Watson—My Lords, I cannot say that I have anything to add to the statement of this case which has been made by my noble and learned friend. To anyone conversant with the law and practice of Scotland, this must, in my opinion, appear to be a most groundless appeal. I think there can be no doubt whatever, in the first place, that the Court of Session had jurisdiction to entertain the application made to it in its present form; in the second place, that, notwithstanding the appearance of the present appellant to oppose its prayer being granted, it was a matter entirely within the discretion of the Court to determine what inquiry was necessary for the purpose of enlightening them as to the capacity or incapacity of the appellant to manage his own affairs at the time; and, in the third place, I think it equally clear that the certificates of the medical men which were produced were quite sufficient to justify the Court in taking the course which they did take, and making the appointment without further inquiry.

Lord Morris concurred.

Their Lordships affirmed the judgment appealed from, and dismissed the appeal.—*The Scottish Law Reporter*, June 25, 1891.

MISS CONSTANCE NADEN'S ESSAYS: A REJOINER.

In the "Journal of Mental Science" for April there appears a review of the late Miss Constance Naden's essays, under the heading "A New Philosophy." It must be a pleasure to those in any way identified with Miss Naden's thought-system thus to find it ably and courteously discussed in so prominent a quarter. I have shown my own appreciation of the notice in question by reprinting it—with annotations by Dr. Lewins—in the appendix to a recently published essay of my own on Miss Naden's auto-monism ("Sadducee *versus* Pharisee," Bickers). It is chiefly, however, as editor of the latest volume of her essays ("Further Reliques of Constance Naden," Bickers), reviewed in the "Journal of Mental Science," that I am interested in the matter. In that capacity, a very large amount of her posthumous papers passed through my hands for arrangement and selection. I can thus, without pretension, affirm myself to have had, at least, the opportunity of becoming as fully acquainted with Miss Naden's views as any other person, and it is because I do not think that the late notice

in these pages adequately treats the subject that I pen this rejoinder. Of course I do not claim authoritatively to interpret Miss Naden and her "Weltanschauung," but where there may be any difference of opinion between her reviewer and myself her own words may be referred to as being, at least, in court. As a philosophical and scientific writer, she has been largely misinterpreted and misunderstood, probably because the time has not yet come for her report being believed; but her most careless critic would scarcely accuse her of using misleading or inaccurate language. Her statement, even in matters of trivial detail, was always measured and deliberate, and her posthumous papers, on account of her painstaking method, required very little revision before being sent to press.

(1.) Had Miss Naden lived to see her essays published in volume form I think she would have been the first to question the propriety of their being reviewed under the title "A New Philosophy." And this for the simple reason that it is *not* new, or even, in the modified sense, novel—this hylo-idealism, to the exposition and elaboration of which she devoted the best years of her brief life. A glance at almost any of her essays will show that she always regarded the most advanced generalization of modern thought as having its seed-time, if not its roots, in the past—*only its readjustment to date* being, in any sense, "new."* In her case, the up-to-date scientific training through which she passed enabled her to put in a fresh light the familiar dictum of Protagoras. No one more distinctly deprecates the viewing of hylo-idealism as a "discovery," or as anything more than a *resipiscentia*—a coming again to our better self—than Dr. Lewins (*Cf.* his pamphlet "Auto-centricism," W. Stewart and Co., pp. 1, 13), to whom Miss Naden was so much indebted for the germ of the thought-theory which she elaborated.

(2.) It is stated by the reviewer that "her main interest . . . was in the discovery and working-out of a philosophical scheme of the world of knowledge which should combine for her mind the merits of the English and the Neo-Kantian systems of thought, and avoid the difficulties of both." Now, as to "discovery" enough has been said, and scarcely anything could be more unfortunate than the phrase "a philosophical scheme of the world of knowledge" as applied to Miss Naden's world-scheme, seeing that her method is scientific as well, and includes, in identity, the world of being as well as the world of knowing. And then, of course, we have the apparently inevitable statement repeated, "It is evident that she was much influenced at one time by Mr. Herbert Spencer." I have dealt with this elsewhere (*Cf.* "Reliques," Appx. 233, note; "Sadducee *versus* Pharisee, pp. 12, 13). The persistence, however, of this idea without any foundation is truly astonishing.

(3.) "The essence of the theory (hylo-idealism) appears to be capable of being stated as an inverted variant of the teaching of Berkeley and Hume." Thus far the reviewer. The contention may be granted as regards Berkeley; indeed, I admitted as much in my reply to Dr. Dale's article in the "Contemporary Review" (*Cf.* "Reliques," Appx. p. 238). But I cannot see where Hume comes in—at least, distinctively. Hume, indeed, doubted "whether there were any reality corresponding to these 'fictions of the mind' at all." But that was not the distinguishing characteristic of his system. On the other hand, it is the veriest commonplace of philosophical record that, as the external world practically disappeared with Berkeley, so the permanent conscious subject disappeared with Hume. Now, what would "an inverted variant" of the latter position be? Simply the reinstatement of a permanent conscious subject. But that would, in no sense, apply to Miss Naden's position. The true "inversion" of Hume is Neo-Kantianism, not of the English, but of the French school.

* As Dr. Lewins puts it in a letter just received: "In every age, every problem must receive a new rendering, so as to bring it into harmony with the ever-varying *Zeitgeist*."

(4.) But since we cannot agree as to what Miss Naden's system resembles, let us see what it is—or rather, in the present instance, what it is *not*—in and by itself. "Miss Naden," says the reviewer, "is possessed by two currents of thoughts, which she conceives her theory to reconcile. She is very clear that to us there is no outside world—that every 'thing' is a 'think' . . . and that, in fact, each man makes his own universe." But she is, at the "same time, equally assured of the effective materiality of the universe." So far well. But the following is immediately slipped in, as if on precisely the same level as the foregoing: "She is quite satisfied of the existence of other things (*sic*) and other beings, and she is prepared to reason about them, not only for intellectual, but for ethical purposes." Now, is this line of criticism a fair one? I am tolerably well acquainted with Miss Naden's writings, published and unpublished, and I would respectfully ask for substantiation of the statement implicitly conveyed by the above method of quotation, viz., that as regards (1) thing being think, (2) the effective materiality of the universe, and (3) the existence of "other things" and other beings, Miss Naden was *coincidentally* persuaded, *i. e.*, regarded them as assurances on one and the same primary level? If not substantiated, of course the criticism falls. It is mainly a question of "object" and "eject," as Clifford put it, and Miss Naden was "parlously" exact in her terminology, as many of her critics have found to their cost.

(5.) Again, "Miss Naden's answer to the difficulty seems to be a rough-and-ready sort of Cartesian argument." In what succeeds, I am unable to follow the reasoning. In fact, in regard to it, I am somewhat of the opinion of Dr. Martineau when he said of a certain controversialist that he impressed his readers more with the stateliness of his march than with any clear idea of the direction in which he intended to travel. Miss Naden's argument is represented by sundry disconnected quotations from her writings. The first is taken from her essay "Ontology and Scepticism." The second is from another part of her writings altogether. And so on. Now, why not have followed up the first extract, with its natural and logical sequel, in the essay which immediately follows it, *i. e.*, "Cosmic Identity?" Isolated quotations are apt to be misleading, and a mosaic of them is intolerable. And, then, by way of conclusion, the patchwork is called a "simple-minded argument." How would Kant read if his "Critique of the Pure Reason" were not only interleaved, but interlined, with his "Critique of the Practical Reason?" Yet this would scarcely be less edifying than an *olla podrida* of hylo-zoism and hylo-idealism. The latter, indeed, lies implicit in the former, but they are not the same.

(6.) It seems, however, according to the "Journal of Mental Science" reviewer, that "the test and basis of the whole matter is, what test of *reality* one's scheme of philosophy can provide." The "test" is the "test," without doubt—except, perhaps, when it does duty as "basis." But let that pass. The answer to the above very much depends upon what the "philosophy" in question is. If it be a monism—a synthesis universal—then a "test" is unthinkable. Miss Naden has the following in her essay "Cosmic Identity:"—

"The term 'identity' when applied to the cosmos has precisely the same signification as when applied to any separate object. It means *constancy of relations*. There is only one distinction to be drawn. The relations of a separate object may be classed as internal and external. . . . Cosmic relations are all internal, for the cosmos has no outside. . . . We cannot draw any comparison between this world and other worlds, for there is no other universe by which our own can be tested." Constancy of relations, then, must be internal, not external, in the case of the cosmos. But a "test of reality" which is internal, inside the cosmos, can only test that which is left when it (the test) is subtracted. Hence, possibly, the conclusions of the reviewer: "That our universe is made up of phenomena all thinking persons will agree. That, in some sense, it is nevertheless real, is obvious to all who are not in a lunatic asylum, and to many who are. But the explanation of the meaning of that

reality is the crux of the philosopher, as the discernment of it is often the test of the lunatic."

It would seem, then, that if a world-scheme is monistic it can have no *locus* at all from the reviewer's standpoint, since there is no foothold left for a test of its reality. All that can be said to this is—What "test" would there be, in turn, of the reality of any such "test," to say nothing of its "meaning?" What of the regress of tests thus imperative? Broadly, however, such a method as that of the "Journal of Mental Science" has its advantages. Find a "basis" for your philosophy and it contrives a double debt to pay—a basis at one time, it comes in handy as a court of appeal at another.

(7.) Then as to reality apart from "tests." This is the *fons et origo mali*, i.e., of the whole of the bad reasoning. "Drunken dreams," "mirages," etc., according to the reviewer, are not "real." And we "know" nothing, apparently, regarding dream-content. But some realists—out of an asylum—are of a contrary opinion, so are some apparently sane idealists, who affirm, undeterred by dread of incarceration, that "the real is *everything*." But surely, unless the critic can show that such dreams and spectra are outside the egoistic circle, his contention cannot affect Miss Naden's auto-centricism. A chronometer registering correct time is a chronometer, but registering incorrectly is not a chronometer at all. Is that how his argument would run? But the registration is "the thing"—its correctness or incorrectness a secondary matter; and this whether the fact be "obvious" or otherwise to sane or insane. Unreality in certain relations is reality in others. Absolute unreality is not even the black spot on the bean. Everything has its place. We may place wrongly, but the round peg in the square hole is not an unreality. Daltonism is not blindness. Were all affected by it, the "colour" would just be *as it is seen* and not otherwise. Scientists begin to admit nowadays that the sentient eye is "the only colour-box."

(8.) With the estimate of Miss Naden, which concludes the notice, it is more difficult to deal, inasmuch as it is mainly negative. "She was a strong and interesting personality, and her essays contain many fresh and vigorous things which will repay perusal." But this, it seems, is because "they (the essays) are not all concerned with the explanation of the fundamental notions of her system." Lastly, "all her arguments are, on the whole, less interesting than herself." Such a verdict is regrettable, if only on the ground that it shows how completely the reviewer has missed her philosophic and scientific standpoint. Eliminate *it*, and the late verdict of a certain provincial newspaper editor might not unreasonably be applied to her literary achievements in prose: "Respectable school-girl essays." And, as I have elsewhere remarked, although her career was brilliant and fascinating, it lacks aim and purpose, and is, to a great extent, unintelligible, unless life-theory be brought forward to explain it. And this has never been done except in the case of the hylo-idealism which she was persuaded of and embraced. The time will come—if it be not already at the doors—when those who now reject it will find, as she found, in this her "rational ideal," the same "sense of new joy, new strength, and new life."

GEORGE M. MCCRIE.

MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

THE ANNUAL MEETING.

The fifty-first Annual Meeting of the Association will be held on Thursday, July 21st, 1892, at The Retreat, York, in honour of the Centenary of the Foundation of this Institution, under the presidency of

ROBERT BAKER, M.D.

Council meet at 9.15 a.m.

General Meeting at 11 a.m.

Afternoon Meeting (President's Address) at 3 p.m.

Dr. YELLOWLEES will propose a Resolution expressing the Association's appreciation of the great blessing conferred on the Insane through the foundation of the York Retreat a hundred years ago.

Luncheon provided by the Retreat Committee, at the Retreat, at 1.30 p.m.

Dinner will take place at the York Station Hotel, 7.30 p.m.

Friday, 22nd.—Train will start from York at 10.15 a.m. for Helmsley, where luncheon will be provided at the Black Swan Hotel.

Brakes will take Members to Rievaulx Abbey.

FLETCHER BEACH,

Hon. Sec.

Darenth Asylum,

June 21, 1892.

INSANITY, ETC., IN THE NEW HEBRIDES

Dr. William Gunn, Medical Missionary, Fortuna, New Hebrides, in a letter about the Arithmetical Faculty in the Polynesians, which is reserved for later publication, makes the following observations:—"Insanity is pretty common amongst the natives. Some become insane for a little time and then recover. Sometimes they have fits of something like madness, which lasts only a night. It is an interesting fact that there is only one case among the natives of Areitzum, so far as I have been able to learn, since the Island became Christian, whereas before there were many cases. There are no idiots in Fortuna, but there are one or two who, though one could scarcely call them imbeciles, are rather inferior in intelligence to their neighbours. There are none in Arima or Areitzum. I have a photo of an idiot in Quongoa, who, although he has not a bad face, is rather idiot-looking. There are several cases of sexual malformation in Fortuna. One of these is usually called a woman, but has the body of a man, the face resembling something of both sexes. There is no beard. I have never examined the case. From accounts by the natives themselves this seems to be as near an approach to the fabulous hermaphrodite as there is in the human race." Dr. Gunn knows of two similar cases, which, however, are not so marked.

Correspondence.

CONSTANCE NADEN AND HYLO-IDEALISM (AUTO-COSMISM).—
 "PERCEPTION AND CONCEPTION.—APPERCEPTION."

To the Editors of "THE JOURNAL OF MENTAL SCIENCE."

GENTLEMEN,—Permit me, as Miss C. Naden's literary executor, to contribute a brief minute on your able and weighty review of her system of thought. At page 275 of "The Journal of Mental Science" for April last, your reviewer terms Miss Naden's variant of Berkeley's "Principles of Human Knowledge" a new philosophy. In one sense it is such, as based entirely on positive science, a consummation impracticable until our present *fin de siècle* epoch. But, in a stricter sense, as a metaphysical or mystical speculation this form of materialism is as old as philosophy itself, and in antiquity has for its most prominent advocate the abderite sophist Protagoras. And, indeed, according to his latest biographer, Sir A. Grant, the stagyrite himself. In a word, it is only Berkeley reversed—reduced, that is to say, as indeed your critic well observes—from absolute to phenomenal idealism, substituting this matter as mother of all "things" for the Bishop's transcendentalism. It posits, as a quite obvious truism, the fact that outside the individual (solipsismal) consciousness there cannot, in a relational sphere, be any knowledge whatsoever—a postulate which arraigns much of Professor Huxley's arguments in *animal automatism*, as also the term agnostic, of which he is the coiner—a term which, as connoting *nescience*, has no scientific value at all, as not merely unscientific, but *anti-scientific*, leaving room, as it does, for Mr. H. Spencer's most unsatisfactory theory of the *unknowable*. Your candid critic carps at Miss Naden's "delightful dogmatism." But as founded on exact science, which is nothing unless positive or dogmatic, her position is justifiable and unassailable. To deal in hypotheses would be, for her, to desert the high vantage ground of the certainty implicit in all scientific syntheses. In their field the "glorious uncertainties" of metaphysic or other speculation have no place whatever. I speak above of the Protagorean formula—"man the measure of all things"—a predicate quite misunderstood by Plato, as also by "god-like Verulam," where he blames men for spinning webs, like spiders, out of their own entrails, as if it were not a case of Hobson's choice. But this ideal, or at least its germ, is really pre-historic, implicit as it is in the ephemerism of Brahman esoterism, in which Brahm, in Miss Naden's view represented by the self or ego, is described as "looking round and seeing nothing but himself," Brahm being confessedly only the higher self. Just as in the case of Sir C. Wren in St. Paul's. Indeed, as soon as we assume, as we must do on the plane of contemporary science and evolution, that thought (cerebration) is an organic function, and life the sum total of these functions or organization in action, the question falls as between hylo or relative and absolute idealism. For no one out of a lunatic asylum, and not many within it, will venture to contend that natural offices can ever be vicariously performed. Otherness therefore drops, and egoism (auto-monism) seems to be the open sesame of the immemorial problem. An exoteric creation, such as the Mosaic, though in principle sanctioned by Mr. Darwin on data quite inconsistent with Darwinism in "Origin of Species," must be quite foreclosed. Kant's negation of "Ding an Sich," a high-water mark from which he receded in all his works after the first edition of his "all-shattering" "Critique of Pure Reason," must be upheld. Miss Naden's view is also foreshadowed by Sir Humphry Davy in his ejaculations regarding the universe during the ecstasy induced by inhalation of nitrous oxide gas. The artificial manufacture of urea, out of inorganic compounds, by Wöhler, more than sixty years ago, satisfactorily proves the solidarity of the inorganic and organic realms. And the morphological arrangement of the cones and rods of the retina, directed, as they are, *backwards*

towards the *fundus* of the eye, seems clearly to show that light, itself invisible, but the revealer of all "things" else, is no outside factor, no "offspring of heaven's first-born, or of the eternal co-eternal beam," as the pre- and *anti*-scientific Milton states it, but solely the product of the optic nerve and brain, so that, as Miss Naden affirms, each man or sentient being generally is still more the maker of his own world than of his own fortunes. And this view will be found to be the most sublime and poetical, as well as the simplest and most obvious one, in accordance with the proverb, "Fact is ever grander than Fiction." Lord Byron sees this point when he writes —

"What a sublime discovery 'tis to make
The universe universal egotism."

And the mystic and far-seeing Coleridge sums up the dialectical quasi-resolution admirably in the lines —

"We receive but what we give,
And in our life alone does nature live;
Ours is her wedding garment, ours her shroud."

I am, gentlemen,

Yours truly,

R. LEWINS, M.D.

Obituary.

PLINY EARLE, M.D.

This well-known American physician, the Nestor of psychological medicine in his country, died full of years and honour on the 17th May, 1892, at the Northampton State Hospital for the Insane, Mass., of which institution he was the second superintendent, having been appointed a few years after it was opened. "He gave it character," says the *Springfield Daily News*, "and raised it to the first rank in its class for the treatment of that endlessly varied disease, insanity, and also in the secondary matter of financial management. These were the results of a singularly broad and open mind, guided by a noble and earnest nature, and characterized by a constant and ardent devotion to scientific truth, for which he ceased not to seek through experience, being ready at any time to abandon what, in the light of greater knowledge, had grown untenable."

He was descended from Ralph Earle, one of the petitioners to King Charles II. for permission to form Rhode Island into a corporate colony. He was born December 31st, 1809, at Leicester, R.I., and educated at the academy there, and subsequently at the Providence Seminary of the Society of Friends, of which body he was a member till his decease. He graduated in the Penn. University in 1837, and visited during several years the hospitals and asylums in Europe. He was appointed, in 1840, resident physician to the Frankford Asylum, near Philadelphia, where he introduced the practice of giving lectures on natural philosophy. He was elected, 1844, medical superintendent of the Bloomingdale Asylum, N.Y., where he resided five years. He again went abroad and visited asylums for the insane. He became visiting physician to the New York City Asylum, 1853. He delivered in this year a course of lectures on insanity at the College of Physicians and Surgeons. For some years he engaged in practice as a physician, and was appointed professor of psychology in the Berkshire Medical Institute at Pittsfield. It is stated that this professorship was the first of the kind in a medical college in the United States. In 1864 he became the superintendent of the Northampton Hospital, where he lived to his death, although he resigned his office in the institution in 1885. A marked feature of his management there was the institution of lectures and social gatherings every week. "He was the first man who ever addressed a gathering of the insane on

any other than a religious discourse, and the only one who ever gave a course of lectures on insanity to his patients, and, to the surprise of specialists, these lectures were much appreciated by his audience of about 300 insane people."

It was a source of constant gratification to him that he was one of the thirteen original members of the Association of Medical Superintendents of Hospitals for the Insane, founded in 1844. He is the last of that historic group of earnest mental physicians. He was president of this Association in the years 1884 and 1885. He was the first president of the New England Psychological Society.

Dr. Earle wrote a considerable number of essays and books. Among these are "A Visit to Thirteen Asylums for the Insane in Europe," 1841; "History, Description, and Statistics of Bloomingdale Asylum," 1848; "Blood-letting in Mental Disorders," 1854; "Institutions of the Insane in Prussia, Austria, and Germany," 1854; "Psychological Medicine: Its importance as a part of the Medical Curriculum," 1867; "The Curability of Insanity," 1877; also "A Glance at Insanity and the Management of the Insane in the American States," 1879.

The funeral took place at the Northampton Asylum. Among those present were Prof. Hitchcock (of Amherst), Drs. Scrivener, Page, Stearns, and Mr. F. B. Sanborn (of Concord). The Rev. R. A. Griffin, of the Unitarian Church, took a leading part in the service. He was buried in the Bridge Street Cemetery.

Dr. Earle, as is well known, attracted great attention at one time to the question of the degree to which the insane recover, and caused much surprise, not unaccompanied by incredulity, by demonstrating from statistics that the percentage of recoveries was smaller than supposed, and the proportion of relapses greater. He was foremost in exploding the constant and seductive fallacy of confounding persons with cases, and unfortunately not a few remain unable to understand or appreciate the distinction between the two. He revelled in figures, whether scientific or financial, and, in regard to the former, may be compared to Dr. Thurnam, for whose laborious researches he entertained the greatest respect. In regard to asylum construction, he favoured a departure from the orthodox views current among the old school of American alienists. In this and other respects he was a man of independent opinion. In religion he was broad and Catholic in his views, and a foe to theological intolerance. Ministers of all shades of belief officiated in turn at the Sunday services held in the asylum. His early training "guarded him," observes his friend, Mr. Sanborn, "from some vain controversies and some immoderate ambitions. He followed humbly and sacredly the inner light, with very little desire to set up his own enlightenment as the limit for all other men."

Dr. Earle was an honorary member of the Association, having been elected nearly half a century ago, namely, in 1844.

JOSEPH DRAPER, M.D.

With deep regret we record the unlooked-for death of the greatly-esteemed medical superintendent of the Vermont Asylum, Brattleboro. His friends had hoped for many more years of service from this excellent man, whose earnest nature, strength of character, and kindness of disposition eminently qualified him for the post which he held. Pliny Earle died in the course of nature in ripe old age, but Dr. Draper long before the age which men count fit, for he was born in 1834, and therefore only 58. He came of a New England family, and was educated in the common schools, and subsequently academies in West Brattleboro', and Deerfield, Mass. He was 22 before he fully decided to qualify for the medical profession. He attended lectures in New York and Philadelphia, where he graduated in 1858. When practising at Greenfield, Mass., he met

with a case of insanity which excited his interest, and brought home to him the fact that he knew little or nothing of the disorder. He wrote for information to Dr. Rockwell, of the Vermont Asylum, and expressed a desire to study mental disorders practically. There was at that time no vacancy, but in October, 1859, he became the assistant medical officer, and remained there till 1865. Shortly after leaving he acted as an assistant surgeon in the military hospital at Brattleboro'. Subsequently he went to the Worcester Asylum in the capacity of assistant physician, and for one year acted as superintendent. Later on he was an assistant medical officer in the New Jersey Asylum, where he resided until the year 1873, when he was appointed superintendent of the Vermont Asylum. Here he found his true vocation, and those who visited him there could not fail to be struck with the admirable manner in which he conducted it. He took a warrantable pride in the improvements which were carried forward under his auspices, including the opening of the Hillside Park, the Summer Retreat, and the Cottage. It may be doubted whether any asylum grounds are more beautiful than these.

In 1881, the year of the International Medical Congress, he visited London, and impressed his English *confères* with his sterling character. It is stated in an obituary notice that "the opportunity for observation and study in his specialty was improved to the utmost, and Dr. Draper came home filled with more zeal and enthusiasm than ever for the development and increased usefulness of the asylum. Believing always in every possible outdoor help and diversion as a main curative agency for the patients in his charge, almost his first act on returning home was to bring before the trustees a proposition for the establishment of a retreat separate from the main institution, such as he had found widely used by the best institutions in England and Scotland, where patients who were in a condition to be benefited by the change might find in summer relief from the home asylum life, just as well as people seek at this season a summer outing or a vacation. The idea was favourably received; the well-known 'Miles-place' was bought for this purpose, fitted up during the summer of 1882, and was first occupied as a summer retreat for a short time at the close of that season. The advanced step thus taken was an important one, and in this respect the Vermont Asylum led every institution for the insane in the United States. So satisfactory did its operation prove that five or six years later the estate now known as the Cottage was bought and fitted up for a similar retreat for the male patients, the summer retreat having been necessarily used for women alone."

Dr. Draper was a clear and practical writer. He wrote papers on "The Pathology of Insanity;" and on "Hysteria;" "Responsibility of the Insane in Asylums," as also on their responsibility outside asylums. His "Annals of the Vermont Asylum for the Insane" covered the history for the first half-century of the asylum, and appeared in 1887, and reflects great credit upon his ability as a writer.

From our personal knowledge of Dr. Draper we can speak in the strongest terms of our appreciation of and esteem for him, both as a man and as a superintendent, and fully realize the truth of the tribute paid to his memory in the words, "To have enjoyed for almost twenty years the confidence and the intimate friendship of a man thus broadly fashioned has been an inspiration, and its memory is now a benediction for which no emotion but of profound gratitude can be felt."

In the funeral address the minister stated—"He loved Brattleboro' with an ardent, growing love. He said to me, 'that notwithstanding all the associations and beauties of Europe, he would rather live there than any other place.' He was wide in his sympathies, and rejoiced in every improvement which added to the material and to the mental or moral advancement of the village and people he loved. . . . He was an earnest Unitarian, and he held his belief, not as an inherited legacy, but as a vital and personal conviction."

It is suggested that the asylum trustees should cause the erection of an enduring monument to his memory in the form of a tower on the pinnacle of the mountain-side opposite the village of Battleboro', which has been secured by the asylum. We hope that this idea, which he himself desired to be carried out in his lifetime, will be effected now that he has passed away.

PROFESSOR VALDEMAR STEENBERG.

This well-known Danish alienist, the amiable and hospitable President of the Psychiatric Section at the International Congress in Copenhagen, 1884, died the 2nd of March. He was born in 1829, and had an extensive general medical education. As house-physician at the Communal Hospital in Copenhagen, he wrote his first essay on "Syphilitic Affection of the Brain" (1860). In this book, he, the first—as later on Heubner in Germany—pointed out the great importance of the arteriosclerotic changes of the cerebral vessels for the syphilitic encephalopathy. Later on the ætiology of the general paralysis of the insane attracted his highest interest, and he was one of the very first to become an almost fanatic champion for the nowadays so generally admitted theory of a syphilitic origin; and not only he himself defended this doctrine energetically, but he inspired several of his pupils (Jespersen, Rohmell, Jacobson*) to take up the cudgels. So early as in 1863 he was appointed the medical superintendent of the large Danish Asylum, St. Hans, a place he filled to his death, viz., more than 30 years. In this long period he was always a faithful, never-weary partisan of modern liberal ideas relative to the treatment of lunatics, and he carried through a long series of enlargements and improvements of the asylum. His conduct towards his patients was almost ideal, and he was a thoroughly humane man, lenient and indulgent in his judgment, and benevolent towards all with whom he was connected. Rightly he was the object of a real worship on the part of the insane as well as the sane. His qualification for psychiatry and the development of the lunatic institutions in Denmark will never be forgotten.

PROFESSOR MEYNERT, VIENNA.

It is with great regret that we announce the death of Dr. Theodore Meynert, the distinguished head of the Psychiatric Clinic in the University of Vienna, which took place unexpectedly at his country house at Klosterneuberg on May 31st, at the age of 59. He had been in bad health for a long time, and during the last months of his life had been unable to discharge the duties of his chair. The immediate cause of his death was pneumonia. Professor Meynert's researches on the anatomy of the brain, and his writings on medico-psychological subjects had made his name familiar to alienists and neurologists throughout the world. He was born at Dresden in 1833, and educated at Vienna, where he took the degree of Doctor of Medicine in 1861. He was for several years demonstrator of anatomy under Hyrtl. He was appointed *Privat-docent* in 1865, and, turning his attention to the clinical study of insanity, soon won for himself a leading position in that department of medicine. Professor Meynert was President of the Psychiatric Association, Vice-President of the Vienna Medical Society, and a member of the Superior Sanitary Council of Austria. Only a few days before his death he had been elected a member of the Imperial Academy of Science of Vienna, and it was expected that he would have been chosen as Rector Magnificus of his university next year. In him the Vienna School loses one of its most conspicuous figures, and medical science one of its most zealous and most independent cultivators.—*British Medical Journal*, June 11, 1892.

* See "Journal of Mental Science," April, 1892.

CANDIDATES WHO PASSED THE EXAMINATION FOR THE
CERTIFICATE OF PROFICIENCY IN NURSING MAY, 1892.

Derby Borough Asylum.

MALES.	FEMALES.
John Gutteridge.	Rebecca Sutton.
William Gutteridge.	Eliza Woollatt.
	Louisa Asbury.
	Elizabeth Milne Withers.
	Elizabeth Macaulay.

Haywards Heath Asylum.

MALES.	FEMALES.
John Backhouse.	Emma Ware.
Albert George Wake.	Kate White.
George Catchlove.	Mary Alice Warner.
Timothy Callaghan.	Caroline M. Walton.
James M. Le Patourel.	Alice Ann Derham.
Jasper H. Smith.	
Frederick Cook.	

Birmingham Asylum.

MALES.	FEMALES.
Henry Ambrose Hill.	
Peter Warburton.	
Harry E. Drew.	

Wadsley Asylum, Sheffield.

MALES.	FEMALES.
Robert Barwell.	Flora F. Drabble.
Harry B. Ellis.	Ellen Healey.
Herbert Brooke.	Mary Madeley.
Thomas George Harrison.	Christiana Emmerson.
William Severns.	Elizabeth Cullabine.
James Dolan.	Fanny Wheatley.
Abraham F. L'Amie.	Annie Marks.
Joseph Ashby Dixon.	Lizzie Cousins.
Arthur W. Redfern.	Elizabeth Fraser Scott.
Nelson Webster.	Eliza Robinson.
John Moore.	
Albert W. Jones.	
Shaw John Davies.	

West Riding Asylum, Wakefield.

MALES.	FEMALES.
William Reed.	
Eyra Frost.	
Richard Steele Robinson.	
James Arthur Hadfield.	
George Hobbs.	
Richard Howden.	
John Whipp.	
James Wright.	
Henry Wright.	

Rubery Hill Asylum.

MALES.
Joseph Storer Noon.
William Philipps.

FEMALES.
Kate Cocks.
Nellie Shields.
Emily Worrall.
Edith Cutler.
Martha Sayers.
Emily Taylor.
Sarah Bishop.
Emily Arundel Withers.

Northumberland County Asylum.

MALES.
George Baker.
Robert James D. Brown.
Thomas Flanagan.
William Philipps.

FEMALES.
Frances Jane Richardson.
Susannah Thompson Palmer.
Elizabeth Crake.
Melville Annie Armstrong.

Holloway Sanatorium.

MALES.
A. Pratt.
Henry James Lee.
John McLaren.
George Wright.

FEMALES.
Ann Raw.
Annie Cornaby.
Annie Oliver.
Jane Chapman.
Francis Matheson.

Stirling District Asylum.

MALES.
James Sim.
John Lawson.
William Fraser.

FEMALES.
Kate Dunbar.
Margaret Mulfeather.

Kirklands Asylum, Bothwell.

MALES.
Donald McMillan.
John Campbell.
Hugh McEwan.

FEMALES.
Isabella Henderson.

Crichton Royal Institution, Dumfries.

MALES.
Joseph Ormston.
Robert Cooper.
John Campbell.
Peter McArthur.

FEMALES.
Isabella Grierson.
Mary Johnston.
Maggie Clarke.
Jemima Riddock.
Edith Thorburn.
Jessie Mackay.
Elsie Annie Leslie.
Barbara Scott.
Jane Williamson.
Marian Cocker.
Mary Dolan.
Alice Noble.

Roxburgh District Asylum, Melrose.

MALES.
David Anderson.
Gilbert Millar.

FEMALES.
Mary M. Reid.

Gartnavel Asylum, Glasgow.

MALES.

John Nicoll.
John Wallace.
James Thornton.
James Durward.
Duncan Urquhart.

FEMALES.

Helen Begg.
Margaret Innes.
Christina Robertson.
Helen Sutherland.
Jane Barr Gray.
Margaret Stewart.
Isabella Gillies.
Harriett McIntyre.
Margaret Hendrie.

Fife and Kinross District Asylum.

MALES.

William A. Bremner.
Allan Grant.
James Eadie.
James Ness.
Alexander Sontar.
George Lumsden.

FEMALES.

Helen Burton.
Elsie M. Hadden.
Margaret Kirkcaldy.
Amelia Kennedy.
Sophia Ballantine.
Agnes Taylor.
Betsy Culbert.
Eliza Honeyman.
Jessie Bonthron.
Lillias Ames.

Dundee Royal Lunatic Asylum.

MALES.

Thomas Boyd.
James Inches.
Charles Chalmers.

FEMALES.

Jane S. Alison.
Joan M. Finlayson.
Jane McGarrock.
Sarah McGarrock.
Jessie Shand.

MEDICO-PSYCHOLOGICAL ASSOCIATION.

At a Special Meeting, held at Bethlem Hospital on Thursday, June 23rd, 1892, it was resolved—

- 1st. "That there be a Committee of Education temporarily appointed, consisting of Members of the Association who are teachers of Psychological Medicine in the Universities or Medical Schools in England."
- 2nd. "That the Committee be instructed to take steps to be represented before the Commission on the New (Gresham) University."
- 3rd. "That this Meeting recommends to the Annual Meeting that a Board of Education be appointed to consider all questions affecting Medico-Psychological teaching, the Board to consist of all Members of the Association who are lecturers and teachers of Psychological Medicine in the Universities or Medical Schools of the United Kingdom."

SATANIC POSSESSION AND INSANITY.

The following letter from the sister of a patient in the Royal Edinburgh Asylum, Morningside, addressed to Dr. Elkins, shows that the belief in demoniacal possession—once universal—still retains its hold in some quarters:—

DEAR SIR,—Thanks for your minute description of my afflicted brother's condition. He is naturally too quiet; but, sir, I would like you to believe and understand that he is possessed by an evil spirit, and by God's blessing if you would try the experiment of taking great believers of all Christian denominations to his bed, notwithstanding the raving, he would soon get better. It is not he that speaks or acts, it is the evil spirit, though loathing in such cases is natural.

M. R.

**EXAMINATION FOR THE CERTIFICATE OF PROFICIENCY IN
PSYCHOLOGICAL MEDICINE.**

The next examination for England will be held at Bethlem Hospital, July 7th, 1892, at 11 a.m. The examination for the Gaskell Prize will be held on the following day, July 8th. For particulars apply to the Hon. Secretary, Fletcher Beach, M.D., Darenth Asylum, Dartford, Kent.

CONGRESS OF EXPERIMENTAL PSYCHOLOGY.

This Congress will meet at University College, Aug. 1, 1892. For particulars, apply to JAMES SULLY, Esq., East Heath Road, Hampstead. Drs. PERCY SMITH, OUTTERSON WOOD, and MERCIER have been appointed delegates from the Association.

Appointments.

ANDERSON, A. W., M.B., C.M.Edin., Assistant Medical Officer to the Fife and Kinross District Asylum, Cupar.

BOWES, W. H., M.D., B.S.Lond., F.R.C.S.Eng., Assistant Medical Officer to the Plymouth Borough Asylum, Ivybridge, Devon.

DUFFUS, G., M.B., C.M.Aberd., Medical Superintendent of Brook Villa Asylum, West Derby, Liverpool.

FITZGERALD, G. C., B.A., M.B., B.C.Cantab., Medical Superintendent of the Kent County Asylum, Chartham.

HUNTER, Dr., junr., Assistant Medical Officer to the Royal Asylum, Montrose. RUTLEDGE, VICTOR J., M.B.Beh., B.A.O.Univ. Dublin, Assistant Medical Officer to the District Lunatic Asylum, Londonderry.

SIMPSON, ALEX., M.A., M.B., C.M.Aberd., Second Assistant Medical Officer to the Lancashire County Asylum, Whittingham, Preston.

SHORTT, W. R., M.B., B.S., L.R.C.P.Lond. and M.R.C.S.Eng., Third Assistant Medical Officer to the Durham County Asylum.

TAWFS, G. W. H., M.B., C.M.Aberd., Junior Assistant Medical Officer to the Counties Asylum, Carlisle.

WATSON, W. R. KEMLO, M.A., M.B., C.M.Glasgow, Assistant Medical Officer to the Govan Parochial Asylum.

THE JOURNAL OF MENTAL SCIENCE.

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PART 1.—ORIGINAL ARTICLES.

Presidential Address delivered at the Fifty-first Annual Meeting of the Medico-Psychological Association, held at the Retreat, York, July 21st, 1892. By ROBERT BAKER, M.D.

Retreat Centenary.

GENTLEMEN,—I have three important duties to perform this afternoon. The first is once again to offer you a most hearty welcome to the City of York and to the Retreat. The second duty is an equally pleasurable one, namely, to thank you, from the depths of my inner consciousness, for your courteous thoughtfulness in spontaneously offering to revisit York this year, in celebration of the Retreat Centenary, and for your great goodness in conferring on me, just before my retirement from office, the high honour of the Presidentship of our Association. The third duty, however, is more difficult; indeed, the thought of it has been ever present with me during the past year. The more I have thought of the best subject for a presidential address, and the more previous presidential addresses I have re-read and studied, the more difficult and onerous my task has seemed to me.

I have lately been wandering through some of the most beautiful districts in Norway, but whether sailing over troubled and tempestuous waters, or climbing lonely glaciers, or sailing through picturesque and tranquil fiords, the task of this afternoon's Address has haunted me like an ever-lengthening shadow.

As you all know, in Norway there is frequently seen all the radiance and wondrous glory of the midnight sun, and that towards midnight there is frequently to be seen a superabundance of effulgent light. I did not get near enough to the North Cape to see the midnight sun in all its glory, but I

did get near enough to see the same grand spectacle half-an-hour before midnight; but I assure you that then, even then, the thought of to-day's responsible duties was with me.

But as I read my book close upon midnight, with all the clearness and brightness of mid-day, I came unexpectedly on these words of the great master-mind, Carlyle (I quote from memory): "If you do speak, speak upon that subject about which you think you know something, and be mindful to speak briefly." In accordance with this axiom, I propose to speak briefly to you this afternoon on our Hospitals for the Insane, their power and their influence in the treatment of mental ill-health.

But let me here remark that I strongly approve of the word hospital instead of asylum. Surely, among the glories of Christian civilization must be reckoned all those modern hospitals for the treatment of all forms of ill-health, which everywhere arise in all the chief cities and towns of the world, and go far to answer such as ask: "If any good thing has come out of Nazareth." The origin and significance of these edifices are, perhaps, best preserved in the continental phrase, *Hôtel Dieu*, the house where god-like deeds are done. But, however the word has been corrupted, the purpose animating it has remained unchanged and excellent, testifying, as nothing else can, so well and so practically to the humanity which has, happily, permeated modern Christian society.

But, now, before I go further, although in what I am going to say I elect to speak of my own individual experience during my twenty years' residence amongst the insane, rather than from compiled statements gathered from various sources, yet I trust you will bear in mind that I do not wish unduly to magnify the importance of the work which has been done in this Hospital, and that I speak to you in a spirit in which all personal boasting is absolutely and utterly excluded. I need hardly say how profoundly grateful I felt when I read for the first time in our Association circular that my friend Dr. Yellowlees, with that kindness, urbanity, and courtesy which are to him innate, was to propose to you to-day a Resolution expressing the Association's appreciation of the great blessing conferred upon the insane through the establishment of the Retreat at York a hundred years ago. When I read these courteous words, my mind reverted to that brilliant essay of Sydney Smith's, written in 1814, entitled "Mad Quakers," in which he says, "The Quakers always seem to succeed in any institution which they undertake."

Now, it seems to me that our hospitals for the insane are factors for good in two distinct ways:—

1st. They possess, or ought to possess, every possible power and appliance for the care and treatment and cure of the insane, and that, being managed by committees of gentlemen whose only aim is to care for and cure their patients, and who have no object in attempting to make money, and who have no temptation to give way to the idolatry of wealth, everything that brains and money can obtain is obtained.

2nd. That all the money obtained from the remunerative patients is spent liberally and impartially in promoting the welfare, comfort, and cure of the patients who are not remunerative, whether they pay anything or nothing.

From 1796 to 1854 the lowest rate of charge at this hospital was 4s. per week. During this period the average cost had risen from 10s. 6d. per week, at which it stood when the institution was first opened, to 17s. "I find," says Mr. Pumphrey, "that 330 patients have been received into this Hospital at the lowest rate, and the united term of their residence amounts to 130,218 weeks (average 390 weeks)." "Now, as the difference between the average weekly cost and the lowest rate was never less than 6s. 6d. (and was for a long time 12s. per week below it), it is evident that a great pecuniary benefit was received by those admitted, in addition to those social personal advantages the Retreat supplied. Two hundred and twenty-four patients have since been admitted to the Retreat at the lowest rate, and their tarriance at this hospital has extended to 65,000 weeks, and this shows that a bonus of £13,100 at least has been conferred on them." In considering these figures, it should be remembered that this hospital has no endowment and has no funded property, and that it is dependent for its income, solely and entirely, on the payments of its inmates and, I regret to add, the consultation fees of its superintendent.

It appears that the pecuniary contributions to the establishment and maintenance of the Retreat amount to a little under £30,000, and that the poorer or charitably received patients have benefited at the least to the estimated extent of £99,000, and that still the property of the institution is valued at £52,000. These figures speak for themselves. I believe they are relatively applicable to our other hospitals for the insane, as well as the Retreat. Do they not speak to us in a spirit of silent eloquence of the magnificent work that our

hospitals for the insane have done in attempting to minister to the needs and necessities of a large class of the educated and cultivated members of the family of "suffering, sad humanity?"

And now, having directed your attention to the charitable work of this and other hospitals, I wish briefly to direct your attention to the advances which have been attempted here in building special accommodation for special cases of mental illness—by making many structural improvements and building numerous villas in the grounds of the hospital.

It was undoubtedly said and believed by them of old time that all insane persons should be sent to the wards of an asylum, but we, in these latter days, know of a more excellent way; we know and are sure there are not a few persons, especially young people, in a condition of temporary and curable insanity who can be infinitely better and more wisely treated outside an asylum than in any asylum ward.

Personally, I have always been profoundly impressed with this fact, so much so that my soul has sometimes been saturated with sadness in realizing in all its intensity the inevitable annoyances of asylum life. But I believe it is possible to give all the advantages of hospital treatment and supervision without these annoyances and disadvantages. We all know that there are many patients who require isolation from home and home surroundings and special skilled treatment, but whom we dare not take the responsibility of consigning to the wards of an asylum.

To meet this defect in the hospital treatment of the insane, many if not all of our hospitals have built separate villas in their grounds, each villa carefully designed and planned for the individual treatment of a small group of selected patients.

Thus, at this hospital we have during the past 18 years built—

(a) The Gentlemen's Lodge buildings, with accommodation for 30 male patients. This building is so planned and designed that it is practically three small independent hospitals, each section being fitted with every known appliance for the prompt individual treatment of each patient. The building itself cost £3,500, Turkish baths £1,400, pleasure grounds £864, making a total of £10,764. This building is so thoroughly well ventilated that the air in each room is changed three times in each hour, the *vis a fronte* being a coil of pipes in the extraction tower. The temperature both of rooms and corridors is maintained both night and day at 60°.

(b) A few years ago the Committee purchased, in order to prevent the encroachment of building speculators, the adjacent estate of Belle Vue House, with its four acres of land, for £4,000. Here under the care of an experienced lady companion nine ladies and their nurses lead a placid and uneventful life.

(c) Some time after this the Committee purchased a small cottage and garden, and paddock, suitable for the purpose of isolating any case of infectious illness, but as fortunately this cottage has never been required for this purpose, it is occupied by an imbecile boy and his attendant. No one can doubt that this boy is better cared for in this separate cottage than he could be had he to associate with the other patients in the larger portions of the Hospital.

(d) Then, subsequently, the Committee sanctioned the erection of the building called the East Villa, with accommodation for three patients. Here the staircase is so designed that though to the ordinary observer it is apparently planned for plant decoration, it is really designed so as to make the possibility of suicides as small as possible. The cost of this most useful building was £1,978.

(e) Lastly, about a year ago was completed the West Villa, which was described in a previous number of the "Journal of Mental Science." It has accommodation for from 12 to 15 patients, and is so designed that it is really three asylums. The electric lighting in this villa answers admirably, and the cost to us is not more than that of gas. I will direct your attention to one special feature in the electric lighting of this building, and that is the use of what is technically called an "interceptor," by means of which, in the various rooms, the illuminating power of the electric lighting can be regulated and controlled to any degree of illuminating power required. The cost of this building was £5,937.

It is possible, and indeed probable, that on viewing these villas in our grounds to-day you may detect some structural defects or mistakes. If so, I would beg of you to remember the words of the late Archbishop Magee, "The man who never made any mistakes never made anything."

To summarize, you will see that in carrying out this plan of the villa treatment of mental ill-health in this Hospital alone there has been expended during the past 18 years £10,764.

But, not only have there been gradual and structural advances in the means of caring for and treating the insane, but there have been also vast social advances.

First and foremost amongst these, I think, we should place

the advance which is almost universal in hospital administration, viz., the employment of a largely increased number of resident medical officers. In my predecessor's time he fought the anxious battle alone. For some years past I have been given the active and loyal assistance of two medical officers, so that now, not only in the central hospital, but also in one of our detached villas we have medical officers living amongst our patients ministering to their many necessities, knowing all their wants, their sorrows, and their deprivations. I tell you from my own personal experience that I know and am sure that this increased association of the medical officers with their patients is both highly beneficial to them in gaining experience and to their clients in having infused into their lives additional means of happiness, intellectual life, and social intercourse, and in minimizing the petty tyrannies which sometimes the uneducated, unintentionally and thoughtlessly, exercise over highly strung and sensitive minds.

But almost equalling, if not surpassing, this great advance, has been the almost universal employment of educated ladies and gentlemen, whose mission in life it is to live amongst the insane, and to minister unto them in the highest sense of this word. Who of us can estimate how many of the dread terrors of this awful disease of insanity have been minimized and soothed by these conscientious toilers, who are daily aiding us and supporting us in the work of our laborious ministry?

Then again it seems to me that a marked advance has been reached in our hospital villa treatment of the insane by the increased facilities afforded us of gaining a personal knowledge of and affection for our patients—in learning their individual capabilities, and in directing, guiding, and leading their energies from unhealthy into healthy channels. Have we not all of us learnt the lesson that where force and irritability and angry words are useless, it is still true “that a little child shall lead them?”

How true is the new beatitude, “Blessed is the man who has a hobby.” How many of us have patients who were formerly destructive, irritable, and wayward, who now devote their energies to making collections of plants, or who ornament their rooms with carefully-arranged collections of butterflies! Surely these are advances in the right direction, for they tend to bring into the lives of the sorrowful many additional sources of happiness and pleasure. Our patients are so infinitely happier if they are doing something. Nothing can be worse than listless despondency. It seems to me

we ought to study each individual patient's idiosyncrasies and powers, that we ought not merely to believe in theory the truth of the axiom, "Find thy work and do it," but we ought to *teach* our patients some congenial occupation and see that they have every assistance in gaining the necessary knowledge. Each year I am more and more profoundly impressed with the desirability of each person having some individual work to do. Is it not true of ourselves? Have not many of us felt, when our anxieties pressed very heavily upon us, that it was almost essential for us that we should flee away and haste to the mountains? Are there not some of us who have again and again resumed our life's work with renewed health and spirits after seeing how many plants we could daily collect on the slopes of the Mürren, or how many butterflies were to be found below the heights of St. Beattenberg or the summits of San Salvatore?

It is no part of my duty to-day, as I understand it, to speak to you about the medicinal treatment of our patients, but I know that there are some amongst you who would think that my hand had entirely lost its cunning if I closed this paper without asking you to remember that amongst the endeavours to get your patients to do something there are few things easier than in getting them to devote part of their time to the advantages obtainable from the skilled and careful use of hydro-therapeutic treatment. I have told you in my paper read previously how my people revel in the use of our Turkish bath, and in its allied adjuncts. I will not repeat the advice I then gave, but simply add that each year's experience shows me that not only are these baths important factors in maintaining a high recovery rate, but they add largely to the health and happiness of our family. But not only so, they are most useful as a means of moral treatment, for I know that some exercise all their powers to restrain their insane impulses to do wrong, lest they should lose these periods of luxurious leisure.

In conclusion, I beg again to thank you for your great personal kindness to myself, and to express the hope that your visit to the Retreat may be to all of you a very pleasant one.

Hypnotism at Paris and Nancy. Notes of a Visit. By
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Assistant Physician, Royal Edinburgh Asylum, Morning-
side.*

The subject of hypnotism has attracted great attention of late amongst the medical profession and the public. The accounts of its phenomena have sometimes been so extraordinary, and have bordered so closely on the miraculous, that intense interest was excited in them. As these statements were attested by men of science and of reputation, and as it was said that hypnotism had such enormous therapeutic possibilities before it, it was essential that serious attention should be given to the study of this subject by those interested in scientific medicine. This study was, however, commenced in this country with feelings of great distrust and reluctance, as it was notorious that for years unprincipled persons had imposed on the public by pretending to all manner of occult powers as mesmerists. They had so offended by these means the feelings of right-minded people, and had produced such a disgust of these phenomena, that many felt it was impossible to investigate hypnotism without contamination. In addition to this, discredit was brought on the subject by the fact that there were two schools in the field with opposing theories, observations and practice, whose pupils carried on a bitter warfare in the press. The most contradictory statements on matters of observation had been made by distinguished physicians, and phenomena had also been recorded which, if true, seemed to overturn the established laws of Nature and all our fixed ideas of things. In spite of the antipathy produced by these facts, one instinctively felt that underlying this mass of contradiction, absurdity and imposture, there lay important truths, and so, impelled by a mixture of scientific and idle curiosity, I paid a visit to the principal teachers in Paris and Nancy, to see with my own eyes what hypnotism was, and what use was being made of it. In the accompanying notes of my visit I have not attempted to draw up a systematic account of hypnotism, as this may be found in books,† but

* This article was presented to the Committee of Hypnotism appointed by the British Medical Association in 1890, by one of its members, Dr. Clouston.

† For the views of the Charcot School see "Animal Magnetism," by Binet and Féré, Vol. Ix., Internat. Science Series. For the views of the Nancy

I have merely given a plain description of the phenomena I myself witnessed.

I. *Demonstration by Professor Charcot.*

The first person I called on in Paris was M. Ch. Féré, physician to the Bicêtre and joint author of "Animal Magnetism." He is one of Charcot's most distinguished pupils, and he introduced me to that great teacher, who with extraordinary kindness at once arranged a day on which to give me a special demonstration on the phenomena of hypnotism. On the appointed morning I accordingly wended my way to the historic walls of the Salpêtrière to Professor Charcot's room, where I found him with his assistants. He is a man of square, strong build, with a keen intellectual glance and a decidedly Napoleonic cast of features. It struck me as remarkable that this type should have produced two such powerful minds in this century.

Before giving an account of the demonstration I shall give a very short summary of Charcot's views on hypnotism. He has only studied it in subjects suffering from the graver forms of hysteria, and his variety is called Grand Hypnotisme in contradistinction to the Petit Hypnotisme of the Nancy School, which may be induced in the majority of healthy people. Charcot asserts that true hypnosis must be accompanied by definite and marked physical manifestations, about which there can be no simulation nor imposture on the part of the subject. He does not, therefore, regard as true hypnosis those peculiar psychical states of the Nancy School, many of which are unattended by any of the physical and somatic phenomena of his hypnotism. And in the cases in which these physical phenomena are obtained by the Nancy School, he affirms that they are dealing with a hysterical subject, for he believes the phenomena of hypnotism to be part of the neurosis, or, at least, closely connected with hysteria.

Charcot has divided hypnotism into three stages—the *Lethargic*, the *Cataleptic*, and the *Somnambulistic*. The usual method for inducing hypnosis is gentle pressure over the eye-balls, when the patient falls into the lethargic state, and becomes motionless, passive and unobservant. By opening the

School see "Suggestive Therapeutics," by Bernheim, 2nd Edition. Pentland, Edin. and London. For the special views of Dr. Luys see "Leçons Cliniques sur les principaux Phénomènes de L'Hypnotisme," par J. Luys. G. Carré, 58, Rue Saint-André-des-Arts. Paris.

eyes to the light the cataleptic state is induced, in which the patient is also motionless and unobservant, but the limbs retain any position in which they are placed. The somnambulistic state is induced by rubbing the top of the head, and now the patient is quite observant, walks about and answers questions. The *credivity* and readiness to receive suggestions are the most striking phenomena of this state.

The patient may be sent from one to another of these states with great ease, for closing the eyes of a somnambulistic or a cataleptic patient at once re-induces the lethargic state. The method of producing the waking or normal state is by blowing a few violent puffs on the eyes and clapping the hands near the face during somnambulism.

One of the first things that Charcot did was to show me these three states and the accompanying physical phenomena which characterize them. The patient came in and sat on a chair, and an assistant pressed gently with his finger and thumb on her eye-balls. In less than half a minute a change came over the patient, the eyelids remained closed and gently quivering, the face was blank and expressionless, and the limbs fell slack and motionless. She was in the lethargic state. The physical test for the lethargic state is the presence of neuro-muscular hyper-excitability, as, for example, when Charcot pressed on one of the ulnar nerves the muscles supplied by the nerve passed into a state of tonic contraction. The hand became slightly flexed, the ring and little fingers flexed strongly in the palm, the forefinger and the middle finger remained extended, and the thumb was adducted. Whatever nerve was pressed

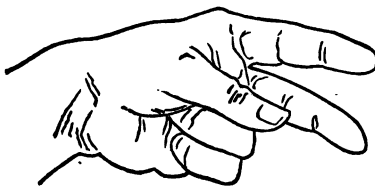


FIG. 1.—Ulnar attitude, produced by pressing on the ulnar nerve in the lethargic state. (From Charcot and Richer).

on, a contraction resulted, which accorded with our anatomical knowledge, and which exactly corresponded with the contraction produced by electric stimulation of the nerve. This contracture persisted after pressure was stopped, and was removed by stimulation of the opposing muscles. One cannot help agreeing with Charcot that here there was a very strange nervous state which could not possibly have been

simulated, for not only were the anatomy and physiology of the nerves unknown to these women, but contraction of muscles could be caused, which are, as a rule, more or less involuntary, such as the superior muscle of the ear. This muscle responded in this as well as other cases in the most distinct manner on pressure, without any effort on the part of the patient. Moreover, the gradual onset of the contraction and its degree, which seemed to correspond with the amount of pressure, was so regular and accurate that I was impressed with the involuntary nature of the phenomenon. It may be mentioned that kneading the muscles and percussion of the tendons also caused contraction of the muscles.

Charcot next opened the eyes of the patient, and they remained wide open and rigidly fixed. The expression was changed, but still vacant, and it was found that the patient was now cataleptic, her limbs remaining in any position in which they were placed. The neuro-muscular hyper-excitability so characteristic of the last state had now completely disappeared, but the cataleptic condition which had taken its place was an even more remarkable peculiarity. The limbs were moved with the *flexibilitas cerea* sensation and they steadily remained in the position in which they were left. Charcot's pupils have demonstrated that this catalepsy is not a voluntary action on the part of the patient, although, of course, it is not physically impossible to simulate the attitudes. It has been found that if the movements of the arms and the respirations be conducted by means of Marey's tambours, and recorded on revolving cylinders, in true catalepsy the upraised arm in course of time gradually descends, and a straight line is recorded on the cylinder; and during all this time the respirations are steady and regular. On the other hand, in simulated catalepsy of voluntary origin, the movements of the hand in its descent are distinctly irregular and jerky, and the respirations, owing to the amount of exertion, get unsteady and irregular, and the lines recorded on the cylinder are very uneven.

Charcot's next step was to rub the hair gently over the frontal regions, when the expression of the patient almost instantaneously altered, giving one very vividly the impression of a statue coming to life. Instead of the fixed vacant stare and the stolid expression, the face suddenly became lit up with animation and intelligence. The patient now for the first time began to look around her, to notice things, and to answer questions in a natural manner. She was now in the somnambulistic state, in which, instead of mental torpor, there was

considerable mental activity, though of a peculiar kind. In this condition there is neither catalepsy nor neuro-muscular hyper-excitability, but there is now present another peculiar physical phenomenon, the musculo-cutaneous hyper-excitability. When Charcot gently blew on the woman's hand, or when he softly stroked her arm, the muscles immediately under the skin stimulated became rigid by contraction. To remove this contracture also, quite a different plan had to be followed than that formerly used, for it was sufficient to rub the part gently and the rigidity vanished, just as it had appeared.

These are some of the physical phenomena on which Charcot lays such great stress, and which he insists on saying accompany true hypnotism. There can be no doubt that they are extremely important, as they demonstrate that a very abnormal state of the brain has been induced, and that the various subjective phenomena, which we shall have to notice, are almost certainly due to the same abnormal state, and not to conscious simulation.

Charcot next demonstrated the state of the mind in hypnotized subjects during the state of somnambulism, and demonstrated that the personality became more or less changed. In the first case he showed me, the intelligence was very much weakened during hypnosis, and the young woman had great difficulty in writing her own name, and when asked to write the numerals up to ten, she blundered when she came to seven, nor could she write down thirty-four. Charcot then asked her who Cleopatra was, and after some hesitation she said "A queen;" but when asked who Mark Antony was, she did not know. Nor could she tell the names of her parents, or of the place where she was educated.

When she was wakened she looked much brighter, answered questions quickly, wrote well, and knew perfectly all about Antony and Cleopatra. There was certainly no doubt that her memory was much weaker during hypnosis. On the other hand, the next patient, a journalist by profession, seemed very keen and clever during hypnosis, and when asked to write some poetry, at once dashed off a most brilliant and witty poem, which I hardly think he could have done with the same spirit and success had he been awake. Féré has reported the case of a girl who, when hypnotized, recognized and told the name of a gentleman whom she was unable to remember in the waking state.

Although, however, some of the faculties may be more acute,

it is certain that the whole mental action is more unequal and irregular than in the waking state.

By far the most remarkable symptom of the somnambulistic state is the complete *credivity** and the extreme readiness to receive suggestions. It absolutely does not seem to matter what one suggests to the patient, for he implicitly believes all one says, so far as he can apprehend it. It is possible to alter the patient's personality in the most ridiculous way and to place him amidst the most imaginary surroundings, and he will act in as consistent a manner as if he had been accustomed to them from birth. It is not necessary to dilate further on this subject, for there are almost no limits, excepting those of one's own imagination, to the number and variety of suggestions that may be received, excluding those of criminal conduct, and these will be referred to later on.

It is not necessary, however, to develop these extraordinary trains of ideas and hallucinations in a direct way by verbal suggestion, though that is, of course, the easiest way. They will also arise spontaneously by the automatic activity of the brain itself from misinterpreted sensations, according to the laws of association. For example, Charcot, without saying a word, held a scent bottle under the nose of a female patient in the somnambulistic state, and she evidently imagined, from the automatic association of ideas, that she was in a scent-laden garden, surrounded by the rarest and most lovely flowers.

She slowly looked round the room, raised her hands, and seemed lost in admiration, then she stooped down, and pulling a flower to her, inhaled its delicious fragrance, next she walked along what was evidently a path, examining a flower here and there more lovely than the rest. She then commenced to make a bouquet, and selected flowers and plucked them off, and carefully placed them in the bouquet, turning it round and examining it from various points to see that it was artistically arranged; she occasionally brought it up to her face to inhale the perfume. In her search for flowers she seemed quite oblivious of her real surroundings, and sometimes jostled against persons and knocked against chairs, and the animated expression of her face and the childish exclamations of delight she uttered were most pleasing to watch. By simple association of ideas, therefore, a complicated series of hallucinations had been produced, which had so reacted on the patient's

This word expresses better than *credulity* the special intensity of this state.

emotional condition as to make her supremely happy, and had so influenced her conduct, that her real environment and her personal relation to it were completely lost.

Charcot next performed some experiments with sheets of coloured glass, which he held in front of the patient's eyes. He first placed a yellow sheet of glass before the eyes of a hypnotized man, who at once exclaimed, "What a lovely day," as the yellow tinge of the glass gave the appearance of bright sunshine everywhere. After a while this man commenced to puff and blow and to fan himself as if he were suffering from the effects of the heat, and in another minute he had become so hot that he threw off his coat and waistcoat. Not a single word was spoken by us all this time, but owing to the association of yellowish light and sunshine, heat had become suggested to the patient, who certainly felt and looked uncomfortably warm.

A red sheet of glass was next placed before his eyes, and what the exact result of this was Charcot was not certain. He looked very miserable and anxious, and it was surmised that it had suggested blood to him, or an accident. While he was in this melancholy state Charcot commenced beating a marching tune on a sounding metallic instrument lying on the table near him, and the patient at first listened attentively to it, then pulled himself together, stood up, and acted as if he imagined he were a soldier.

He also held blue glass before the eyes of two cases. The first case was that of a man, but it was impossible to tell what effect, if any, it had on his ideas. In the case of a woman, however, it must have suggested the sky, and then evidently heaven, for she placed her hands together, raised her face and her eyes upwards, and her attitude of devotion was so lovely and perfect, and her expression so pure and intense, that she might have stood as a subject for a painter.

In some cases it is not necessary to originate these delusions and hallucinations, either by direct or indirect suggestion, as there is an active delirious state produced by hypnotism. One young man whom I saw had hallucinations of sight, which are the commonest variety, but whether these occurred only in alcoholic subjects or not, Charcot could not say. The patient referred to imagined he saw beetles everywhere, and during the whole somnambulistic period he never for a moment desisted from his occupation of first catching them, then dismembering them, and finally trampling on them. Many seemed to be purely hallucinations, but others were illusions produced by

blots on paper or marks on the floor; and he once very nearly succeeded in obtaining something substantial by clutching Charcot's button of the Legion of Honour.

I also saw an old man at Nancy, who, the moment he was hypnotized, began to talk about Paris and the Champs Elysées, and his former life there.

Although the majority of cases receive suggestions readily enough, some do not do so, and one case which I saw most obstinately refused to take suggestions. Charcot desired this man to do some writing, but, in spite of every persuasion, verbal suggestion alone failed to penetrate to his consciousness, but finally he was induced to write a little by placing the pen in his fingers and holding it there.

The alteration in the sensory condition during hypnosis is often of a very remarkable nature, and some interesting phenomena were demonstrated to me.

During the lethargic state there is usually complete anæsthesia of the skin, so that the subject may be pinched and pricked with pins without wincing. It is, however, during the somnambulistic state that the most interesting phenomena manifest themselves, and these are of such a nature that they cannot easily be simulated, as, for example, the anæsthesia of the lethargic state may.

The first experiment was on colour sensation, and it was repeated with several different patients. Charcot held a small pack of white cards in his hand, and pointing to the top card said it was a beautiful red colour. "Yes," replied the patient. "A very bright red," added Charcot. "Yes, a very pretty red," again replied the patient. Charcot now rapidly removed the card and asked what colour the next one was, and the immediate response was "green," which of course is the complementary of red. This test was applied to several cases, with the different primary colours, and never was there any hesitation in answering—except in one case with violet—nor was the wrong complementary colour given. This experiment demonstrates that when a hypnotized person receives a suggestion—such as that of colour—distinct changes are induced either in the brain or in the retina, and these changes resemble those induced by sensory stimuli from the outside.

Another experiment, also repeated several times, was to demonstrate the extreme acuteness of the sense of vision in some of the hypnotized. An assistant took up the same pack of blank white cards, and made the faintest spot with a lead pencil on the back of one of them in order to recognize it. He

placed this card on the top of the pack and told the patient that it was a photograph of Charcot, pointing out with his finger Charcot's head, the table he was sitting beside, and his arm resting on it, with a book in his hand, to all of which the patient assented. She admired the photograph greatly, and begged to be allowed to keep it. The cards were then handed to me, and I took the marked card and turned it round so as to make Charcot's photograph upside down, and placing this card in the middle of the pack, I handed it back to the patient without having let her see what I had done. She took the cards, rapidly threw off the upper cards, and with as great rapidity and ease as we would recognize the ace of spades she seized the marked card when she came to it. She immediately turned it round and began to admire the photograph. I examined the back and found it to be the marked card. By what markings she recognized this card it was quite impossible to say, for the card was white, without a spot on its face. Yet Charcot stated that her vision was so acute as to detect marks on the card, and these marks formed portions of his imaginary photograph, and by these means not only did she recognize the card, but could also tell whether it was upside down or not. It has been demonstrated also that had this pack been photographed the patient would have recognized the photographed card with the same ease as the original.

The next experiment showed abnormally active powers of vision, and also possibly of the muscular sense. Charcot asked a young man to write some poetry, and he placed before him a packet of paper. After he had written two lines, and when he was not looking, Charcot suddenly jerked away the top sheet from the packet, leaving of course the next sheet of paper beneath. The patient appeared not to notice the absence of his first two lines, and went on writing on the clean sheet exactly at the place he would have written had the two previous lines been on the sheet. Charcot did the same trick on four different occasions, sometimes when the patient was in the middle of a line, but he always continued writing at the correct place as if the whole poem were on the clean sheet before him. When he had written six lines a clean sheet was left as before, and he was told to fill in the stops and to correct his writing. He carefully read over the clean sheet of paper and filled in the stops, and the strokes, dots and accents that were needed. This was done so carefully that there was only one omission to be seen, one *i* not being dotted, and no strokes or dots were

added where they already existed. The corrections he made are not in position mathematically accurate, this perhaps being due to the fact that the packet was slightly moved and disarranged, still they are all placed very nearly where they should be. To account for this extraordinary phenomenon it may be

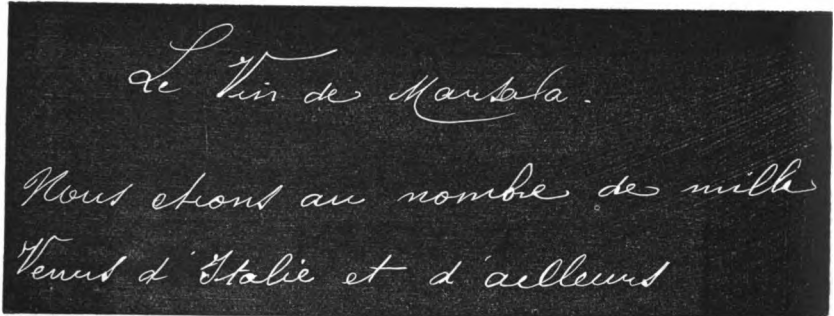


FIG. 2.—Two lines of a poem composed and written by a patient in the somnambulist state.



FIG. 3.—Corrections in the writing and punctuation of the above two lines of poetry, made on another clean sheet of paper.

that the man carried in his mind the exact image of his writing, which must have been projected before him on the sheet he was writing on. This seems almost certain, for when he corrected his writing he seemed to follow with his pen imaginary lines of writing on the paper.

The other senses, hearing and smell, are also sometimes excessively acute, and one of the strongest reasons for extreme care in all experiments with hypnotized persons is, that it is quite possible they may overhear whispered directions and so learn the nature of the experiments one is making.

A very curious phenomenon in connection with these hallucinations which I have just mentioned is, that frequently they persist for a long time after the patient has awakened from the hypnosis and is in her normal frame of mind. This is one of the post-hypnotic phenomena, and is made use of in the Nancy School for purposes of treatment. These young women who had seen Charcot's imaginary photographs, when they awoke and saw the pack of cards lying on the table, all begged to be allowed to keep the photograph, and it had to be taken away from one.

During the course of the demonstration, also, Charcot took advantage of M. Féré's good nature, and depicted him in the most fanciful shapes to some of the patients. To some he described him as having a nose like the trunk of an elephant extending many feet in front of him, and so muscular and flexible that it could twist about in all directions. To others he described him as having a frightful and grotesque appearance. Later on, when we were leaving the place, we passed through a hall in which many of the patients were congregated, and M. Féré was greeted with peals of laughter and jeers from some of the women, while others turned away from him in horror and disgust. M. Féré told me this might last a few hours or for several days.

There is another variety of post-hypnotic suggestion, which M. Féré showed me on a subsequent occasion. He told his subject when she was in the somnambulistic state that his assistant was a thorough blackguard, and that before she left the room she was to tell him so to his face. She was now awakened, and then told that she might go. The patient's conduct and face now offered a splendid psychological study. One could see that she was annoyed, and was thinking over something unpleasant, as she slowly put on her jacket and adjusted her bonnet. Now and then she shot a sidelong glance in the direction of the assistant, and a scowl passed over her face, but as a rule her gaze was averted from him. She then asked M. Féré rather crossly what he was looking at? but he evaded her question, and said "Nothing at all." She now had her gloves buttoned, and rapidly approached the door, but after she had opened it she wheeled suddenly round. The unfortunate assistant was standing near the door, and she looked him full in the face, with an expression of great malignancy, uttered the words "You scoundrel!" and instantly disappeared, slamming the door behind her. This case was very instructive, for it was obvious that the poor

woman, who knew the assistant well, and was on good terms with him, was acting a most disagreeable part, under a compulsion which she could not resist. It illustrates the strength of a suggestion received in the somnambulistic state.

The phenomena of suggestion which I have described so far have all taken place during the somnambulistic state; there is, however, a very interesting series during the cataleptic state. In this state it was found impossible to suggest verbally, but there was a very active suggestibility through the muscular sense, especially of emotional conditions. The subject being cataleptic, it was of course possible to place the limbs in any desired position, and it was also possible by manipulation to cause contraction of any of the muscles of the face, and so to make the face assume any expression one wished. When by these means any definite expression was produced it was invariably found that the patient assumed an attitude which was strictly in keeping with the emotional state expressed. For example, when Charcot corrugated the eyebrows and depressed them slightly, the patient at once drew back in a defiant attitude and clenched the fists as if prepared to fight. When the zygomatici were pressed so as to draw up the angles of the mouth as in laughter, the frown suddenly vanished from the eyebrows, the clenched fists opened, and the attitude and expression were in complete accord with that of a person enjoying a hearty laugh. By these means all the attitudes and expressions for the stronger emotions were in turn suggested, but it has been proved that the emotional feeling is not very lasting or deep, for if a tracing be taken of the respiratory movements, which are greatly affected in the stronger emotions, it is found in the cataleptic state that after a preliminary and very transitory irregularity, the movements of respiration are unaffected.

It has been mentioned that the cataleptic state is induced by opening the eyes of the lethargic patient, but it is found that if only one eye be opened the patient only becomes hemi-cataleptic. The result of this is that all the expressions of the face are one-sided, the lethargic side remaining vacant and motionless. This peculiar phenomenon admitted of a very strange experiment being performed, for a lethargic patient had one eye opened, and on the cataleptic side of her face the expression of anger was induced. The other eye was now opened, which rendered the other side also cataleptic, but here the expression of laughter was induced, and therefore I had before me a person angry with one side of the face and laugh-

ing with the other. The appearance was very odd and peculiar, and the effect was rather confusing, due of course entirely to a subjective feeling.

Before concluding the demonstration Charcot illustrated to me the close connection between hysteria and the hypnotic condition by suddenly producing catalepsy in an hysterical patient by bringing down a heavy magnet he held in his hand on the table with a loud noise. The patient was walking across the room to go away, and the catalepsy came on her so instantly that she was fixed in the attitude of raising one foot from the ground. By rubbing her scalp she became somnambulistic, and by closing her eyes lethargic, just as if hypnosis had been induced in the ordinary way. Of the therapeutic uses of hypnotism Charcot did not say a single word to me. He indeed pointed out that a woman who had hysterical paralysis of one leg, walked about and seemed all right during hypnosis, and that though he might temporarily remove the paralysis by suggesting its disappearance, that such a remedy did not treat the disease she laboured under, but only allayed one symptom. He treats his cases of hysteria according to the principles most approved of here. Seclusion, fattening foods, and a physiological mode of living. What then, we may ask, are the uses of hypnotism according to Charcot? The question has been concisely answered by M. Féré, that the hypnotized hysterical woman is to be regarded as "the psychological frog," and that what the frog has done for physiology, the hysterical woman is to do for psychology. Without advocating the practice of this view, there can be no doubt that many obscure points of psychology have received wonderful illumination from hypnotic phenomena. It is sufficient to mention that hallucinations, illusions, delusions, false identities, and morbid emotional states can be produced at will and varied at will, and that insane impulse, one of the most important social problems connected with psychology, can in its minor degrees be artificially induced in the post-hypnotic state.

In conclusion I feel bound to express my thanks for the extreme kindness of Professor Charcot and of M. Féré, and for the honour done me by such a laborious demonstration. I was struck with admiration at the brilliant success of the experiments, which worked with the precision that one expects in physics, but which one is quite unprepared for in physiology. This complete success all along the line may have helped to convince me of the reality of the phenomena, even without

confirmation by the various tests I have described, but there was one little piece of human nature at the beginning which also went far to persuade me. The first young woman to be hypnotized had been found somewhat unprepared for Charcot's lecture, but rather than keep him waiting, the nurse had insisted on bringing her in before us somewhat in *deshabille*. Though every hysterical subject craves for a pedestal, no woman, how much less a Parisian, cares to pose while slovenly and inartistically attired, so she scolded with a volubility only possible in a French woman, till she was hypnotized. When she awakened she instantly carried on the indignant scolding as she had left off, till she was stopped by a hystero-epileptic fit. It is improbable that this impulsive woman would have allowed her vanity to be trampled on for the sake of a scientific experiment.

II. *Professor Bernheim's Treatment by Suggestion.*

I shall next describe my visit to the School of Nancy, as being the headquarters of the opposite camp. M. Liébeault is really the founder of this school of hypnotism, but he is now an old man and has retired from practice, though he is still most enthusiastic about hypnotism, and takes a keen interest in all visitors. For many years he practised hypnotism as a purely therapeutic agent among his own patients, but he was regarded as a crank, and, as he told me himself, he was called "the fool of the Rue Bellevue." Finally Professor Bernheim was induced to give this agency a trial, was convinced of its usefulness, and by his reputation at once attracted attention to the whole subject. Professor Bernheim is a short man, well up in years, of simple habits, and of a genial, kindly disposition. Bernheim believes that almost all sane people are capable of being hypnotized, that the state may be induced by a hundred different methods so long as it is suggested to the patient, directly or indirectly, that he is being hypnotized, and that the state is mainly characterized by an extraordinary readiness to accept suggestions. Suggestion is the keynote of the whole process, for hypnosis is induced by suggestion, and the subject's whole conduct and ideas are afterwards governed by suggestions.

Bernheim's object in using hypnotism is purely a therapeutic one, so he invited me to accompany him round his wards to see his treatment. One of the first cases we saw was an outpatient, who had come up that day for the first time. He was an elderly man, who was suffering severely from sciatica.

The case was a typical example of the disease, with well-marked symptoms, for the man could hardly stand, and the pain he suffered on pressure made him groan. After examining the case carefully, Bernheim told the man he would cure him and asked him to sit down in a comfortable arm-chair. He now told him not to be alarmed at what he was going to do, for it would not disturb him in the slightest, and he requested him to calm his thoughts and prepare himself to go off to sleep. The man settled himself comfortably in the chair and looked steadily forward in front of him. Bernheim stood at his left side and placed the palm of his hand on the man's forehead, and spoke to him, slowly, in a quiet and gentle tone of voice, much as follows: "*You are feeling calm ; you are feeling comfortable ; you are feeling at rest ; my hand is soothing your brain ; you are beginning to feel drowsy ; your arms are feeling quite heavy.*" Here he took up the patient's hand with his own disengaged left hand, raised it slightly, and let it fall. He then said : "*Your eyes are beginning to ache ; your eyelids are feeling heavy ; you can scarcely keep them open ; they are beginning to close ; they have closed.*" While he was saying the last few words he slowly brought his hand down over the patient's eyelids and gently closed the eyes, when he continued, keeping his hands over the patient's eyes. He now said : "*You are beginning to feel sleepy now ; you are gradually going off ; in another minute you will be sound asleep—sleep—sleep—you will soon be sound asleep.*" He repeated these last sentences several times, gradually laying stress on the words "sound asleep." He then continued : "*Sleep—sleep—you are nearly asleep now ; you are just going off ; you are now asleep ; you are sound asleep—perfectly sound asleep.*" These last sentences he spoke with the slightest tone of authority and of positive assurance in his voice. The patient's face had now acquired an impassive expression, and he was breathing slowly and deeply, but, otherwise, there was no marked change in his appearance. Bernheim now told the man he was going to remove the pain. He told him that the pain was gradually going away, that the leg was feeling easier, that the pain had become much less, and that, in fact, it could hardly be felt now. While he was saying this, he passed his hand along the leg, to suggest that some active measures were being used. He then said suddenly, with positiveness, that the pain was gone, and he asked the man if that was not so. The man replied that it was much easier, but that he still felt it. Bernheim replied that he would not stop till he had entirely

removed it, and he again suggested that the pain was going away, and was getting gradually less and less; that his leg was feeling quite well now, and that there was absolutely no pain left in it. Then he again said, most positively: "Your leg is quite cured now; you don't feel any pain in it, do you?" The man replied that he did not, and that all pain was gone, but when Bernheim began pressing the nerve trunk he again said he felt a little pain. Bernheim then assured him that he would remove every particle of pain and that he would make him walk about the ward quite smartly, and so he again said that the pain was leaving, that it had now entirely left, and that there would be no more pain on pressure, and that he could walk about quite well without pain. Bernheim then asked the man to stand up, and to say how he felt; he replied that he felt quite well. He then pressed on the nerve and it produced no pain, and he then asked the man to walk along the ward, which he did with perfect ease. He now told the man to sit in the chair again, and ordered him to continue sleeping for five minutes; at the end of that time he said that he would awaken, feeling fresh and well and in good spirits, and that the pain would be completely gone from his leg and would not return again. After a few minutes the man awoke, looking quite bright and as if a great weight had been taken off his mind. He showered his thanks profusely on Professor Bernheim, and when he left he marched away almost jauntily, disdaining the help of a female friend and of a big stick, on both of whom he was so dependent not a quarter of an hour previously.

I have entered into the minute details of this case, as it is ignorance of these which prevents many from making use of this treatment. Concerning this case, I asked Bernheim if the pain would remain away permanently, and he replied that he could not tell; that the pain might possibly return after the first sleep the man had, or it might return in a day or two, or not at all, and that if the pain did return the man could easily be hypnotized again.

One of the next cases I saw was a boy about twelve years old, who was suffering from purpura hæmorrhagica. He suffered from pain in the muscles of the legs and thighs, which was very severe on pressure, and, being nervous and timid, when I touched his limbs he screamed out. I concluded that this pain was due to hæmorrhages in the substance of the muscles. Bernheim very speedily hypnotized this boy, and suggested to him that the pain had entirely gone. When he

awoke, he allowed me to squeeze and press his legs as I pleased, without feeling any pain, and next day I did the same without hurting him. That this recovery from pain was real no one would deny who had seen the boy's fright and had heard him scream when I touched him previous to being hypnotized.

Another case I saw was a widow woman of middle-age, who came as an out-patient for the first time. She complained of severe pain in the right lumbar region, which had lasted for several days. She was certainly a most hysterically emotional woman, and it was very difficult either to examine her or to get an account of her symptoms. Whether Bernheim diagnosed ovaritis, salpingitis or perityphlitis I do not know, but he hypnotized her after a little difficulty, as she was nervous, and completely removed the pain. She was then kept in the hospital for further examination and treatment.



FIG. 4.—Attempt at writing of a girl, suffering from Right Hemi-chorea. The letter L can be distinguished. (From Beannis.)



FIG. 5.—Writing of same girl, after having been hypnotized by M. Liébeault. (From Beannis.)

Another case was of a boy who suffered from chorea, a disease sometimes particularly amenable to hypnotism. He

had been in the ward for some time and had improved greatly, but a considerable amount of movement still remained, which made taking his soup, the occupation I saw him at, a difficult one. He was quickly hypnotized, in about half-a-minute, and he was told that the movements were not to take place and his hand was to be much steadier. His hand decidedly improved, and he finished his soup with much greater ease.

I also saw a man who was suffering from insomnia. He had been hypnotized the day before for the first time, and he had slept soundly during the night as had been suggested, although he had not done so for five nights previously. He was again hypnotized, and told to sleep well at night.

A girl who suffered from nocturnal enuresis was also hypnotized, and it was suggested to her that she was to awaken four times regularly during the night. On next day's visit I learnt from the sister of the ward that she had conducted herself according to her orders. Bernheim stated that children can be very readily hypnotized, and that this disease is particularly suitable for this treatment.

A young man, who was in the hospital for phthisis, complained of ordinary neuralgia over the frontal region, and he was hypnotized and the neuralgic pain dispelled.

In addition to those I have described, there were a large number of cases which received suggestion of one kind or another during the hypnotic state, such as cases of pneumonia, empyema, phthisis, mitral stenosis, hemiplegia, and hypertrophic cirrhosis of the liver with jaundice. Bernheim treats all his cases according to the established therapeutic methods; for example, the case of jaundice was getting podophyllin, but, in addition to this, he uses hypnotic suggestion whenever there is any unpleasant accompaniment that may be removed, such as pain, uneasiness, anxiety, despondency, nervousness, want of appetite, sleeplessness, etc. The case of pneumonia, for example, was told that his breathing was easier, and that all pain had gone; the case of phthisis that his cough was less, and that he must take his food well, and all cases whatsoever that were hypnotized were told, previous to being wakened, that they were to be contented, happy, and cheerful. In this way there was no doubt that much was done to make the patients easier and more comfortable.

One of the cases that came up for treatment, or rather was brought up, was a case of early general paralysis of the insane, and though the symptoms were not at all well-marked, Bernheim diagnosed the case immediately. The man was

confused and hazy, and somewhat weak-minded; he could not do his work and complained of weakness and tremblings in his limbs. Bernheim attempted to hypnotize this man, but it was extremely doubtful if he was hypnotized in the slightest degree. He opened his eyes the moment Bernheim took his hands off his forehead, and though he performed some slight movements according to suggestion, I think it highly probable he would have done so without being hypnotized. The only point which told in favour of his being hypnotized was when asked how long he had slept, he said five minutes. I must record, however, that I certainly did not believe him to be hypnotized. Bernheim told me that the insane and those weak in mind were very unfavourable cases to hypnotize.

There is, perhaps, one other case I should mention, of a man who, when Bernheim approached to hypnotize him, got very agitated and trembled all over. I do not know what ailment he suffered from, but there can be no doubt that he was in a very nervous and timid state. Bernheim did not long persist in attempting to hypnotize him, after he found that persuasion did not calm or reassure him, but left it to time and familiarity with the sight of others being hypnotized to overcome his prejudice.

It is a very difficult thing to tell by any external sign when hypnosis has occurred in these patients of Bernheim. When hypnosis is induced by staring at a bright object, the onset of the hypnotic sleep is betokened by the closure of the eyes, often very sudden and accompanied occasionally by a slight spasm or start of some of the facial muscles. But when the eyes are closed by the hand, as Bernheim does, this test is lost. His patients very often performed one or two swallowing movements as they were going off, and the breathing also became slower and deeper, and the expression of the face became less intelligent or, at least, changed from the natural one. Then there were two tests Bernheim almost invariably used. As the person was being hypnotized, he would hold up one of the arms and then slowly let it go. If the arm fell the patient was, as a rule, not hypnotized, but when hypnosis had taken place the arm assumed the cataleptoid posture. In the latter instance the patient had, I presume, received the suggestion that the arm was to be held up, and having become suggestible through hypnosis, had strictly followed the suggestion. Bernheim also very often commenced revolving the hands of the patient round one another, and if he received this suggestion and continued doing so, he was regarded

as hypnotized. An increased suggestibility is, therefore, the test of hypnosis in the eyes of Bernheim, and therefore the lesser degrees of the hypnosis of the Nancy School can be nothing more than a peculiar psychological condition. The cry of Charcot for physical signs of hypnosis which cannot be simulated, is therefore in these states a vain one, for the only tests that can be applied are psychological ones. But these psychological tests may be just as satisfying as physical ones, and for myself I feel absolutely convinced by the certain manner in which pain was relieved in a few minutes, that a peculiar psychological state had been induced, which enabled this to be done. I am sure that no one could come to any other conclusion who had seen Bernheim at work in two large wards, one for each sex, full of patients of all ages, and suffering from very various complaints.

At first one is sceptical and very doubtful if hypnosis have really occurred in the lesser degrees, as the patients look so natural and are so conscious of all that goes on around. Sometimes, too, they even open their eyes during the middle of the treatment, while suggestions are being made, and they have to be told to close them. But the proof of the hypnosis is in the results, for even in these cases pain is dispelled if present. Perhaps, however, it is not till one has oneself relieved pain by suggestion in such a case, much to one's own surprise, that all doubts are finally settled.

It is well for those beginning, to remember how slight hypnosis may be, when this suggestible state of mind has been induced, and when it is quite possible with a very little persistence to suggest the removal of a pain. This is not surprising when it is known that in some people this state of mind exists in the waking condition, without ever having been hypnotized.

In Bernheim's wards I saw two men to whom, without hypnotizing them, he gave suggestions, or I might almost say orders. And although perfectly ridiculous, the patients carried them out, and then laughed at their foolishness, but apologised that they could not help it. One man he ordered to drink a glass of imaginary beer, which he did, and also to revolve his hands about one another, which he had to continue doing till permission was given to stop; and another man was ordered to get out of bed, to cross the ward, and to scold the patient in the corner bed. The man did as he was ordered, gave the man a most hearty scolding—indeed I thought he was about to assault him, and then when I asked him why he had done so,

he said he could not help it and felt that he must do it. These two men were not hypnotized in Charcot's sense of the word, yet they were in a peculiar state of mind very ready to receive suggestions, by which extraordinary cures have been effected.

The vast majority of Bernheim's patients require some coaxing such as I have fully described before they get into the suggestible state, even though they all come to him in a state of mind of abnormal tension and expectancy. They feel that this man has some occult power over them, and that he is able to put them into a peculiar sleep, so that they fall ready victims to his artful wiles and suggestions. There is no doubt that this frame of mind exists in Nancy, for I questioned my cabman as he was showing me the town in an artless and innocent manner about hypnotism and its powers. He told me that he had never been treated, but that friends of his had, and that Bernheim had the most wonderful powers, their indefiniteness, no doubt, lending a useful mystery to them, and that he was able to cure all the lesser diseases. I was also told at Maréville, a great asylum near Nancy, where hypnotism was once practised but has now fallen into disuse, that although hypnotism had done much good to individuals, that it was the general impression amongst medical men in Nancy that it had done more harm than good by inducing this peculiar frame of mind in the people—this belief in occult powers and in the power of one man's mind over the conduct of another.

Whether this state of mind is absolutely essential for the production of hypnosis or not I cannot say, but it certainly is a very important aid, and it has been noted, that watching others being hypnotized, if done successfully, renders the induction of hypnosis more easy. In a place like Nancy, where hypnotism is an established fact, the operator has thus every assistance, but in this country, where hypnotism is looked on with scepticism and even antagonism, the operator is severely handicapped.

Bernheim also gave me a demonstration in connection with some of the phenomena of hypnotism. In one case he suggested, as a post-hypnotic phenomenon, that a regiment of soldiers was to pass along the street with the band playing, and the patient shortly after waking, jumped out of bed and rushed to the window, where he watched the regiment and listened to the band with great pleasure. In another case he suggested that a dog would be seen running about the room, and that it would jump into the patient's bed, all of which

happened, for the patient got very angry, and kicked the brute out. One of the most amusing sights he ever saw, Bernheim told me, was the astonishment of a patient to whom he had suggested that instead of a human being there was a dog in every bed in the ward.

Bernheim now concluded with an exhibition of the most extraordinary phenomena I saw on my visit, what has been called negative hallucinations or systematic anæsthesia. These took place in an hysterical young woman, and it may perhaps be mentioned here by the way that Charcot asserts that in those cases in which Bernheim reproduces, by his own methods, Charcot's phenomena of hypnotism—that he is dealing with an hysterical patient. Charcot asserts this, of course, because he does not believe his phenomena to occur except in hysteria. Bernheim affirms, on the other hand, that he can reproduce all Charcot's phenomena by suggestion in ordinary people, but the very limited demonstrations I got did not convince me of this. Bernheim's catalepsy by suggestion was not like true catalepsy, and was much more like voluntary posturing, nor did he reproduce neuro-muscular hyper-excitability satisfactorily, but he states that this is a mere matter of education, and that by practice he could train his cases to make the contractures just as correctly as Charcot's.

But to return to negative hallucination, what is meant by the term is, that as in positive hallucinations an image is created where none really exists, so in negative hallucination a blank is created, where a real object exists. Thus, a patient may be told that she has no hands, and she will not be able to see them or to feel anything touching them, and to her consciousness no hands exist. What adds to the interest of the phenomena I am about to describe is, that they took place in the post-hypnotic state, when the patient is supposed to be in her right mind.

Bernheim hypnotized this woman and then suggested to her that on waking she was not to see himself, that he would be gone away. She was then wakened and soon after expressed surprise at Bernheim's absence. She then began to talk to and to amuse herself with one of the assistants. Bernheim during this time walked up to her, and stood beside her, and touched her on the face and hands, and she took not the slightest notice of what he did, and completely ignored his presence. He then called for a pin, and as one of the assistants came towards him with it, the patient ran away laughing and scolding, as she thought the assistant was going to prick her

with it. The moment, however, he handed the pin to Bernheim, she no longer saw the pin and took no further notice of it, though Bernheim bared her arm and stuck the pin right through the skin. Her total insensibility to all that related to Bernheim was most astonishing, considering that she appeared thoroughly awake and talked quite naturally. Bernheim now removed the pin, and as unfortunately it had pierced a vein, there was a good deal of bleeding. Bernheim called for a bandage, and as the assistant again approached her the patient wanted to know why he wished to bandage her, as there was nothing the matter with her. When Bernheim took the bandage she paid no further attention to it, and allowed her hand to be quietly bandaged, as if nothing were being done to it. When Bernheim again called for a pin to pin the bandage, she again got excited as the assistant wished to pin it, but her fears at once subsided when Bernheim took the pin. She now expressed great concern at the blood she saw on the floor, and wondered who had met with an injury, and when one suggested it was herself she laughed at the idea. Bernheim again hypnotized her and told her on waking that she would feel no pain in her arm and that she would not see the blood on the floor and that she would see him. When she awoke she looked at the bandage on her arm and wondered why it had been put on and at once began to take it off. She spoke to Bernheim now, and when he pointed to the blood on the floor she looked in vain for it and could not see it.

These phenomena of negative hallucinations throw a light, I think, on the mechanism of the removal of pain, which from one point of view, is nothing more than suggesting the negative hallucination of absence of pain when in reality pain does exist. Just as in the one case, although a man was standing before the patient and the retinal impression of his form did not reach the regions of consciousness, so in the latter case, although the nerves of a part are being so irritated that an ordinary person would feel pain, yet the impression from the nerves is not allowed to affect consciousness; it is blocked somewhere. This explanation, if true, offers a reason why the pain produced by organic causes—and not only functional pain—can be so perfectly removed. There is probably little doubt that it is by acting on the highest regions of consciousness that this anæsthesia is produced, just as in the case of chloroform, and Bernheim has suggested that the hysterical anæsthesiæ are also due to cortical lesions affecting the highest mental functions.

A very curious addition requires to be made to these phenomena of negative hallucination, which, although I received no demonstration of it, Bernheim informed me existed. When the patient was in the state in which she could not see or hear Professor Bernheim, although he was standing beside her and speaking to her, yet if he suggested to her with a little persistence to go across the ward, for example, and pick up a book on the table and look at the first illustration in the book, she would, after a short time, do exactly as he had suggested. If one of the visible persons now asked her why she had done this, and why she had looked at the picture, she would answer in some such way as this, "I accidentally caught a glimpse of the book, and wondered if there were illustrations in it." The patient would be under the impression that she was acting of her own free will, whereas in reality she had received a suggestion from the outside, an unconscious suggestion. Although I have previously said that the anæsthesia was produced in the highest regions of consciousness so that particular impressions from the outside were blocked, yet it is evident from these last observations that, although the stimuli received in these particular regions are not strong enough to produce a vivid conscious feeling, yet they do reach these regions and may be strong enough to set up trains of ideas.

The peculiar fact to be noted in connection with negative hallucination is not simple anæsthesia, but anæsthesia for a particular series of sensations, all others being perfectly well perceived.

When at Nancy I also met M. Liégeois, Professor of Law, who has devoted great attention to the legal relationships of hypnotism, and who was the advocate who so strongly supported the idea that it was possible, if not probable, that Gabrielle Bompard had been hypnotized by Eyraud, and had received the suggestion to assist in committing murder, and that therefore she had not acted of her own free will. He informed me that if he could have seen Gabrielle, who was known to be a good subject, for five minutes before the trial, he could have suggested such negative hallucinations to her as would certainly have convinced the judge and jury of the immense possibilities of hypnotic suggestion.

The School of Nancy are strongly of opinion that hypnotic suggestion can be made use of for criminal purposes, but, on the other hand, Charcot and his followers sneer at the idea, and say that this is entirely imaginary. So far as I am aware no

case of the use of hypnotism for suggesting criminal conduct to another has yet been proven in the courts of law, but the Nancy School point to a large number of experiments which seem to demonstrate the truth of their theory. For example, people have been given paper daggers and told to stab a certain individual, who had evil designs on them, and they have committed these imaginary murders. On the other hand, these "crimes of the laboratory," as the Charcot School love to call them, are committed under very artificial circumstances, and many people have a strong impression, founded partly on the confessions of subjects themselves, that there is an under-current of consciousness in the patient's mind that it is all right, that it is not real, and that nothing will happen to them. In addition to this there are many examples in which the patient has demonstrated a certain amount of free will and has refused to follow the suggestion, especially when the act suggested is quite contrary to the whole current of the being. Which view of the case be true one cannot say, as the matter may still be regarded as *sub judice*, but I may state that the Nancy School assert that a crime may be suggested and the subject forced to carry out the suggestion. It may also be suggested that the crime was entirely spontaneous and had not been planned by another, and by these means the real criminal would not be discovered, as the subject would assert that she alone was guilty. They also state that the evidence of witnesses may be tampered with by means of hypnotic suggestion, and Bernheim demonstrated this to me. He suggested to the hysterical case of whom I have spoken that she had robbed a till, and when she awoke she confessed to us, with weeping and other signs of great sorrow, that she had really done so. If this young woman could be made to confess, when in the waking state, that she had committed this crime, which was so abhorrent to her feelings that she wept copiously and showed all the signs of grief, how much easier could false information be suggested in matters of observation and common evidence?

In conclusion, I have to express my thanks to Professor Bernheim for his kindness to me. I was struck by his frankness and the consistent manner in which he enforced the claims of mental suggestion, and no one could doubt his transparent sincerity. He now has a considerable number of followers in this country, as the therapeutic uses to which he puts hypnotism are better suited to our sentiments than anything which suggests a physiological experiment.

III. *Dr. A. Voisin's Treatment of Insanity.*

I also visited the wards of Dr. Auguste Voisin, who has charge of the insane patients at the Salpêtrière, and who, speaking generally, adopts the same methods of hypnotic suggestion as Professor Bernheim. Dr. Voisin has charge of about 200 female patients from the City of Paris, but the class of females I think deserves notice. They are those who have fallen into the hands of the police and have been found to be insane, and I think it highly probable that he has a large number of cases of moral insanity, of degraded women of strong passions and defective control, and cases of hysteria and hysterical excitement. These are cases that are more on the borderland of insanity than the cases of well-marked mental disease such as an ordinary asylum receives; therefore I think they are more suitable cases for hypnotism than the ordinary insane. As a matter of fact, Dr. Voisin told me that he admitted a good number of hysterical patients, the class most suitable for hypnotism. He also informs me that he tried hypnotism for an hour daily for twenty consecutive days on all his patients if it were possible, and that he found he was able to hypnotize about 10 per cent. of them. The method he uses is fixation of the eyes on a bright object, and the details of his plan are as follows:—The patient lies on a bed, and suspended from a pulley on the ceiling there is a silvered glass ball, about the size of an orange, such as people sometimes place on Christmas trees. This ball is lowered by the string till it rests about nine inches above the patient's eyes, and in such a position that the eyes look upwards, and the patient lies, looking fixedly at the ball till hypnosis comes on, or the hour expires. In those cases in which he hypnotizes personally he either makes use of ocular pressure, like Charcot, or of fascination, a method by which the patient and operator look fixedly at one another's eyes at a distance varying from less than six inches to a foot or two, the operator constantly repeating the word "sleep."

One of the first cases I saw was that of a young woman who suffered from recurrent attacks of great excitement at monthly intervals. These acute attacks were always accompanied by hallucinations of hearing—usually she heard her father's voice saying "They are killing me." She imagined that Dr. Voisin was her father's murderer, and she used at these periods to shout this after him and even threaten to assault him, though when she was well they were on very good terms. The treatment adopted in this case was commenced immediately before

these attacks. The assistant hypnotized her regularly every night, and left her asleep till Voisin's visit in the morning. Before waking her he would suggest to her to eat well, to be happy, and to be calm. This treatment was carried on for a week till the period was over, and it was found that by these means the excitement was warded off altogether. The first time I saw this woman was during a period when she was being treated in this manner. I saw Voisin waken her, and offer the suggestions previous to wakening her, and she seemed to be thoroughly hypnotized, for the difference between her waking and her sleeping condition was great. On a subsequent occasion I saw her during one of the intervals, when it was thought that she had got over the periodical attack. She was dressed and walking about the ward, but was melancholic, sullen, and quiet. She seemed hypochondriacal, and said she could not eat. Dr. Voisin proposed to hypnotize her, but she begged him not to do so, but if he did, that he would not send her to sleep for long. She was hypnotized by fascination, and when asleep allowed pins to be put into her arm. She was then told to take her food and to be happy and contented. After sleeping for a few minutes she was told I would waken her by touching her left hand, and she awoke the moment I did so. Her mental condition was now very markedly changed, for all the melancholy had gone, her expression was bright and happy, and she was quite cheerful in her speech.

I asked Dr. Voisin if this woman was hysterical, as she seemed so to me, but he informed me that she was not, and that she took true epileptic fits. He further informed me on my asking him, that it was possible to cure true epilepsy by means of hypnotism. On this point, however, Bernheim holds the opposite view, and for my own part I incline to the belief that the cases which recover must in reality have been hystero-epilepsy.

The next case I saw was one of hystero-epilepsy with grand attacks. She also had attacks of epilepsy, epilepsy larvée, and also petit mal, with outbursts of extreme violence and excitement. She was from all accounts one of those very troublesome cases in whom all self-control is lost, and who have no better feelings to appeal to. Some time before my visit she one day heard a voice, saying, "Break, break, break," so she mounted the wall of the airing court and damaged it to such an extent by pulling out the stones, that it cost over 500 francs to repair it. In addition to this, she smashed every window that was within reach. Voisin's treatment of this case was to have

her hypnotized regularly every night, and every morning at his visit he suggested her to eat, to be happy, to be quiet, and to be fond of the nurses, and after this he awakened her. By these means the patient had been for some time very easily managed, and it had become possible to live beside her in peace. As showing that she was a bad case and was not yet trusted, it may be mentioned that she occupied one of a series of detached small houses, each having two single rooms, for excited cases. Voisin thought that in course of time she might recover under this treatment, but in the meantime it seemed as if he were highly satisfied with the relief from excitement and violence. In both these cases, I believe, Dr. Voisin has tried keeping the patient asleep all day and night, excepting when wakened for food, and he found that the health remained good, and that the rest was beneficial to the mind.

The next case I saw was that of a very troublesome young woman. She had lost her mother when she was young, and had a very bad upbringing from neglect, and as a result she had early fallen into irregular ways of living. It was also possible she had suffered from specific disease, but of that there were no symptoms now. She suffered from melancholia, and had hallucinations of hearing. She was being treated by the prolonged bath, and she was hypnotized in it by Voisin by the method of fascination. When she was asleep he told her to be happy, never to lead a fast life again and to forget it, to be obedient to the nurses and do all they told her, not to hear the voices, as they were imaginary and did not really exist, and not to pay any attention to what they said. After about five minutes' sleep she was awakened, and though she showed no alteration in her appearance, it is quite possible the advice sank into her mind. Voisin informed me that this case was not one of hysteria.

The next case had formerly been a patient, and had come back to be treated for a painful arthritic knee joint. She was a good example of hysteria, and suffered from hemianæsthesia of the right side, which had previously been accompanied by aphasia. She was hypnotized, and Paquelin's cautery was painlessly applied to the knee. There were, of course, no mental symptoms to treat.

These are all the cases that I saw hypnotized during two visits on different weeks, and of these the first and the second cases were hypnotized on both occasions. I also saw a case of hypochondriacal melancholia lying on a bed staring at a glass ball, but whether she eventually became hypnotized or not, I do

not know. Every person of any experience who has used hypnotism has found that it is extremely difficult to hypnotize the insane, and painstaking enthusiasts like Voisin, and Forel of Zurich, after extraordinary endeavours, have only managed to hypnotize about 10 or 15 per cent. There are, however, cases which give the most brilliant results from hypnosis, and I certainly think the retention of hypnotism for these cases should not be discouraged. It will be found, I think, that these cases are the most sensible and reasonable class one finds in asylums, for the demented do not hypnotize readily, as they are too weak-minded to receive suggestions or to feel impressed. Voisin stated that he uses chloroform to calm the excited cases before hypnotizing them, and that some cases hypnotize more readily as they are getting excited than when they are well, a fact I have been able to confirm.

IV. *Dr. Luys' Treatment by Transference.*

I also visited the Clinique of Dr. J. Luys, at the Charité. Unfortunately Dr. Luys was indisposed at the time of my visit, but he placed me in the hands of M. Gérard Encausse, his *chef de clinique*, who was very obliging, and who put himself to a great deal of trouble for my sake.

Hypnotism is used in this clinique almost entirely for therapeutic purposes, but the methods adopted and the theories held vary considerably from the Nancy School. In fact, it may be said that it stands, in many respects, halfway between the Charcot and the Nancy School, for Dr. Luys admits all the phenomena of Charcot and makes use of hysterical subjects. But he and his followers hold in addition the most extravagant views on the subject of hypnotism, which are equally rejected by Charcot, Bernheim, and Voisin.

In the waiting-room of the clinique the following notice is placed for the benefit of out-patients:—

Hypno-therapeutic Treatment.

“The treatment of patients will be applied as follows:—

The *mirror* for 20 days, to be followed by rest for 10 days.

Electricity for 12 days, to be followed by rest for 12 days.

Transference for 6 days, to be followed by rest for 10 days.

NOTE.—The treatment will be altered if the doctor thinks it necessary.”

I do not think that this course of treatment is very strictly followed, for I believe that more stress is laid on the *transference* which is sometimes the first and only method tried, and which is sometimes combined with the *mirror*, though not simultaneously.

The treatment by the mirror is simply one of the numerous methods of inducing hypnosis, but it appears one of the neatest. The mirror consists of two pieces of wood, shaped like a Cupid's bow, with glass on each side of them, and trans-fixed through the middle by two rods, one within the other. By means of a clockwork mechanism these two rods rapidly and almost noiselessly revolve in opposite directions, with the two pieces of wood bearing the mirrors. The patient is seated with his back to the light on the level with the mirror, and from one to three feet away from it. He is supposed to look steadily at it, and the rapid flashing of the light soon wearies the eyes and induces a drowsy, heavy state, accompanied by a nervous calm, and, finally, sleep. By constant repetition sleep is more easily induced, and it is said by these means alone, and without *direct* suggestion, that cures have been made.

Of the treatment by electricity I have no remark to make, but much may be said on the treatment by transference. The theory at the bottom of transference is the belief that there are invisible and intangible emanations or fluids which can pass from one human being to another, and that some subjects, especially when they are hypnotized, absorb these emanations very readily. This theory of emanations is an old one, and was the popular explanation of mesmerism and animal magnetism, and it used to be thought that a mesmerist by means of the magnetic power of his hands could dispel pain by means of passes, and that he often became temporarily affected with his patient's ailment.

Dr. Luys makes practical use of this theory, and when a patient comes to him, he makes the patient sit down opposite to and clasping the hands of a hypnotized hysterical subject. It is to be noted that the patient is not hypnotized, and that the transference of the disease is effected during the patient's waking state.

There is, however, one other point in transference, and that is the use of the magnet. It is held by Luys that the magnet draws the current of these emanations along with it, and by means of a heavy magnetic rod he makes passes all over the patients, leading the current across the arms to the subject's body, each pass producing a convulsive movement of the

subject. After these magnetic passes have been conducted for a certain time it is found that the subject is suffering from the very same symptoms that the patient entered the hospital with, that the subject has also acquired the patient's entire personality, and that the patient often feels greatly relieved. The patient and subject continue holding hands for a long period of time to complete these currents, and, finally, when the current is broken the subject is told that she is to feel well, that the acquired disease has left her, and then she is awakened, as a general rule, without being the worse for her experience.

I saw three cases that were being treated by transference. One was a case of melancholia, who had been treated for three days, but she informed me that she did not feel any better. Another was a case of disseminated cerebro-spinal sclerosis, who had been treated for some time, and who felt distinctly better than before treatment. The third was a case of migraine, who had been treated for eight days, and who now felt slightly better. During the process of transfer in this case the subject was asked the colour of her hair and of her eyes, and she described those of the patient instead of her own—demonstrating the altered personality. After waking, the subject complained of headache, and shortly after commenced to retch, so that it was necessary to hypnotize her again and suggest that the acquired migraine had gone.

When I made my visit there were three subjects who, I believe, had formerly been hysterical patients, and who attend regularly to be hypnotized for purposes of transference. They are accordingly well versed in the ways of the place, know all that is going on, hear all that is said to those who come to study the phenomena of hypnotism, and have become familiar with Luys' views on the subject, and know what is expected of them. It is even said that they read the "*Revue d'hypnologie*," which recounts the wonderful recoveries in which they play a great part. They also mix freely with the out-patients before they are treated, and seemed to have every opportunity of knowing their symptoms. They are also paid for their services. Under these circumstances, is the assertion of Bernheim that these phenomena of transference are simply the result of auto-suggestion at all far-fetched, seeing that they can all be produced by suggestion? This, of course, accounts, according to one view, for the symptoms observed in the subject; but how are the patients relieved of their symptoms? According to Bernheim, they offer examples of suggestion in

the waking condition, such as the two cases I saw at Nancy. The whole proceedings, I must confess, are carried on in a way that must greatly impress the patients, and M. Encausse's manner is so enthusiastic and so full of assurance that many would be unable to resist his suggestions.

M. Encausse also showed me another mode of transference more wonderful than that which has been described. Dr. Luys has invented a magnetic crown, shaped something like a horse-shoe, and I was asked to place this on the head of a patient in a certain bed. I left it there for five minutes, and then placed it on the head of a subject who had been hypnotized, and who had not been told of what I had done. The patient on whose head I placed the crown suffered from hemiplegia, with contractures, and the subject at once assumed the symptoms and the personality of the patient. I asked M. Encausse if hemiplegia had not a distinct pathology, and whether this disease was conveyed in the magnetic crown? He replied that he could not give an explanation, but that the facts were as I saw them. This experiment was not performed with anything like test conditions, for it could hardly be expected that this could be done for a visitor at a moment's notice, and the sources of fallacy were innumerable, for the patient had been months in the ward, and the subject knew him and his symptoms well. To show how carefully these experiments must be done, I may state that the subject might have recognized the patient by the sense of smell, as probably a dog could have done, for it has been demonstrated that a hypnotic patient, who was completely blindfolded, picked up from the floor a letter torn to bits, in the most unerring manner, by the sense of smell alone. In another case the subject recognized the owner of a glove in a crowded room by the sense of smell.

Charcot and his pupils, including M. Féré, believe in the influence of the magnet in hysteria, where the nervous system is hyper-sensitive. They believe that in a hypnotized female it is able to transfer from one side to the other contractures and anæsthesia. Bernheim denies these statements, and asserts that the transference is suggested, and demonstrated this to me by means of a penholder, and also of nothing at all. Bernheim's demonstration, however, only proves that it is possible to do this by suggestion, and does not necessarily disprove Charcot's observations. M. Féré also showed me experimentally, by means of Mosso's plethysmograph, that the volume of blood in the hand and forearm of a hypnotized hys-

terical female was decidedly affected by the magnet in such a way that no conscious effort could simulate.* But these observations of Charcot and his pupils do not at all support Dr. Luys' practice.

Dr. Luys also believes that the two poles of a magnetic rod affect the hypnotized subject's emotional condition in a marked and contrary manner. When the north pole was presented to a subject she at once assumed a delighted appearance and fondled the extremity, gazing at what M. Encausse told me

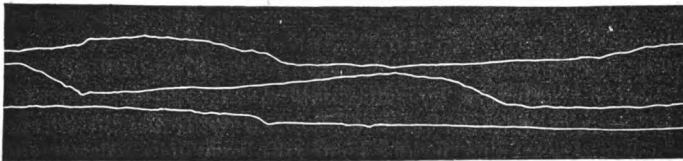


FIG. 6.—Plethysmographic tracing of changes in the volume of the forearm and hand, following the application of a magnet—one-tenth natural size; read from left to right. (From Féré).

was a beautiful yellow flame, with sparks coming from it. The south pole, on the other hand, caused a feeling of aversion, and she turned away from it with something of horror in her countenance. It has also been stated that persons only act thus when it has been suggested to them, and that under test condition these results have not been reproduced.

M. Encausse also showed me the effect of a curious old magical figure, consisting of a five-rayed star, with some other symbols, on his subjects. When he showed them it with the apex upwards, it produced the same feelings of pleasure as the north pole of the magnet; but, when the base was uppermost, it produced marked expressions of fright and horror. This was what M. Encausse called white magic and black magic, and how it acted he could not tell, but he evidently believed it had some wonderful occult powers.

I must refer to two other points in connection with this clinique, which, however, I did not see for myself. The physicians do not diagnose some of their cases by the ordinary physical methods, but ask the subject when she is hypnotized to describe the case. This closely resembles the practice of clairvoyance as professed by the spiritualists, and is a tacit admission that a hypnotized hysterical female, without much

* "Sensation et Mouvement," par Ch. Féré, p. 114.

education, possesses an occult gift of diagnosis superior to that of a skilled physician.

The second point is, the belief in the effect of drugs in sealed tubes, when applied to the skin, or even brought near a hypnotized patient. The statements of Dr. Luys on this point were investigated by a commission appointed by the Academy of Medicine and were finally rejected. However, Dr. Luys still believes that if a sealed tube of morphia be placed near certain parts of a hypnotized person it may produce a pleasant and a drowsy feeling, and that strychnia may produce convulsions. Most other observers, however, record their conviction that Dr. Luys has unconsciously offered a suggestion by a whispered word or a gesture to a spectator or in some other way. For my part, also, I should feel inclined to ask why should water in a sealed tube produce symptoms of hydrophobia, a definite disease produced by a specific virus? And why should the exhibition of valerian produce "feline movements and crawling on all fours?"* Does the internal administration of valerian turn one into a cat or produce cat-like conduct? To me, these two facts are a convincing proof



FIG. 7.—Effect produced by valerian acting "from a distance." (From Foveau de Courmelles.)

that these drugs, instead of exerting their physiological actions, have only suggested ideas of what was closely associated with them in our own minds, and the phenomena are those of mental association and not of pharmacological action. It is right for me

* "Hypnotism," by Dr. Foveau de Courmelles, p. 52.

to mention here that not a single person I met had the slightest doubts of Dr. Luys' thorough honesty and conviction, and all spoke of him with great personal regard. But at the same time they were all satisfied that he must have made errors when conducting his experiments, and that his subjects were, consciously or unconsciously, playing him false. M. Encausse is also undoubtedly a man of brilliant talents, but with a personal equation that must be considered in his observations. Some of his scientific ideas are very unorthodox at the present day, as, for example, his belief—as I was informed—that he could produce living organisms by electrolysing dextrine, and the fact that he held non-materialistic ideas of psychology, and believed in the phenomena of spiritualism.

V. *Conclusion.*

I shall now give a brief summary of the conclusions I arrived at during my visit, after having seen so much hypnotism and after having heard so many conflicting theories about it.

In the first place how are the apparent contradictions between the Charcot and the Nancy Schools to be reconciled? Charcot has stated that true hypnotism is accompanied by certain remarkable physical phenomena, which can be accurately investigated, and which occur independently of suggestion; in fact, in some cases conscious effort cannot reproduce them. Bernheim on the other hand states that his patients are truly hypnotized, and yet none of these phenomena are obtained which Charcot lays stress on, without suggestion. The cause of this difference lies not in the hypnotism, but in the patients who are hypnotized. Charcot selects cases suffering from profound or grand hysteria and cases of hysterio-epilepsy, and even of these he finds that all do not demonstrate the grand hypnotisme. The proportion of these to the Paris population is probably about 1 to 100,000, and I am within the mark when I say that not a score of such patients have passed through the Salpêtrière during the last ten years. When hypnosis is induced in these patients they manifest the various physical phenomena according to the classic description of Charcot, though improvement takes place with practice and repetition. But one may well ask with Tamburini,* are these phenomena not those of acute hysteria? Charcot pointed out to me the close connection between hysteria and hypnotism, and demonstrated the

* "Alienist and Neurologist," July, 1891, Vol. xii.

immediate induction of the cataleptic state by a sudden loud noise—a flash of light would have done the same. Cases have also been observed which demonstrated one or other of the physical phenomena in the waking condition, without any hypnotism. Professor Tamburini therefore advocates the view that hypnotism induces such an altered nervous state in these cases of grave hysteria that latent pathological phenomena proper to the disease are rendered manifest, which may however occur spontaneously in other cases without hypnotism. It is not for me to say if this be so, but I believe that the phenomena of hypnotism vary according to the subject operated on. I believe that if one selects a healthy person and hypnotizes him, that as a general rule he will fall into one of the slighter phases of the lesser hypnotism of Nancy. Then it is probable that in different types of people, according to some subtle peculiarity in their nervous organizations as yet not accurately known, hypnosis becomes deeper and deeper, and more marked phenomena accompany it, and of these various degrees Bernheim himself describes at least nine. Finally, in the few cases of grave hysteria and hysterio-epilepsy we reach a climax in the complexity and perfection of the phenomena accompanying the hypnotic state. By looking at the phenomena of hypnotism in this light, the major difficulties between the two schools vanish, and those that remain are due to misrepresentation and ignorance of the exact views of one another. I do not entertain for a moment the innuendos of the Charcot School that Bernheim's patients are not hypnotized, because they do not manifest marked physical phenomena. I believe that the lesser form of hypnotism, as it occurs in sane people, is a purely psychical phenomenon, and it is none the less interesting and important on that account. It may be more difficult, if not impossible, to give such convincing proof as Charcot does of the presence of hypnosis in these cases, but no open-minded person can fail to be convinced of the reality of an induced psychical state, by Bernheim's success in relieving pain.

Nor do I agree on the other hand with Bernheim that all the so-called physical or somatic phenomena of hypnotism which Charcot describes, are the result of suggestion, and that they are never obtained spontaneously. Charcot distinctly states that he does not expect them to occur excepting in a few suffering from grave hysteria, and those examples which Bernheim gave me of these physical phenomena produced by suggestion were not convincing. His suggested

cataplexy, for instance, in those cases I saw, does not stand the scientific tests of the Charcot School, and is more accurately described as a cataleptoid or cataleptoid state; and, regarding the influence of the magnet, his reproduction of some of the phenomena by suggestion cannot be held to negative the occurrence of the same and other phenomena by the magnet. It is quite natural for Bernheim, who has studied suggestion so thoroughly, and who has explained so much by it, to have a mental bias towards this factor in explaining all phenomena.

During my visit I made inquiries, and found that neither Charcot, Féré, Bernheim, nor Voisin believed in any occult phenomena in connection with hypnotism, such as thought transference or clairvoyance. And of course it is unnecessary to say that hypnosis is not induced by means of any magnetic power or other emanation possessed by the operator, but is mainly a state induced subjectively by the person who becomes hypnotized. The fact that glass balls and rotating mirrors do this is sufficient proof of the absence of magnetism, and, therefore, the intense looks and the extraordinary gestures of the mesmerists are not essential to hypnotism, and are only of assistance in so far as they impress the subject. And in respect to the treatment by transference at Dr. Luys' clinique at the Charité, and the various other supernatural phenomena there, I feel inclined to accept without much hesitation Bernheim's explanation of unconscious suggestion as being the correct one.

Finally, as to the uses of hypnotism, there can be no possible doubt that in experimental psychology it will prove of the very utmost value, and it has already added greatly to our knowledge. Binet and Féré, in their work, regret that the English psychological school had not studied the phenomena of hypnosis to confirm many of their views, and Dr. Liébeault told me he hoped for many discoveries when the Scottish metaphysical mind investigated and analyzed these phenomena. As to its therapeutic uses, there is no doubt that it is a most successful agent for the relief of pain and feelings of uneasiness, and for nervous affections of many kinds, and in places where it has a fair reputation a large majority of the ordinary population may be influenced by a good operator. As to its special use in insanity, I think that it will be of distinct service in a few cases, but my impression was that even in Voisin's wards, receiving many cases of hysteria, its beneficial use was restricted.*

* Since writing the above, I have made a trial of hypnotism and hypnotic suggestion among the insane, and I have found my belief confirmed that it

Regarding injury to the individual, I do not think there is a single case recorded of any serious after-effects when it has been used by medical men for therapeutic purposes. As, however, there is the wider question, whether belief in the mysterious powers of hypnotism may produce superstitions among the ignorant, and epidemics of absurd ideas, it becomes the duty of the physician practising hypnotism to make its true nature known.

Is Katatonia a Special Form of Mental Disorder? By M. J. NOLAN, L.R.C.P., L.R.C.S.I., M.P.C., Fellow Roy. Acad. of Med.; Senior Assistant Medical Officer, Richmond (Dublin District) Asylum.*

As katatonia, "a mental disorder," writes Spitzka,† "well marked but not generally recognized," has hitherto received but scant notice in this country, the following observations, based on the study of a group of cases which well illustrated its alleged characteristics, may not be devoid of interest.

It is now some eighteen years since Kahlbaum,‡ of Gorlitz, drew the attention of alienists for the first time to a group of clinical symptoms said to be previously unnoticed, which he proposed to elevate to the importance of a distinct class of mental disease under the name of Katatonia.

The newly-described symptomatology quickly arrested observation in Europe and America, with the result that while on the one hand some cultured and discriminating physicians endorsed the necessity for Kahlbaum's plea, to which they gave their full support, on the other not a few, and those not the least distinguished, were satisfied to recognize the various symptoms as familiar, but declined to admit that they constituted the facies of a distinct pathological entity. As a consequence katatonic phenomena were relegated to a very subordinate and obscure position in the wide domain of insanity; and thus it is that to-day we find katatonia annexed to mania, melancholia, dementia, stupor, or hysteria, treated, so to speak, as a tributary dependency, whose individuality is ignored, but whose resources are largely taxed when it is necessary to strengthen the claims

would not produce extraordinary recoveries; but I have also discovered that it is a useful minor therapeutic agent in many ways I had not thought of.

* Paper read at the Quarterly Meeting of the Medico-Psychological Association, held at the Royal College of Physicians, Dublin, May 26th, 1892.

† "Manual of Insanity," p. 149.

‡ "Die Katatonie," Berlin, 1874.

of the better established groups. It is, however, self-evident that symptoms so striking in character, and so universal as to appear every now and again and to colour almost every province in the empire of insanity, must be of the highest importance, deserving the fullest investigation so that their true nature and full legitimate position may be determined, with a due regard to the complex character of their phenomena. Much has been done in this direction in America and on the Continent, but the subject has gained but comparatively little attention in England, where so far as it has been treated the tendency has been, with few exceptions, to dismiss it as of over-rated importance, though at the same time it has been almost universally granted that it is entitled to at least a clinical *locus standi*, although as an old friend with a new face.

In a study of the available literature of the subject one is struck at the very outset by the confusing diversity of opinion expressed as to the nature of the affection, a diversity due in some degree to the multiplicity of the symptoms, but perhaps to a still greater extent to the fact that later writers discuss the subject, not so much from the standpoint of the original describer, but from the modified or amplified basis taken up by his immediate followers. It is essential, therefore, for an accurate conception of the condition noted by Kahlbaum, and in order to give due appreciation to the views of later observers, that we should arrive at a comprehensive definition, and very briefly review the opinion of some of our best known writers. Spitzka,* after exhaustive researches among the insane of Ward's Island, where the flotsam and jetsam of the new and old worlds were drifted together, satisfied himself that many of his cosmopolitan patients exhibited symptoms identical with those first noticed in the Silesian peasantry. Following in his tracks, Kiernan† confirmed and consolidated the opinions of his predecessor, publishing his full belief in the value of, and necessity for, Kahlbaum's demand for a new class of mental disease. Schüle,‡ who has given the most exhaustive and perfect picture of the clinical aspects of the disorder, makes of it three distinct varieties—(a) religious expansive form, (b) depressed form (*dæmonomania*), and (c) hysterical katatonia—but, as all three phases very fre-

* "Amer. Journ. Neur. and Psych.," 1883.

† "Alien. and Neurol.," 1882. "Lancet," 1884.

‡ "Klinische Psych.," Leipzig, 1886.

quently follow in one individual, the utility of this amplification is questionable. Hecker, Meynert, Hammond, Neuendorff, Neisser, Fink, and Brosius are unanimous in giving it a distinct and prominent place as a separate malady; the latter even goes further, and insists on three varieties (meningitic, œdematous, and anæmic). On the other hand, we find Clouston* stating it is simply a variety of alternating insanity, "in which the functions of the motor and trophic centres are specially involved." Bevan Lewist† writes: "The more closely we study these cases of katatonia described by Kahlbaum the more convinced we are that we are not dealing with any distinct pathological entity, but with some of the multiple forms of hysteria. . . . Melancholia attonita closely approximates to the state to which we now allude." Savage‡ is not over-definite in his expression of opinion, but seems inclined to class it with cataleptic melancholia. My chief, Dr. Conolly Norman,§ in a Monograph on Acute Confusional Insanity, states incidentally that katatonia is probably to be regarded as a type of that disorder. Maudsley would group it with hebephrenia, Westphal with Verrücktheit (delusional insanity), Tamburini and Krafft-Ebing with folie circulaire. Arndt, Tiggis, and many others are solidly arrayed against its pretensions, each looking on it as a variety of one or other of the commoner forms of insanity. Many other mixed and intermediate views have been put forth. The most noteworthy being, perhaps, that of Moll,|| of Berlin, who considers it very closely allied to the hypnotic state. (A case reported by the writer would go to support this view.)¶ MM. T. Séglas and Ph. Chaslin, in a most able and exhaustive critical digest of our present knowledge of katatonia, succeed in well nigh demolishing its claims to any special distinction as a class of mental disorder, and conclude by saying it is merely a variety of the class of stupors, simple or symptomatic, already described, "the only opinion that can be formulated in the present state of science," and they add they can give no explanation of its phenomena, but regard it "as more closely connected with a degenerative and more particularly hysteric basis."

* "Mental Diseases," p. 233.

† "Text Book Mental Diseases," p. 238.

‡ "Insanity," pp. 180-2.

§ "Dub. Journ. Med. Science," 1890.

|| "Hypnotism," p. 205.

¶ "Stuporose Insanity Consecutive to Hypnotism," "Jour. Ment. Science," Jan., 1891.

Mickle,* who is rather in accord with the views just expressed, states that the affection is little known in this country, and goes on to say that although "Kahlbaum, who named katatonia, and who first described it as a separate malady, demands for it an application far wider than can be admitted, there certainly is a set of cases forming a sub-group, in which the clinical phenomena and general course of the disease are so distinct that it will be necessary to take that case-group into account, and to concede to it a separate existence, as at least a variety or sub-form of mental disease, for which last view there is much to be said. At least as a symptom assemblage or syndrôme the name katatonia will have its use in mental medicine." Hack Tuke,† in his able communication on Mental Stupor to the International Medical Congress, represents Kahlbaum as having minimised the psychical aspect of the affection, and of having paid primary attention to the disorders of motility; and this fault, we fear, has not been confined to the original observer. All reported cases, exhaustive as they are on the physical phenomena, give but scanty details of the mental conditions involved; and though in opening his remarks Tuke invited comment and information on the latter, and on the nosology, the response, which was of rather a negative character, would seem to have been confined to very brief statements by Crichton Browne and Clouston. The *précis* of Tuke's opinions on the subject given by MM. Séglas and Chaslin is, we think, to some extent misleading, when they say "he does not agree with Kahlbaum, but thinks that the cataleptic phenomena are due to a mental state of absorption under the influence of a sad hallucination." His exact words are: "In conclusion, I would sum up by saying that I think the cataleptic variety of mental stupor (and probably other varieties also) is a condition to be regarded as caused by the exclusive direction of the mind upon a melancholy delusion, or, if this be absent, from various causes due to brain exhaustion calculated to paralyze volition and allow of involuntary actions; and that this stage when completely established is no longer one of utter melancholia or dementia, as regards the patient's actual mental state at the time, although it may terminate in the latter." Here, then, we have a recognition of the intermediate state (cataleptoid variety of mental stupor), which we have observed, and which so far as we are aware has not received the atten-

* "Katatonie," "Brain," Vol. xii.

† "Transactions Int. Med. Congress," London, Vol. iii., pp. 634-9.

tion it deserves, nor has it been distinctly named, at least in our language. Tuke, moreover, is said to "separate sharply" melancholy stupor "from acute dementia, which has often been confounded with it." He, in fact, divides mental stupor into two varieties, viz., melancholic and non-melancholic, including the intermediate state just described. But since, as we shall see, the cataleptic condition may vary in degree to a very great extent, and not present the characters of true catalepsy, and since it occurs as a phase in a distinct, if erratic cycle, and not as an individual aspect as does catalepsy itself, we would incline to make it a third variety of mental stupor, with a title indicative of its constituent features, say, "alternating cataleptoid stupor," or some such name.

Meanwhile it is clear that the condition which has been grouped with mania, melancholia, acute confusional insanity, stupor, hysteria, and hypnosis, is not yet thoroughly understood, and its consideration, when recognized, under any one or other of its phases, cannot but be of interest.

From what has been said, it will be readily seen that it is difficult to arrive at a definition sufficiently comprehensive to include all that has been described as katatonia. This difficulty, perhaps in some degree, tells against its claims as a distinct affection, inasmuch as it is always an easy task to designate a condition the identity of which is plainly familiar by characteristics constant in kind and uniform in degree. Spitzka,* when he describes it as "a form of insanity characterized by a pathological emotional state and verbigeration, combined with a condition of motor tension," well nigh covers the whole ground. The addition "running a quasi cyclic course of expansion, hysteria and stupor" would help to define the disease in unmistakable terms; and a case fulfilling all the indications contained in such a definition could not well be classed with mania, melancholia, or hysteria, in their simple forms; nor yet with their mixed aspects of hallucinatory mania (acute confusional insanity), melancholia attonita, or folie circulaire; and still further would it remove it from dementia, paranoia, and non-melancholy stupor. Were we to take this amended definition as embracing the essential features of katatonia, it would give a pronounced clinical entity, standing out as distinct as "typical" G. P. At the same time it should be borne in mind that one or more of the symptoms included in the general

* "Manual of Insanity," p. 149.

cataleptoid stage may so far colour any one of the forms of mental disease, as to justify the application of the term "katatonic," mania, or melancholia as the case may be. Such an application in no measure detracts from the value of the specific term "katatonia," which should be restricted to a class of cases exhibiting during their cyclic or quasi-cyclic course all the symptoms of all the phases. The symptoms may be grouped variously, and form stages or phases which do not follow a fixed order, but the grouping of the symptoms, and the sequence of the groups so formed is, as indicated by Mickle, emotional, convulsive, and stuporose, with alternating dumbness and verbigeration. In all the cases under notice there was a primary initial stage of depression, the character of which was mild at the onset, but terminated in those sexual and religious delusions which ushered in the emotional stage.

The depressed stage is invariably insidious. Very often the patient has been labouring under it for many months before his condition attracts attention, and during this incubation period only some very slight superficial changes in manner or conduct may mark the gathering of the doubts and fears within—all accumulating to burst out with the violence born of long suppression. It may be undue mental strain, physical exhaustion, ill-health, or excess, but one or other cause excites a restive depression, which enfeebles and enervates the mind, the secret brooding terminating in a meaningless fulmination, very frequently the result of a pseudo-religious emotion.

The depression when pronounced is of rather a distinct type. It has not the nameless dread of "something" of the dream stage of acute confusional insanity nor has it the hopeless despair born of a fixed delusion, but it is a mindlessness reflecting more or less passively the undercurrent of morbid ideation, which it neither attracts nor repels; at the same time that it responds sharply to the acute hallucinations of men, women, angels, devils, animals, and monsters, hallucinations not at all times displeasing, and so differing from the more painful impressions of melancholia. Could the brain as a *camera obscura* furnish us with a view of its reflections at this time we should, as it were, see an intermittent series of silhouettes of a grotesque character flashed suddenly out of darkness and as suddenly withdrawn, leaving no record, and giving no time for examination. There is, unfortunately, no one word in our own language to define

this state, but the phrase "A drowsy, unawakened cognition," used in a much more extended sense by a philosophic writer,* very aptly expresses the existing mental state. Associated with such disturbance of psychical functions we find anæmia, vaso-motor fluctuations, general wasting, masturbation, trophic lesions and other minor neuroses. Gradual rigidity, universal or confined to special muscular groups, usually increases towards the approach of the convulsive stage, which may be ushered in by a hysteroid or epileptoid fit or group of fits. By this time delusions have been well established and are of a strange mixture of a sexual, religious, and persecutory type, and the emotions excited by them are not by any means as acute as the seeming intensity of the delusions would warrant. This has been regarded as a very marked feature in the cases that have come under notice, and has, at an early stage, helped to form what proved to be an accurate diagnosis. Suicidal tendency is rare even when despondency is deepest; but serious injuries have been attempted in a silly fashion, or as the result of hallucinations commanding self-punishment. One patient made frequent attempts to cut through his breast in order to mark his heart with religious symbols, concealing pieces of glass in his mouth for long periods awaiting a favourable opportunity.

Occipital headache has been complained of more particularly during the later stages. In every case the region affected was indicated by the patient, and it was observed that they had acquired a habit of gently stroking the occiput with open palm, the caressing action being in strong contrast with the restless rubbing and tearing over the scalp indulged in by active melancholiacs. This feeling of consideration for themselves was, moreover, evidenced by the general care they took of themselves, being particularly solicitous about their personal comfort.

The emotional stage.—It is at this time the patient usually comes under notice, having acted in a violent or alarming manner towards his neighbours or himself. Very often removal to the asylum leads up to another outburst, which may persist after admission for a considerable period. The vague terrors inspired by incarceration are the occasion of exciting to action many morbid ideas hitherto dormant; the patient takes a martyr's delight in his misery—he hails the attendants as agents of human or divine chastisement, and

* Ralph Cudmore, "Intellect. System of the Universe," 1678.

smiles sweetly in anticipation of further torments. Suddenly newly-awakened fear creates a thousand painful images, and every sense becomes a medium for fresh troubles; bewildering, gruesome hallucinations and illusions form a terrible panorama, concurrently with which auditory disturbances keep up a distressing and confusing Babel; while in some cases perversions of taste and smell add to the general misery. The effect is, however, very transitory, and the emotions evoked become pathetic, the pseudo-pathos taking the form of silly and shallow exhibitions of feeling with a strong colour of religious and erotic delusion, theatrical and declamatory speeches and attitudes are struck to give emphasis to the most commonplace remarks with an effect so ludicrous that the patient commonly breaks down into a laugh, as if realizing the exquisite absurdity of his bombastic utterances. Gradually the intensity of this state subsides, and it will be seen that the transition to the next stage is not marked by the rapid, abrupt alternations so frequently seen in other forms of mania, but is a steady uniform reduction to that phase of the disorder in which its more characteristic features are, for a time, hidden beneath a veil of stupor or pseudo-stupor. Before, however, this last stage is reached we have every possible intermediate condition, as well as full development of the symptoms which have been said to be special to katatonia. The excitement may lean to the active maniacal or passive melancholic side, but the general tone is one of religious expansion very often combined with the "mulish resistiveness" which so well expresses the obstinate mental and muscular opposition to any external stimulus. The patient affects an attitude and will not permit himself to be displaced, the degree of tension exhibited being in striking contrast to the plastic mobility of the pseudo-cataleptic state. Rhythmic movements are not uncommon, and are accompanied by grimaces and various meaningless contortions, which give way to, or alternate with, "physiognomical representation," dumbness being maintained under severe attempts to break down the affected mutism. Slight attacks of a hysteroid, spasmodic, and even epileptoid character may occur in this stage, particularly if the patient be subjected to an exhaustive examination, thus showing the hysterical basis of the various phenomena, while at the same time neuralgia, herpes, bullæ, and acute thermic disturbances testify to the degenerative nervous constitution. Though the motor conditions described in no

way essentially differ from like states in other mental affections, yet they are important because of their succession, periodical recurrence, and association with delusions and hallucinations of a heterogeneous and unstable nature. One muscular condition demands special consideration, as from it results the one symptom that of all others has been declared as absolutely special to katatonia—verbigeration. "*This verbigeration is a co-ordinated spasm of the muscles of speech originating in the cerebral speech centres, and is absolutely special to katatonia.*"*

There are many varieties of this speech disorder, and one or more may be manifest through the course of the disease—phrases, words, syllables, or letters may be rhymed and repeated with emphasis and seemingly appropriate declamatory gestures. It may be said generally that the destruction of articulate language is in direct ratio to the integrity of consciousness. Thus in the emotional stage we find the oratorical flights suddenly embellished by an extempore rhyming of sentences; in the stage of pseudo-stupor unintelligible versification is evolved from fragmentary words and from single letters. In one or other of the various forms and different stages, disturbances of the speech centres are invariably present, and are due in every instance to convulsions, either clonic as in verbigeration or tonic as in dumbness. In addition to the speech-making with appropriate gesticulation, we meet with dumbness and poses plastiques; senseless garrulity with purposeless action; confabulation with emotional attitudes and ecstatic expressions; and a regular systematized delirium (*Wahnsinn*) with co-ordinated spasm depicting its tenor. In all these conditions, however, though *sense* may be, more or less, wanting, the *language* is correct, but in verbigeration there is not alone an utter absence of meaning, but the words themselves are broken piecemeal and the fragments strung together are reorganized to produce a cabalistic gabble, which holds pretty much the same relation to ordinary speech that the humming of the musical score does to the fine execution of the libretto; there is a properly inflected phonetic equivalent to every syllable, but the result is absolutely void of meaning. This verbal neoplasm would seem to be produced to supply the want created by an acute and complete amnesic aphasia, and its utter inadequacy to do so is to some extent supplemented by abundant mimetic

* "*Katatonia.*" "*Brain,*" Vol. xii. (Séglas and Chaslin).

performances. The words, whether those of ordinary language or those morbid fabrications raised from its ruins, would seem to be elicited as spontaneously as they are in the verbal delirium of traumatic origin (described by some writers); but yet unlike the headlong, untrammelled, and monotonous phraseology of that state, inasmuch as though irrelevant, meaningless, and disjointed, yet they are uttered with a deliberation and emphasis, as if the speaker were delivering an address or sermon in feeling tones and with an impressive manner. The mind at such periods is impaired in its functions; its receptive capacity is for the nonce paralyzed; and special sensation is markedly diminished; and yet withal, ideation running riot, utterances are made with such coherent inflection that when heard and observed from a little distance the effect is quite deceptive, and this power of inflection is the more remarkable when, as frequently happens, the same word is being repeated again and again. Those who have not had actual experience of this strange condition may form an idea of it by conceiving that if an orator were to deliver his speech into a phonograph, and that by some possibility the vocal impressions made on the cylinder were transposed and mixed to the greatest possible degree of confusion, the coherent inflexion of the voice would be so scattered as to lose all character. If, however, the machine discharged the chaotic jumble of words in sentences, duly emphasized as when they were first spoken, a phenomenon analogous to that which takes place in verbigeration would be the result. We are told that "clear thought is possible without corresponding word images."* It is evident in katatonia that the proposition may be converted. It further suggests itself that there is in this verbigeration and its accompaniments a condition of aphasia which deprives the sufferer of the power of correct verbal expression, leaving him at the same time facility to inflect his automatic utterances with the ring of true emotional feeling that must, if at all present exist, but very ill-conceived in his inner consciousness. It would seem probable that though the individual centres for phonation and articulation remain intact, the harmony of their conjoint function has been broken, the connecting and governing power of normal ideation no longer acting as the guiding and controlling medium between them, being replaced by ataxaphasia, agrammatism, and paraphasia. To

* Bateman on phasia, 1890.

this condition we would confine the term *verbigeration*, and it is for this condition we are to look in *katatonia* as a constant and essential feature. But other disorders of language are fairly common, and have been observed in this as in other mental affections. On the subjective side of emotional language cognition is faulty and badly ordered; and on the objective the shortcomings of the emissive and executive departments are noticed respectively in ill-co-ordinated impulses, and in the defects of the concomitant mechanism for the expression of the latter by means of vocalization, articulation, and gesture. Voice in one or all of its fundamental elements, loudness, pitch, and quality, is affected; *tumultus sermonis*, *bradyaphasia*, whispering, *monophonia* or *hysteroid semi-aphonia*, taking the place of the natural character. Articulation would not seem in many cases affected, except inasmuch as the *hysteroid* condition, inducing spasmodic inspiration, now and again excites a stammer.

Onomatopœsy or imitation of natural sounds has also been noted. Intellectual, owing largely to the influence of excitement, is changed into emotional language. Tone modulations are freely lavished, as we have seen on bombastic, flatulent, rhetorical flights, and the most commonplace remarks are embellished with striking attitudes calculated to evoke the keenest ridicule of the beholder. Rhyming is a very frequent feature, and obscene language is largely used to accomplish it, with very unpoetic licence. The automatic element plays a leading part in phonetic and gesture speech, and not alone is motor volition arrested, but the musculature is constrained to adapt itself for lengthened periods to illustrate a dominant idea. The higher psychical centres in a semi-paralyzed condition no longer guide the sensory and motor centres by the gentle influence of the guiding rein of reason, but pull them sharply up by the chafing bit of inhibition, and so start resistance and obstinacy. It would seem to me that there is a distinct nervous connection between the break in the voice at puberty and the phonetic *verbigeration* of *katatonia*. The former is said to be due to a rapid laryngeal development co-incident with the transition of the sexual organism from quiescence to comparative activity; and the latter results from a mental affection of adolescence, in which undue excitation of the newly-awakened genitalia is a constant and prominent factor. In the cases observed the *pomum adami* was particularly well developed, and the patients were all singers. From analogy

with other animals I incline to think the phonetic displays in katatonia are to some extent due to the egoistic, projective, *bien-être* of youth, finding vent in abnormal sexual gratification; for we know that during the rut in many animals new and modified cries are made use of to attract attention. In each case we have the biological epoch and a particular organ involved, as well as functional disturbance of the latter.

The Stuporose Stage.—Of the three distinct stages and the less defined intermediate phases that connect them, the stuporose condition is perhaps the most uncertain in degree, as well as the most erratic. It may occur in almost any one of its manifold aspects, or in any combination of them, and it may be present as a prolonged and profound lethargy, or as a transitory, recurring and light dream stage. From a psychological aspect it is closely allied with the stupor of cataleptical melancholia, the patient's recollection of his feelings during the state being in inverse ratio to the suspension of his higher faculties; but it differs from it in the very important feature that when delusions and hallucinations are experienced during it, they are, though disagreeable, never terrifying, and very commonly they are even distinctively pleasing; in some cases of a religio-sexual character they excite feelings more akin to ecstatic erethism. More remarkable still is the fact noted in all cases that whatever the mental condition may be, whether it is one of depression or an exquisite rapturous enjoyment, the patients exercise during this stage of pseudo-trance a very keen criticism, evidenced by the caustic or other remarks which they freely make in the subsequent emotional period, bearing on the individuals who came into contact with them, and on their surroundings during this time of partial obnubilation. Cases of complete abrogation of the higher mental faculties have been recorded; but in none of the cases here noted was their absolute suspension observed; even in those most closely approximate to true lethargy, self-preservation was never disregarded. Coupling the excitation of the epileptoid seizures by exhaustive examination already noted when treating of the emotional stage, with this faculty for noting trivial details when the mind would seem to be well nigh shut out from the external world, as well as the capacity for attaining the maximum of comfort at the minimum expenditure of effort, it may be readily accepted that a hysterical foundation underlies the

superstructure of physical and psychological morbid phenomena. Probably as a result of this evanescent and unstable element, and in the absence of one more detrimental in its nature to the organism, we do not find associated with this stuporose state the abnormal psychological symptoms common to allied conditions in acute dementia or cataleptic melancholia. Though vaso-motor disturbances are the rule, the extremities do not become as cold and livid as in the other stupors, nasal mucus is not superabundant, the skin is not invariably characterized by a "dewy or greasy" appearance, nor has the "honey-like excretion" on the margin of the eye-lid been observed; food is freely taken when proffered, and emaciation is not alone exceptional, but on the other hand the general condition has been observed to improve. In addition to these negative points of difference, the more positive proof of the existence of an opposite condition to that of the ordinary true cataleptic stupor is that to a certain degree the "mulish resistiveness" is present, and instead of *flexibilitas cerea* we are met in our efforts to pose the patient by a well-sustained rigidity. In some cases, however, in which the stupor is light, and the patient in an amiable and receptive mood, this rigidity is readily overcome, but the muscles soon tire and throw off coercion, the limbs falling to rest with a rhythmic easy movement. In the rare cases which Spitzka* has had the good fortune to meet with, the catalepsy was "typical and extreme," and consequently they responded readily to his manipulations, maintaining irksome positions for lengthened periods; and in the original cases reported by Kahlbaum, constrained attitudes were retained for very many hours. The reflexes are generally normal, the tendency being to exaltation when there is any departure from health. The expression when not vacuous or silly is happy, rarely sad; the eyelids partially closed blink clonically; the eye-balls are rotated upwards, but more frequently their forward gaze is unaltered—paling, flushing, and local sweatings are constant.

The foregoing necessarily brief *resumé* accentuates the features most characteristic of katatonia, but needless to add, it does not attempt to portray the very many finer lineaments that go to make up a complete and elaborate series of clinical pictures, such as Schüle † has executed

* "Manual of Insanity," p. 153

† "Klinische Psych."

with a master-hand. With incomparable skill he has succeeded in fixing every light and shade of the many aspects of his patient, uniting in his work the versatile animation of emotion and the silent stolidity—the “still-life” so to speak—of stupor.

Ætiology.—As in most mental affections the ætiology of katatonia is still obscure, puberty and adolescence with their respective vices, masturbation and sexual excess, have been regarded by most writers as the more usual direct exciting causes of the affection. But though the epochs named and their concomitants are probably active factors in the sum total of strain that induces the mental breakdown, yet in themselves I doubt their power of damage. From a very extensive experience of all classes of youth, sane and insane, I have found that the injurious effects resulting from the vice named were infinitesimal in proportion to its almost universal practice. In the cases which have been so coloured by onanism as to merit the name of “masturbating insanity” that have come under my notice, in every case heredity, or collateral insanity or neuroses were traced, and it was always a matter of some doubt to determine the actual significance of the habit whether as a cause or symptom, judgment inclining in favour of the latter view. Consequently, I agree in the opinion of MM. Séglas and Chaslin, who insist that for the condition described as katatonia, general degenerative changes and hysteria are solely responsible. Granting, however, that the disease starts *per se* from this source, I can plainly trace (more particularly in the fulminations and stupors) a very intimate relation between exhaustive sexual strain, which exercises a double injury, primary and secondary, and the varying mental states. Much of the oddness, eccentricity, and degeneration of adolescence, seen in school and college life, may be regarded as katatonic, not sufficiently pronounced to be considered pathological. Women are, as in general paralysis, comparatively exempt, but when observed it is due more frequently to menstrual and ovarian trouble rather than pregnancy and parturition, as stated by Kahlbaum. Phthisis is, in my opinion, *not* very closely connected with it, rather less, in my experience, than in any other form of mental disease, the tendency being to obesity as in dementia, in which the unfavourable cases terminate.

Pathology.—Death not having taken place in any of the cases that came under the writer's personal observation,

nothing can be said as to their morbid anatomy. Under the circumstances, it would perhaps be wiser to pass over this aspect of the disorder and be content with stating what has been already said on the subject, but the question is one so deeply interesting and yet so unsettled that some observations may be permitted. For this course some apology is needed, and palliation is asked for, inasmuch as that Savage, after a lapse of years, during which splendid pathological work has been done, reiterates the statement, "Though I have examined sections of brains of patients dying from almost all forms of insanity, I am left with the feeling that we must be more general in our pathology, if we are to understand our subject."* The time when "an evolution of knowledge of nerve functions,"† as Maudsley puts it, which is "to master the subtlety of nature," has not yet come, and, though some progress in that direction has been made, meanwhile it may be permissible to deal with the subject from an "ascopic or intramolecular" standpoint. This course may be regarded as the less objectionable when we consider that Hack Tuke's recorded post-mortems‡ showed nothing either striking or uniform, the most constant feature being œdema due to partial vascular changes or simple stagnation, and consequently an absence of the characteristics which Kahlbaum ascribes to the affection.

Starting then with an acceptance of the views of MM. Séglas and Chaslin, we must be prepared to question the value placed on certain anatomical changes which Kahlbaum and others have described, and which they put forward as a basis for the true pathology of the disorder. And, reluctant as we are to relinquish one iota of a physical for a less solid and tangible ground-work, we are in a measure driven back to the shifting sands of speculative opinion when we remember that the morbid changes so described are found where no katatonic phenomena have ever been exhibited, and that moreover in cases of true katatonia they have been conspicuously absent. Again we know that the changes so minutely described as characteristic cannot be regarded as the direct result of masturbation (which has been assigned by the same writer as the cause of the disorder), since that vice is so extensively and excessively practised and yet produces so little organic change of structure in nerve

* "Insanity," p. 1.

† "Path. of Mind," p. 492.

‡ "Trans. Int. Med. Congress," London, Vol. iii.

tissues. Granting it the fullest exercise of vicious influence as an exciting factor, by no process of reasoning can we see how it could set up a basal meningitis, spreading by extension through the Sylvian fissure, and so involving the speech centres. Even assuming the manifest impossibility that such local lesions were capable of production by onanism, we fail to see how the permanent lesions so set up could in any way account for the very complex and ever-changing psychical conditions involved in the disorder. The mechanism of these conditions is for the present, at least, to be looked for beyond the realms of the scalpel and the microscope; organic, meningeal, cortical, hæmic, cellular, or nuclear changes cannot explain the rapidly alternating and most opposite mental states, which may oscillate steadily to the normal balance, or after violent and erratic efforts may end in the dead level of a terminal dementia. The most recent researches of one of our ablest physiologists* have led him to say, "Such knowledge as we do possess rather tends to show that the psychical processes in proportion as they become more complex involve a greater number of nervous factors, and, therefore, have for their material basis a greater width of nervous area, or, in other words, their localization becomes less definite. Hence, as we have said, the psychical process is a function of connections." If then we are to seek in the "tissue of mind" for a *raison d'être* of the very complex processes seen in katatonia, we must not confine ourselves to centres alone, but extend our investigation to the connections of all such centres, and possibly in their functional or organic disturbances a clue may be found to account for the evident want of co-ordination in their action, manifested by sensory and motor derangements. Since, however, but little labour has been expended on this all-important field of connections, and but a meagre material return has rewarded the labour of investigators, we may seek by the application of physiological and psychological methods to elucidate the morbid state involved. A consideration of all embraced in such a research would be impossible within our limits, but the chief characteristic feature—the key-stone of the pathological fabric—verbigeration, may be briefly dealt with to illustrate the lines which if followed up may lead to a complete hypothesis of the abnormal psychical ground-work that underlies the physiognomy of katatonia.

* "Text-book of Physiology," Foster, Vol. iii, p. 1118, 1890.

We take verbigeration, already dealt with clinically, first because it is, as we have seen, absolutely special to the disease; secondly, because it involves motor, sensory, and higher psychological centres, whose localisations have been more certainly fixed than most others, and whose connections, therefore, may be more easily followed.

The mental condition that co-exists with this verbigeration is one of disordered ideation—illusions, hallucinations, and delusions abound, and there is a marked failure in cognition of immediate surroundings. Concepts are no longer formed, and the concepts already formed on pre-conceived receipts undergo a displacement and mutilation analogous to the confusion and dismemberment of articular language. As pointed out by Romanes* intentional grouping and comparing of concepts form higher and higher concepts, and thus there is “a kind of algebra of receipts,” by means of which the higher work of ideation is carried out. This intentional grouping and comparing is no longer possible in katatonia, the algebraic symbols for reasoning are misplaced; the equation for judgment, therefore, cannot be solved, the unknown quantity remains still unknown. The mischief increases by leaps and bounds. As algebra expresses not alone ideas and relations, but also their results, and as “concepts may be grouped together to form into higher and higher concepts further and further removed from the sphere of sensuous perceptions,”† a disturbance of the process of figures on the one hand or concepts on the other must result in confusion and error. Thus it is we have a disorder of conceptual ideation and of receptual ideation, and, in consequence, a functional disturbance of the element on which the former depends, namely, language. This essential element in its highest form, phonetic speech (*Lautsprache*), is impaired in the manner already described, and by a retrograde reduction its deficiencies are supplemented by gesture-speech (*Geberdensprache*), whereas, if we accept the statement of Kleinpaul, who is supported by Kussmaul, in normal evolution the latter has preceded the former. So far, then, we have self-consciousness reduced to simple consciousness, with a corresponding devolution in the modes of expression; and this simple consciousness is not the active, clear perception of the present, but rather a passive cloudy retrospect.

* “Origin of the Human Faculty.”

† *Op. cit.*

When we consider the very close proximity of the psychical and motor speech areas we can readily understand why this should be so, and also because we know how, through the cortical relations of the said areas the whole muscular system plays to each speech perversion an accompaniment more or less complete. Seeking the source of these speech disorders, we may start from the third left frontal convolution, and pass through the adjacent island of Reil, and follow thence the motor speech tract through the substance of the hemisphere, left peduncle, left side of pons, across to the right side of medulla, where the motor nerves take origin. Clearly any disturbances travelling along this route are very readily reflected through their intimate connections to one or more of the various centres in the locality, and thus excite corresponding disorder of their functions. The medulla being the grand junction between the central and spinal nervous systems contains within its narrow compass, not alone that most intricate mesh work, the *formatio reticularis*, the direct connection of all the nerve out-stations and their central governing centres—but it also contains the vital centres themselves, as well as the reflex, vaso-motor, automatic, spasm, and other minor centres. This great organization, which may be compared to a vast railway system, is in katatonic subjects presided over by a directorate of weak cells. The permanent way of cerebro-spinal tracts is badly constructed of inferior materials, and the various ganglionic termini for the transmission and reception of impressions are ill-calculated to bear the stress of transition from one or other of the earlier of the seven stages. Consequently the travelling impulses suffer all the mishaps due to a badly appointed service, either reaching their destination exhausted by a tedious journey or shaken by frantic and spasmodic efforts, or, worse still, crushed in a collision, or shunted to a siding. In the spring-time of life the pleasure excursions follow on each other too closely; danger signals are disregarded, and disaster ensues. Psychical energy, the *vis a tergo* of nerve tissue, begins to give way to that dominant fatal grasp of the “intrinsic morbid factor” that has seized on the cells. The degenerate track ploughed up by the feverish to and fro action of excess, throws the guiding engine of perception off the lines, and so we find it at a standstill; its functions, exhausted by a final and futile effort, suspended. To instance this reduction, we will start from a material basis, taking onanism as the agent

that is to free the "intrinsic morbid factor" that is present, not alone in the cells of the cortical layers, but permeates the entire nervous ground-work, which is of a degenerative quality and hysteric in its functions. The excessive practice of this vice is followed by a chronic congestion of the vasodilator medullary centre. We are aware that the cortex exercises a very important rôle in the production of vaso-motor phenomena, consequently there is a clear connection between it and the medullary centre, so that obviously the disordered function of the latter induces a sympathetic interchange in the cortical regions, resulting in communicated disturbance of the intermediate and other centres, proximate and remote, including the reflex, automatic, and spasm centres, with the result that speech disturbances, blinking of the eyelids, salivation, motorial and sensory disturbances, cataleptoid conditions, are manifest. Thus far the course is clear, but we have to consider there are two roads to the same goal, that the brain is bi-lateral in its connections, and in doing this it is well to remember Foster's observations. "Seeing," he says, "how completely we are in the dark as to the reason why we possess two hemispheres, and especially seeing that as shown by speech the whole of each hemisphere is not identical, we may perhaps suppose that the fibres of the corpus callosum, which forms so large a part of the central white matter of the hemisphere, have certain other duties than that of merely keeping the points of one hemisphere in touch with the corresponding points of the other hemisphere. But when we have made every allowance for all this direct inter-cortical communication we are driven to the conclusion that the indirect ties between one part of the cortex and another, through the lower parts of the brain, are of no less, perhaps greater, importance."*

The conclusion is, doubtless, correct, and it is to a disturbance of the "indirect ties" between the articulation centre, the phonation centre, the orolingual centre (Ferrier), and the special laryngeal centre in the third *right* frontal convolution (Seguin) that we venture to look for an explanation of the very complex speech disorder of katatonia. As all the centres named are intimately connected with others, and all with the cortex, we have not alone verbigeration in one or other of its many forms, but also the production of the other phenomena that mark the disorder.

* "Text-book of Physiology," Vol. iii., Foster, 1890.

A disturbance which will throw their normal harmony of function out of gear will produce the extraordinary phenomena of verberation. The necessary frictional element can, as we have seen, be readily started in the vaso-motor centre, and thence transmitted by the proximate reflex centre, by the indirect and direct connecting paths to the other centres involved. Discord so widely promulgated must necessarily excite a disaffection of all the inter-connecting tracts, and induce an internecine struggle between the higher centres. This implication of the entire encephalon in a revolutionary crisis accords with the assumption of Flourens that it is involved in its entirety in every psychical process; and the fact that in due time the balance of power may be fully re-established and associated actions of the centres restored, points to the existence of a functional rather than an organic cause for the production of the complex phases of katatonia. And what more congenial soil for the development of such functional disturbances than that reduced in quality by degenerative change, saturated with the miasm of hysteria, and prematurely taxed by the doubly exhaustive physical and psychical strain of sexual excess?

In thus venturing to base on physiological and psychological considerations a hypothesis as to the elements involved in the production of katatonic phenomena, I am fully conscious of its weakness, and feel that such a line can be excused only on the ground that a syndrome, so thoroughly established clinically, has so far failed to secure an unimpeachable standpoint, or even a tolerated footing in pathological anatomy. I trust, therefore, that an humble effort to elucidate in a very slight degree so complex a physical and psychical condition may be leniently dealt with, and, if the result should be the exposition of the views of those better qualified to speak on such matters, the writer will feel gratified that this essay has not been without result.*

* For an authoritative description of so-called Katatonia by a former pupil of Kahlbaum, and the directly counter opinions of Séglas and Chaslin, see Tuke's "Dictionary of Psychological Medicine." Art. "Katatonia."

CLINICAL NOTES AND CASES.

*Cases of so-called Katatonia.** By M. J. NOLAN, L.R.C.P.I.,
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As the following five cases embraced individually in their quasi-cycle the leading features of the three forms of katatonia (*religious expansive, dæmonomaniac, and hysterical*) as laid down by Schüle, his nomenclature is adopted in the following notes to indicate the various *phases* or *stages* through which they passed. Mickle's division of the latter is not grounded on the clinical aspect of the affection, but is merely a convenient *précis* of groups of phenomena, which possess an allied psychical or physical basis, but which are met with scattered over the entire course of the malady, following no closer than the stages themselves any definite sequence. The cases came under notice at short intervals, each one differing in its first appearance. They have since admission run an unfavourable course, and with several others have accumulated to form a group quite distinct in its characteristics from the many hundreds of others associated with them, and so gave an opportunity for careful comparison and scrutiny.

CASE I.—*Tragico-Religious Ecstasy; Persecutory Melancholia; Cataleptoid state; with Verbigeration.*

M. McG., aged 23; married; cabinet maker; admitted 16th September, 1888. Is an anæmic young man of doubtful antecedents. Has been in a reformatory for some years. Married one year; addicted previously to masturbation, and since then to sexual excess. Three months since felt he was "called by God" and "faced death." Ceased to have marital intercourse, resumed masturbation, became very zealous, and prayed in a fixed attitude all night. Left home secretly for Liverpool; returned, saying persons had tried to kill him. He states he is often called during the night to talk with God, and that just punishment will fall on those who persecute him. He has feelings of an expansive religious character. No change to October, 1889. Very suspicious; poses in ecstatic attitude, and is indignant and disdainful when his "visions" are questioned. Insomnia; frequent fulminations,

* Read at Quarterly Meeting of the Medico-Psychological Association held at Royal College of Physicians, Dublin, May 26th, 1892.

glass breaking, etc. The latter he states he is compelled to do, as it relieves his mind. Full of eroto-religious delusions; hallucinations auditory and visual, the latter of rather an agreeable character. Complains frequently of occipital headache, and suffers from neuralgia, herpes, and facial erysipelas at intervals. Cannot be induced to read, work, or in any way occupy his mind; is rather restive when forced to conform to the rules and customs of the asylum. Masturbates frequently. This condition lasted for eight months, until June, 1891, when he sank into a stuporose state, almost quite oblivious to his wants, comforts, or surroundings. During this time he was roused with difficulty; did not complain, as is his usual habit, of any kind of discomfort, looked pleased. His face became full, and set in a vacant smile; altogether it had a sort of "beaming" aspect. He could not, or would not, say subsequently what he was thinking of at this time, but said he was not unhappy. He remained in this state until

September, 1891, when he became excited, broke glass, and fell into a state of semi-stupor, in which he still continues, that is to say for the last nine months. All this time he has been in a sort of dream-state, not unconscious of his environment, but quite indifferent to it. He walks round and round the day-room, dragging one leg in a shuffling manner, his right arm semi-flexed, and raised before him, so that his half-closed eyes are fixed on the finger tips, which work in curious manner all the while he is speaking in a low tone, in a senseless manner, but with evident emotional feeling. There is a marked tendency to *flexibilitas cerea*.

Recently he complained of intense headache. On examination his pulse was full and bounding, temperature 104°. No physical signs of any organic trouble. Next day his temperature had fallen to normal. This febricula was followed for a few days by remission of the attitude, verbigeration, and other symptoms noted, after which they returned in full force, and still persist.

It will be observed that in this case the stages were of very long duration and well defined. Judging from the uninterrupted course of the disorder, extending now nearly four years, the prognosis cannot be considered promising.

CASE II.—*Melancholia; Ecstasy; Exaltation; Dæmonomania; Pseudo-Stupor; Exaltation.*

J. J., aged 18; single; no occupation; admitted February 19th, 1890. Is a fairly well nourished youth, described as temperate, shy, and retiring in disposition, and very intelligent. Family history could be obtained only from a neurotic emotional sister, who denies hereditary taint. Seven months prior to admission depressed, affected solitary habits, became very assiduous about religious matters, hyper-scrupulous and violent. On the day

previous to his admission he suddenly placed burning coals in his mouth and put his foot into the fire, and violently assaulted those who tried to prevent this conduct.

On admission patient was in a cataleptoid condition, and assumed the crucifixion attitude, refusing to speak. The conception as expressed by the facial muscles was one of happy self-sacrifice. The eye-lids, three-quarters lowered, were blinking clonically, pupils widely dilated, eye-balls directed upwards and inwards, reflexes normal, general expression "pathetic exstasy." The face paled and flushed rapidly, particularly over the malar prominences. Vigorous efforts rouse him a little, but he did not respond to questions. *Flexibilitas cerea* was marked. He refused food, was wet and dirty.

This condition lasted during the remainder of the day. At night he lay extended, as if crucified; later became noisy. Next day was stuporose, and so continued to *August* (seven months). Emotional, laughing and weeping by turns; now and again pronouncing strings of words, incoherent and disconnected, in a very emphatic manner. His language indicated the mixed exalted and persecutory type of his delusions. He asserted that the sacred nature of his being had been profaned, and he vented his wrath at imaginary insult by uttering "as the voice of the Church," anathemas in very grandiose style, but very commonplace phrases.

November.—More evenly grandiose, stating that he was "enlightened by God Almighty, that he was crucified against his wish; that he suffered from God," and continued to repeat these statements again and again for weeks, during which his mind seemed quite out of touch with his environment, all its functions being directed to originating and discharging one limited set of ideas, and failing to grasp or comprehend any others.

February, 1891.—Fairly conscious of his surroundings. Complained of occipital headache, stroking his poll gently with his right hand. Asked why he had been sent here, he stated he had been frightened by "horrid faces—blackish representations"—that he put coals in his mouth and tried to burn himself "because he used to commit sin by abusing himself constantly," that he commenced this bad practice at the age of twelve. His one desire now is to become a clergyman, "so that he might save his own and the other souls. The Lord would, he hoped, inspire him to preach and save the world."

April, 1891.—Fairly rational, wrote a sensible letter to friends, for a brief interval ceased to masturbate.

July, 1891.—Suddenly broke several panes of glass, and confessed he had been masturbating all night. Was removed to hospital for treatment of wounds; there he became very depressed, restless, and frightened, but would not speak, though he con-

stantly whispered to himself. (Subsequently he stated that during the time he thought his soul was lost, that the devil was trying to lay hold of him, and that he thought he saw a blackish block, which he took to be the devil, but that he could not see well, as he felt his eyes were partly blinded, and as if someone had him by the throat trying to choke him.)

This terrified state deepened into pseudo-stupor, during which his limbs were flaccid, his expression vacant, his habits wet and dirty. He seemed almost quite oblivious to everything round him, and ate only when fed by the attendant.

December, 1891.—Became suddenly excited, broke glass. Stated that he was a priest, a cardinal, archbishop, the Pope, Jesus Christ, the husband of the mother of God. Demanded his robes and a suite of apartments suitable to his dignity. Now and again had ecstatic periods, during which he had visual and auditory hallucinations of beatific scenes and music. His face is flushed, eyelids blink and wink intermittently, individually, and synchronously; eyeballs prominent and directed upwards; pupils widely dilated. At other times he is expansive, benevolent, and communicative. He says his desire is to make the world happy, that he loves to cure the epileptic and the sick. States that he stood like Christ crucified because "his Divine strength overcame the strength of his human flesh;" raised out his arms, held them out—"it was pleasure, it was heavenly, it was sublime to keep them out." States that he is very, very happy; that he masturbates constantly; that it is a great pleasure, and that it does not affect his human body; that he has the gift of doing it in the right way; the earth is his and the sun shines for him; all knowledge and learning spring from him; he is the source of all love and happiness. During this recital of his attributes he suddenly performs silly actions, saying he is acting on the orders of God. He also laughs in a foolish way, and constantly whispers to himself. States that he cannot say why he laughs—"That it must be that he feels so happy;" cannot say what it is he whispers to himself, "as he has no thoughts in his head except when he is answering questions." When it is pointed out to him that some of his statements do not accord, he says that it is his "special gift to be able to say things seemingly contradictory, but nevertheless true."

February, 1892.—Recollects when he went about with closed eyes and arms stiffened, refusing to speak. He felt very happy then, but cannot recollect his thoughts. He knew everybody about him, and remembers that I shook him, and that I was with a young gentleman in a tennis jacket and blue tie. Also states he had at times beautiful visions, angels, heads without bodies (cherubs?). Later, when in hospital, he saw black images with horns, and a cow, and a horse; and a man beat him in the bed. One night Christ rode through on horseback, he tried to follow, but

was restrained by a "loving fear;" he then heard Christ call him with a voice of "manly, masterful menace, such a manliness as does not exist in the world now." Still he was held back. The mother of Christ then screamed from the gate; he tried once more to follow, but failed, then "all was over, all was over, over, over, and he was not that night with Christ."

April, 1892.—Mental state unchanged; health very robust.

The cycle in this case has extended over two years. Mentally the present state differs little from that which he exhibited soon after his admission, when the cataleptoid state had passed off.

CASE III.—*Depression; Expansive Mania; Daemonomania; Stuporose Melancholia, with refusal of food. Acute Hallucinatory Mania; Pseudo-Catalepsy; "Mulish Resistiveness" with Verbigeration.*

M. T., aged 22; single; under-land steward. Admitted 30th April, 1890.

Previous history (communicated by his mother).—Is the second of a family of eight, parents healthy, no history of family taint. As a schoolboy was noted for his aptitude, the village master frequently saying that "he could not be kept back—he picks up learning as quick as a hen would oats." After school hours he read history and sermons. Was apprenticed to a pawnbroker in the city, but his health broke down, and he was obliged to return to the country after ten months, his "liver" having become affected. Having recovered he was employed to care farm produce which was stored for market, and also had the duty of issuing supplies to the farm labourers, who did not approve of his strict conscientious discharge of his duties, and consequently worried him by many petty annoyances. A year prior to admission he complained of pain in the back of his head, lost sleep and appetite, became very depressed, refused to speak to anyone, but kept muttering to himself, going over history, poetry, etc. This continued for six months, when he became jolly, full of pranks, jokes, and stories, which latter his mother first regarded as "fun," but found out later they were "imagination." He every day developed new delusions and hallucinations of a mixed character, particularly with reference to the supposed transformation of men into animals, and *vice versa*, and for a long time he puzzled over a word which he could not remember, and which he thought the use of would enable him to effect a counter-transformation; in his effort to recollect this mystic word he spent long intervals repeating words and phrases, making emphatic gesticulations meantime. This state lasted close on five months, when he suddenly became excited, declared his mother was a person of high social rank in the locality, that there was no longer need of prayer, that he had banished

hell out of existence, and he remained so up to a week before admission, when he one day became dull, stated his deceased father was at the other side of a hedge calling to him, accused his mother of poisoning him, and complained very bitterly that he was suffering from venereal disease. He became noisy, broke the windows of his mother's house, threatened to choke her, and on this latter charge was sent here. On admission he was wildly excited, suffered from hallucination of devils and animals, and of voices. His language was very obscene, varied by invocations of the Deity and saints. His terror now and again gave way to bursts of hollow laughter. He lay awake all night talking to himself and masturbating. It could be gathered from his language that he was repudiating charges of a sexual character, at the same time he used filthy expressions, and spoke familiarly of spiritual matters, and of angels and saints, all intermixed with part quotations of phrases, proverbs, verses, and speeches, and an intermixture of newly-coined words having somewhat a like sound. This condition lasted for five months (to September), when it gradually became subdued, and finally merged into a condition of stupor, during which he refused food, lay in bed, was wet and dirty, could not be induced to speak, lost flesh rapidly, and looked very miserable. Towards April, 1891, he roused somewhat, became passive, exhibited *flexibilitas cerea*, fattened, and resumed a constant whispering monologue, and so remained until October with very little change, when he got into a very resistive state, which lasts to this date (May, 1892), and is characterized by a mental and muscular opposition exercised against all external stimuli. He lies or stands in one position for hours at a time, making grimaces, contorting his features, laughing in a silly, mirthless manner, refusing to move, eat, dress, or perform any voluntary or enforced action. He whispers to himself, and now and again breaks out into obscene rhymes, and repeats words again and again which convey no meaning. His usual attitude suggests resistance to an effort to dislodge him from his position; he has his feet firmly planted on the floor, his arms fixed to the sides, his hands clenched, his body slightly inclined forward, the expression of his face like that of an animal at bay. With the exception of short intervals, he stands so for the length of each day. At night he rolls up like a ball, all his limbs flexed and so rigid that it is very difficult to extend them or raise the head, which is bent on the chest, all the muscles being in a state of high tension. He is wet and dirty, and will not take or look for food. He resents any interference with curses and oaths, and declares he is "a doctor, a head attendant," etc. His circulation is weak and general aspect is phthisical; there is no salivation, œdema, honey-like excretions on the eye-lids, or greasy skin. He has an eruption of bullæ on the soles and inner aspect of his feet, and has livid and swollen hands, which are ulcerated over the knuckles.

This case, like the foregoing, has been also over two years under observation; the phases of the cycle have been prolonged and have not been interrupted by remissions.

CASE IV.—*Acute Hallucinatory Mania; Dæmonic Melancholia; Pseudo-Catalepsy with Verbigeration.*

T. C., aged 21, single, stone-cutter, admitted December 26th, 1890. Has been a temperate, industrious youth of retiring disposition. Depressed for some three or four months; violent one week. A well-nourished youth, wild expression, prominent eyes, widely dilated pupils, charged with having assaulted a young lady. Is very excited on admission, exalted, suspicious, irritable; hallucinations (visual) and delusions. States that he has just now travelled in company with the Mother of God and Saint Joseph; resents close questioning, saying "it is his own affair;" he imagined the devil was between his legs, and that at present he sees many devils round him. This condition lasted one week, the hallucinations varying in character, and becoming less vivid each day. Masturbation indulged in very freely and shamelessly.

January 1st, 1891.—Improved. Professes to laugh at his delusions, states he knows his mind was upset; unsteady and shifting in manner; irritable, suspicious, states he had been feeling depressed and disinclined for work for some time prior to his attack.

January 6th.—Finding he could not at once leave the asylum, he became excited and relapsed. Became very restless, refused to dress or undress, reiterating a silly demand for his release. Full return of all former hallucinations and delusions.

January 15th.—To-day became stuporose, struck attitudes, talking quickly in a silly, incoherent, noisy strain.

February 3rd.—Roused from stupor, states he has ceased to masturbate; assists in ward cleaning.

March 13th.—Continued to improve; discharged "relieved" to care of friends. Health much improved.

May 22nd.—Readmitted after an absence of over two months. Meanwhile lost flesh. He has now a worn, exhausted look, expression vacant, cannot be induced to do anything, mental and muscular "mulish resistiveness" to every attempt made to make him obey orders. Is very incoherent, stating, in reply to the question where was his home, "I live with everybody, by myself when by myself." Asked if he had been masturbating lately, he said, "You may bring a horse to the water, but you can't make him drink," repeating the phrase, with a leer, again and again in a low tone, grinding out the words. Very restless, walking about in a confused, frightened manner, talking to himself in a low tone; gesticulating now and again; very noisy, but not aggressive or destructive. This condition lasted three months.

August 23rd.—He has fallen into a dull, apathetic state of

semi-stupor, standing all day in one spot, hands in pockets, shoulders bent, eyelids widely open, smiling foolishly, constantly chattering incoherent sentences about "girls, God, angels, devils, and hell." When observed, he seems to undergo some excitement, talking more rapidly and laughing silently. He appears to be pleased and amused by his idea and hallucinations. This phase continued to October 6th, when he became cataleptoid, and remained so for ten days, now and again giving way to emotional outbursts, weeping, laughing, etc., and accompanied by verbigeration, broken words, and sentences poured out in a meaningless string.

November 18th.—Seemed clearer; responded to questions, stated he could not explain what caused his emotion; that he was not unhappy. The cataleptoid state set in soon afterwards and continued with intermissions to

January 4th, when he lapsed into a dreamy, semi-stuporose stage, which lasted nearly three months, during which he kept up a ceaseless monologue of part sentences in a whispering tone, with concurrent frowns, smiles, contortions, grimaces, and emphatic gestures; and even violent prancing now and again. The tendency to attitudes was very marked, the patient rarely leaving one spot the whole day. He has not exhibited any aggressive instincts, eats and sleeps well, is of cleanly habits, but very resistive of external influences; any attempt to move him causes general muscular spasm, and he seems, as it were, rooted to the ground. This continues to date.

This youth has been seventeen months under care. The cycle has been composed of phases which gradually merged one into another. The improvement in health has been very marked.

CASE V.—*Eroto-Religious Mania; Stuporose State; Daemonomania; Alternating Hysteroid and Confusional Periods; Semi-Stupor with Verbigeration.*

J. H., aged 22, cooper, single, well-proportioned, rather anæmic, admitted 22nd June, 1891, charged with "having attempted to choke his brother." Maternal uncle insane. Has been very steady, temperate, and industrious until within a few months, since when he became depressed, indifferent to his work, and during the last week violent. On admission he is very excited and emotional. He is intensely erotic, proclaiming that he attempted to tear out his heart because he had been abusing himself since the age of 15, but that "it (masturbation) does no harm;" "It lightens the brain;" "I am absolved from all blame;" "I never expect to see anyone again;" "I am quite satisfied to be extinct." His conduct is very violent, and he has visual hallucinations of divine personages. When removed to the infir-

mary he burst into tears, crying out, "I can't help it, I am so bad." He then became boisterous, obscene, mischievous, and pseudo-religious, and so continued for nearly a month, when he became stuporose, refused to speak or eat, or move, and remained so for about a week until the 1st July. He again became very excited and suicidal, attempting to strangle himself with his necktie, compressing his larynx, beating his head against the walls. This paroxysm lasted for two weeks, during which he was very violent, would not remain in bed, abused himself constantly, and spent the day alternately crying aloud and singing extempore rhymes of an eroto-religious character. At the same time he was in constant terror of devils, who he imagined crowded his room and sought his destruction. His attention could be fixed, and, by patience, a rational answer extracted from him. On the 15th July he entered into an alternating condition of hysteroid and stuporose phases, which continued to recur for nearly two months, when he again became profoundly stuporose, performing no voluntary act. He required to be dressed, undressed, fed, and led about for exercise, remaining many hours fixed in one attitude, with eyelids drooped, a very pleased expression, smiling now and again, as if meditating on some very gratifying subject. Any movement at such time was evidently the result of visual and auditory hallucinations of an agreeable character; to the latter he replied by whispering incoherently.

September 28th.—Prostrated by an acute attack of dysentery, which ran a severe course for thirty days. At this stage of exhaustion he became mentally very clear, expressed a strong desire to recover, obeyed all orders, and spoke rationally. As convalescence set in he relapsed into passive indifference, showing very little volition. His physical health improved *pari passu* with his mental reduction, so much so that, having become very obese, he was sent to work on the farm, where he intermittently and in automatic fashion employed himself at very light offices, such as raking, etc.

November 5th.—He is noted as "Improved, dull, and apathetic, but responds rationally to questions." States he recollects his period of excitement when he had visions of girls marching up a stairs to heaven. They were of every class: one he thought was his cousin, but when he went to speak to her he found she was some other girl. Says he also recollects the period when he stood silently, and was led about, that it set in with a fear that he was about to be roasted, then he became indifferent, felt happy, and thought he was an angel or a freemason. Thinks all his trouble came of disappointment in love; the girl he was engaged to returned his ring (fact). She has since shown herself to him in the dining-hall here. Was suicidal "because he was a bad boy, and went with bad women." From this date he improved in a marked degree, became gay, indulged in horse-play, worked well in the

divisions and on the farm, but was rather incoherent in his replies, and laughed in a silly fashion when spoken to. Stated he laughed because he saw two girls passing at the moment, and also at his own folly.

January 10th, 1892.—Dull and confused; confessing that he has been masturbating frequently during the past few weeks. Cannot recollect anything of his previous states. Frowns as if puzzling over his thoughts, which, judging from his expression, are not displeasing; he endeavours to give them verbal expression, but fails. After such attempts he repeats words in a whispered tone.

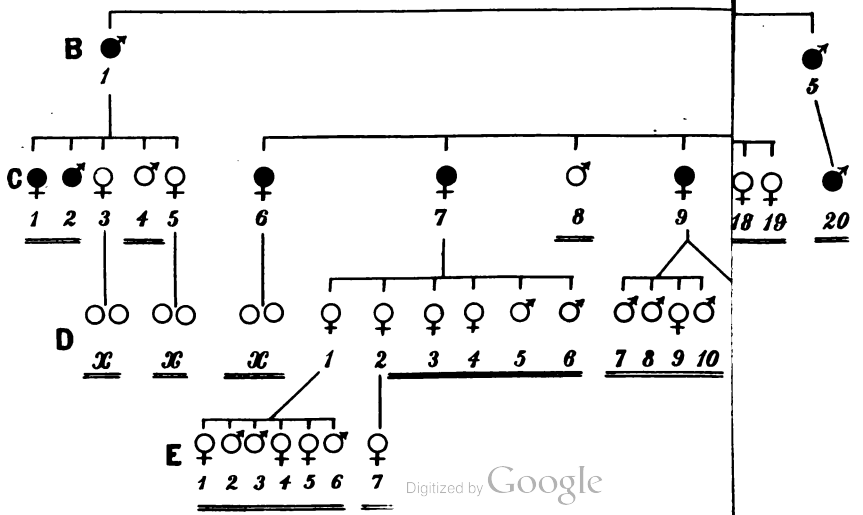
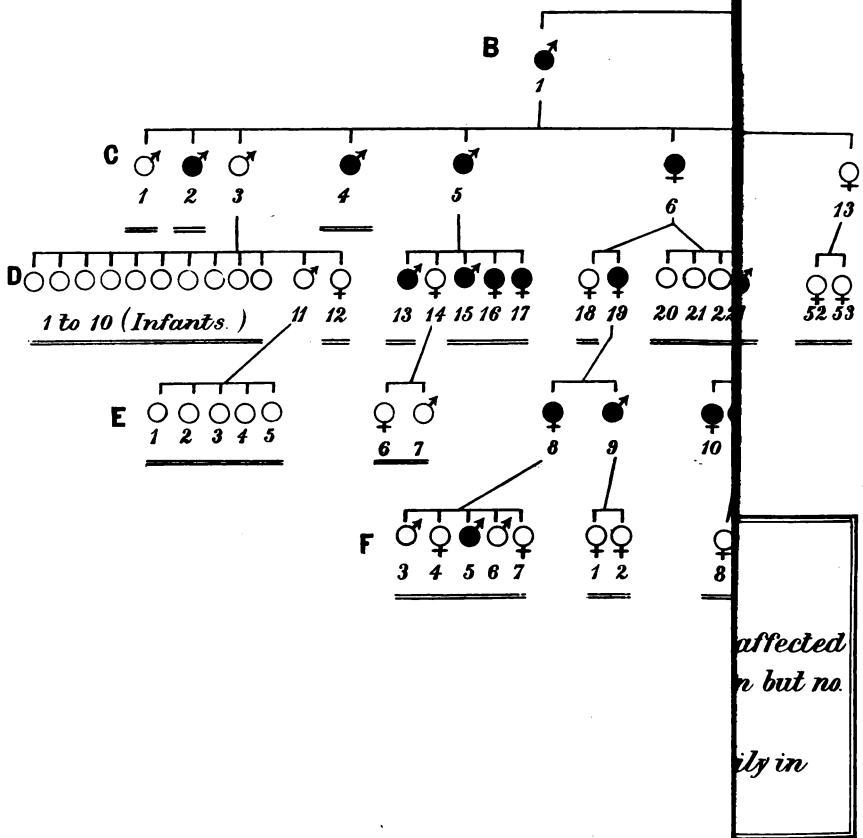
March 20th, 1892.—Increased dulness and confusion; very silly look; frequent grimaces; marked hysteroid tendency; emotional.

April 4th, 1892.—The condition above noted merged into a dream stage. He sits or stands in an easy attitude with half-closed eyes, his features expressive of pleasing imagery; there is a moderate degree of *flexibilitas cerea*, volition is almost at a standstill; he is evidently out of touch with his surroundings, and is happy in clondland. He utters words and part-sentences in a gentle tone: "Can—not—not—not. Love—to me; to me."

During the ten months which the patient has been under observation the phases have been very numerous, recurring daily, weekly, and monthly. At present he is relapsing into a state of melancholic stupor, with paroxysmal fulminations.

Cases of Hereditary Chorea (Huntington's Disease). By W. F. MENZIES, M.D., B.Sc.Edin., M.R.C.P., Senior Assistant Medical Officer, Lancashire County Asylum, Rainhill. With plate.

A list of works on hereditary, or Huntington's chorea, which will be appended to this paper, shows that this disease is by no means so rare as has been supposed. At the same time it appears either endemic to, or at least prevalent in, certain parts of many countries, where its entity is well recognized by the laity, its cardinal signs discussed, and its universally unfavourable termination so proverbial, that members of families in which it is known to exist find great difficulty in securing partners in marriage—whereby the disease tends to a spontaneous cure. It is beyond doubt that this particular form of chorea has for a long time been differentiated from others by medical practitioners in its particular habitats, although even yet, in spite of the many able expositions of its peculiarities, considerable confusion seems to prevail in general medical literature. An old woman, nearly 80 years



of age, told me, when I was collecting information, that when she was a girl her "old family doctor said no one ever got over it." This statement carries us back a hundred years at least.

Dr. E. S. Reynolds, of Manchester, in the "Medical Chronicle," April, 1892, mentions a case, John Wood, from St. Helens, who was under his care at the Manchester Workhouse Infirmary. This man told him that there were "plenty like him in St. Helens," and he, after inquiry, heard that two separate families were affected, but was unable to find them.

It so happens that for the last five years I have had these two families, or certain members of them, under observation, and the present time appears, therefore, suitable for recording their history. Before going further, I must thankfully acknowledge the great assistance I have received from the officials of the Prescott Union, especially the Clerk, Mr. A. F. Mann, who is also Superintendent Registrar, and Mr. J. Pennington, Relieving Officer for the St. Helens District of the Union, without whose help I should never have been able to get what information I have. I may mention that if the man John Wood, Dr. Reynolds' patient, belongs to either family under consideration, he has sprung from the female stock not later than four generations back. None of the old residents of the same name know about him, and all his friends seem to be dead, so that I have not been able to go further with his case than confirm his statement that his mother died of chorea in Prescott Union Workhouse.

One family is named Tickle, the other Dixon. The admission of a member of each into Rainhill Asylum in 1887 called my attention to the disease.

I shall first briefly mention the individuals in each stock, explaining the genealogical tree, and naming them as there denoted—the generations by Roman capitals, the members of each by Arabic numerals, not attempting to give the exact order of age, which from want of evidence would only mislead; second, describe somewhat fully a case which shows an average balance of the chief signs, and is well-marked, without being too far advanced; third, briefly summarize the salient points in other cases I have seen; and last, devote some space to a consideration of the disorder as a whole.

The Tickle Family.—The first individual (A 1) who, as far back as I can trace, was affected with hereditary chorea, lived in the township of Parr, St. Helens, and had been dead many years at

the time when his elder son (B 1) told my informant, now an old man of 72, about him. B 1 and his brother B 2 have been dead over 60 years, and one was over 70 when he died. A 1, assuming that he was 20 to 30 at the time of marriage, must have been born nearly 150 years ago. These three early cases appear to have been old men at death, as if showing that the type of disease was only developing, for, as we shall afterwards see, there is a general tendency to precess in each generation. My informant was best acquainted with the third generation, who were more of his own age, but he knew only the elder branch, consisting of eight individuals.

C 1, male, was unaffected, but died before reaching adult life.

C 2, male, commenced to be affected at 40. His ailment progressed rapidly. He was admitted into Rainhill Asylum on 7th April, 1853, and died 13 days later. He was very feeble and emaciated, and was mistaken for a case of general paralysis, an error easily made in the last stage and without any guiding history.

C 3, male, was unaffected, and lived to 76. Of his children ten (D 1 to D 10) died in childhood; a son (D 11) died at 54, unaffected. He left five children, who all either died early or left the district, so that I have been unable to find them. A daughter (D 12), single, is alive, aged 53.

C 4, male, commenced at 30. He died, with most of his children, in Liverpool during the great cholera outbreak. The other members of his family are untraced.

C 5, male, commenced at 24, and died at 38. He had five children, viz.:—D 13, male, who was affected at 17, and died young; D 14, female, unaffected, married, who has two small children; D 15, male, single, aged 22, who began at 18, and was for some time an inmate of the Prescott Union Workhouse, but took his discharge under the idea that he was still strong enough to do some useful work; D 16, female, single, admitted into Rainhill Asylum 12th August, 1887, and died 14 days later of phthisis, aged 40 (she was in an advanced stage when seen, having commenced at 34); and lastly, D 17, female, single, admitted into Rainhill Asylum 15th May, 1889, and still resident, who commenced at 28, and whose case I have taken as a type of the disorder.

C 6, female, was affected for some years, and died at the age of 43. She was twice married, and her children were:—(i) D 18, female, died aged 4; D 19, female, single, affected, who died aged 51, and had two illegitimate children by different men, viz., E 9, male, a drunken, ill-doing man, half insane, aged 33, who is married and has two little girls (F 1 and F 2), whom he has deserted, and who are unaffected, whereas he himself has had tremors for two years; and E 8, female, who commenced to be affected at 26, and died at 40, leaving five children (F 3 to F 7), whose ages range from 18 to 8, and of whom one (F 5) is possibly affected;

(ii) by the second marriage C 6 had four children. Three (D 20-D 22) died in infancy, D 23, female, commenced at 29, and died at 35, leaving three children, viz., E 10, female, 26, single, who commenced to have tremors in her fingers at 25; E 11, male, 23, single, mentally affected, of violent temper, who commenced at 20 (he has an illegitimate infant, F 8); and E 12, single, female, who is unaffected.

C 7, female, single, had tremors for some years, and died of them at 36.

C 8, female, single, servant, died of phthisis, aged 22, and was not affected.

Turning to the younger branch of the family descendants of B 2, we find a more limited connection, but one to which I have not yet been able to do complete justice. Curiously enough the members of the two branches are quite unknown to one another, and would not allow the possibility of any connection between them, until I obtained the link from an old woman who has known her branch for 65 years, and had heard tell of the elder brother, B 1.

The children of B 2 were:—

C 9, male, single, who commenced to have tremors at 16; age at death unascertained.

C 10, female, who died aged 50, unaffected. Of her children, four (D 24-D 27) died in infancy, two are alive, unaffected, single (D 29, D 30), and three who are married and unaffected (D 31-33) have all their children free. One daughter (D 28), unaffected, has a son (E 13) aged 20, who is said to have had irregular movements continuously from 14 to 17 years old. He is at present quite healthy, and, if his mother's statement be reliable, is the only example in the series of the disorder terminating in any other event than the fatal, and also the only one where it has reappeared after missing a generation.

C 11, male, who died in Prescot Union Workhouse 16th Feb., 1887, aged 53. He had been affected for some years, and was married, but his eight children all died in infancy.

C 12, male, who commenced at 30, and died at 50. Of his children, six (D 42 to D 47) died in childhood. A son (D 48), single, aged 43, is at present an inmate of the Prescot Union Infirmary, badly affected. A daughter (D 49), aged 34, is unaffected, as are her six children, of age varying from 15 to 3 (E 14-E 19). Another daughter (D 50), aged 32, is unaffected, so are her four children (E 20-E 23), whose ages are from 10 to 4. Lastly, a son (D 51), 26, single, of intemperate habits, has for eighteen months had typical tremors if anything excites him when "in drink." When sober he is free.

C 13, female, unaffected, who died in her first pregnancy, leaving twin girls (D 52, D 53). These are alive, single, and free from chorea.

Appended is a summary of the Tickle family:—

Generation.	Individuals traced.	Lived to over 12 years.	Number affected.
First (A)	1	1	1
Second (B)	2	2	2
Third (C)	13	13	8
Fourth (D)	53	20	8
Fifth (E)	23	13	5
Sixth (F)	8	3	1
Total.....	100	52	25

The Dixon Family.—The individual from whom this stock is sprung is said to have come from Cheshire, but beyond the fact that he lived some years in St. Helens before becoming affected, and that he died an old man, nothing can be discovered. His third son died in 1854, aged 60, so that he himself was probably born about 1760-70. Five of his children grew up, and two had large families.

B 1, male, was affected, but at what age he became so is unknown. He, too, had five children, two of whom left families. They are:—

C 1, female, married, commenced with tremors at 30, and died about 50. She had no children.

C 2, male, single, intemperate, had shakes from 40 years of age.

C 3, female, was free, as are also her children, now grown up.

C 4, male, single, accidentally killed in youth.

C 5, female, unaffected, as also are her children.

B 2, second son of A 1, commenced with the disease at 46. His temper became violent, and in 1862 he was sentenced at the Liverpool Assizes to penal servitude for life for a murderous assault upon his wife. He afterwards died in some prison near London. He left nineteen children.

C 6, female, affected from 45, died at 53. Her children, now in adult life, are free so far.

C 7, female, admitted into Rainhill Asylum 10th Sept., 1887, and died 3rd March, 1889, of phthisis. She suffered for ten years, and left six children:—

D 1, female, unaffected, who has six children (E 1-E 6).

D 2, female, unaffected, one child (E 7).

D 3, female, married, no children.

D 4, female, died aged 14.

D 5, male, now aged 33, married, has no children.

D 6, male, single, aged 23.

None of these children are yet grown up.

C 8, male, single, unaffected. He was an ill-doing young fellow, and was sentenced to ten years' penal servitude for highway robbery. Since his release he has disappeared from view.

C 9, female, single, commenced with tremors at 40, and died in Prescott Union Infirmary 17th Sept., 1890, aged 48. She had four children to one man, one to another (D 7-D 11), none of whom are yet affected.

C 10, male, 45, not affected. He has three boys and three girls (D 12-D 17) still in childhood.

C 11, male, 43, free. He has five young children (D 18-D 22).

C 12, female, unaffected. She died aged 38, of cancer of mamma, and left five boys and one girl (D 23-D 28), all free.

C 13, female, 36, unaffected, has two children (D 29, D 30).

C 14, male, 34, commenced with tremors at 26, but is still able to get about. Has three children (D 31-D 33).

C 15, male, 32. He is just commencing to show the disease. He has two boys and four girls, all young.

C 16, female, died in her third confinement, leaving a boy and girl. She was unaffected.

C 17, male, C 18, female, C 19, female, died in childhood.

B 3, third son of A 1, never married. He was affected, but at what age is unknown. He died in the Prescott Union Infirmary 17th March, 1854, aged 60.

B 4, male, single, unaffected, died in youth.

B 5, male, died in the Prescott Union Infirmary 8th April, 1867, of the disease. His children have left the district, but the eldest (C 20), then a man of from 20 to 30, had already commenced when last seen about here. Summary:—

Generation.	Individuals traced.	Lived to grow up.	Number affected.
First	1	1	1
Second	5	5	4
Third	20	18	8
Fourth	41	20	—
Fifth	7	—	—
Total	74	44	13

Such, then, are the two family trees. I had preferred that they were more complete, but the sources of information are few. Both names are common about here, and all such persons have been examined and those unconnected eliminated; but could we go a little further back, probably some members of these would prove to have originally suffered, although the disease died out before the memory of present informants. Much better histories can be got about affected lines where the interest is sustained by the presence of the disease than about those who have remained free.

I now pass to the consideration of the case to which more particular attention has been devoted. The mental condition is good enough to allow of a fairly satisfactory examination.

Jane Tickle ("Tickle D 17"), aged 32, admitted to the asylum 15th May, 1889, from Factory Row, Sutton, St. Helens. Her elder sister (D 14) says that she worked in the glassworks till four years ago, when gravescent weakness and inability to execute the manual operations required caused her to give up. She had always been of hasty temper, but grew worse about a year ago, when her memory began to fail. Since then has suffered greatly from indigestion, with vomiting. Of late has been upset by mere trifles, and will scream and cry, and on several occasions has been violent, threatening her sister with a knife, and throwing glass and crockery about the room. Had inflammation of the eyes as a child, and was treated in Liverpool; has had no other illness at all, no specific fevers, rheumatism, or early chorea. Has been a bright, steady, active-minded, hardworking, healthy girl. Can read and write. Has menstruated regularly all her life.

State on admission.—Patient is a well-nourished, not unhealthy-looking woman, with great want of facial expression.

Sensation.—Sensibility to touch, pain, and temperature is normal, although the slowness of response makes it at first appear that there is general tactile hypæsthesia. There is no recollection of pains anywhere. Muscular sensibility is decidedly acute, minute differences of weight being appreciated without hesitation. Sense of posture exact, no hyperæsthesia of muscle nerves.

Motion.—The muscles are everywhere well developed, but there is no hypertrophy. No recognizable loss of power, nor any local or general wasting. The most apparent abnormality is a continuous irregular choreic muscular jerking, not increased by voluntary movement, but rather, to some extent, under control. It affects all groups of muscles, but no individuals. Thus, the head is jerked upwards and backwards, and brought back quickly; the shoulders are raised, the thigh flexed or inverted, the forearm flexed, extended, pronated, or supinated, the hands or ankles flexed. Even the smaller movements in the hand are associated, as

when the thumb and forefinger are opposed. Three points deserve notice: (1) Muscles accustomed to specialized movements perform these more frequently, but less extensively; (2) organized movements enervated from both hemispheres are common; (3) the proximal parts of the limbs are affected less than the distal, the legs less than the arms, the face scarcely at all, while the scalp is free. The pace is slow and measured, with a tendency to rotation of the trunk to the left. Correct gait and balance are interfered with only by the uncontrollable jerkings; there is no tendency to stagger or fall in any particular direction while the patient is standing still.

Reflexes.—The superficial are normal, but are overbalanced if the limb is preoccupied, so to speak, by a jerk. Thus, while the thigh is being rotated no plantar occurs, even although correctly timed. Conjunctival reflex and reaction to light, accommodation and cutaneous stimulation perfect. Pupils 4.5 m.m., equal and of regular outline. The knee-jerk is decidedly but not greatly increased; there is no ankle clonus, no wrist or elbow jerk.

Special Senses.—Smell is very imperfect, but there is nasal catarrh, probably of long standing. Taste and hearing normal, tongue protruded steadily in middle line. $V = \frac{2}{3}\%$, some corneal nebulae present, optic disc and retina normal. Fields of vision, both to light and colours, normal. Speech is affected only in so far as enunciation is impeded by laryngeal jerkings, to obviate which the muscles of phonation are rendered tense, the tone becomes monotonous, the pace slow and dragging, then suddenly a word is shot out with explosive violence on the first or second overtone. Heart, lungs, and abdominal organs normal; no enlargement of spleen; urine normal; no glycosuria or albuminuria. No trace of rickets or syphilis.

Cerebral Phenomena.—The most obvious abnormality is an undue apathy, a want of interest in her present surroundings and future fate. She discusses her ailment with equanimity, laying stress on its fatality. Says she "supposes" she "will die of it too," but the thought leaves no unpleasant impression. About her past she is much more interested, and is willing, and even eager, to give all the information she can. She says she is "quite happy," and doesn't "trouble about things." Perception is normal, its spatial relations are not disturbed. Objects, form, colour, familiar faces are all recognized at once, and calculation of distance is fairly correct. But apperception is diminished. She avoids explanation or interpretation of perceptions, and when asked to describe an object says, for example, "I don't know," or "I can't see." But when roused by a sharp demand, she performs the cerebral act at once, and correctly. Differentiates by signs equally well. In the absence of a recording instrument assumption is, perhaps, unsafe, but I suspect that the reaction time is markedly increased. There is diminished attention, and the sense

of effort is objectively apparent, *i.e.*, she employs visual and other muscular fixation as extraneous aids. It is difficult to analyze this loss of attention accurately, for want of terms. She is "very noticing," and darts to snatch a crust out of the mouth of a feeble fellow patient. Yet to look at her one would imagine she notices nothing. The motor memory is difficult to rouse, also that for past events, but when stimulated to the proper pitch continues to reproduce the action or fact for as long as a minute, and she repeats an answer over and over again in different words. But independent of this there is real loss of memory, and she shows considerable skill in endeavouring to compensate for it by enlarging upon unimportant particulars. Also the memory for acquired actions is defective, a point which is apt to interfere with the examination of muscular sensibility. Her judgment is faulty, and in describing new sensations, tastes, objects, etc., she shows great want of decision in "making up her mind," pronouncing alternately in favour of each possibility. If annoyed she flies into a great rage, and swears and screams, and endeavours to strike out, the muscular jerkings becoming meanwhile more prominent. Her affective nature is distorted, and she takes violent, and apparently unreasonable likes or dislikes, and expresses aversion in no measured terms. She is purely selfish, and shows total disregard for the comforts and feelings of others, although full of complaint if she herself be not satisfied. Lays no plans for the future, and does not seem to cast her thoughts ahead in anything. Hope and despair are alike absent.

Progress.—During her period of residence there has been an absence of fluctuations, and the disease is slowly advancing to an unfavourable termination. Briefly we notice:—(1). Gradually increasing want of control over the jerking movements, so that now they persist, though with lessened intensity, during sleep, whereas at first they ceased entirely. (2). Progressive weakness of the musculature, with slow atrophy. (3). Gradual increase of the superficial trunk reflexes, so that now the abdominal and scapular are well marked. (4). Increase of deep reflexes, especially the knee jerk, with advent of ankle clonus, and triceps and wrist jerks. (5). Progressive loss of memory, with increased instability of temper. (6). Of late, loss of flesh and digestive power, with tubercular growths in the peritoneum. The electrical reactions have been tested from time to time with negative result. The passage of constant currents of moderate strength through the muscles appears to be without influence on the jerking movements.

(To be continued.)

OCCASIONAL NOTES OF THE QUARTER.

The Annual Meeting of the Association and the Centenary of The Retreat, York.

A full report of this Meeting will be found in "Notes and News." We append a leader on the event from the "British Medical Journal," August 6th, 1892:—

"THE CENTENARY OF NON-RESTRAINT.*

"The British Medico-Psychological Association held its annual meeting this year in the city of York, to mark its sense of the benefits conferred upon the insane by the foundation of the Retreat in the midsummer of 1792. Similar associations in the United States, Russia, Austria, Germany, France, Belgium, Holland, and other countries recognized the interest and importance of the event thus commemorated by sending their greetings. No national rivalries appear to have chilled the expression of the most cordial felicitations on the occasion, and the last number of the 'Journal of Mental Science' contains ample evidence of this generous sympathy in former days. The same Journal contains materials which enable us to appreciate the motives which led to the building of an institution destined to exert so remarkable an influence in reforming the treatment of lunatics in this country.

"Considerable dissatisfaction had been felt for several years prior to 1792 in the management of a Lunatic Hospital at York, established in 1776 by public subscription. In 1791 a lady patient died. Her friends had come from a distance during her illness to see her, but their wish to do so was denied. The event was shrouded in mystery, and suspicions already aroused as to the treatment of the inmates were intensified. A citizen of York known for his philanthropy, and a member of the Society of Friends, took the affair to heart, and proposed the establishment of a new asylum, where the patients should be treated with kindness, and where the feelings of their friends should be consulted.

* This is misleading, seeing that the Retreat did not introduce the non-restraint system. It may seem an unimportant point, but it is as well to secure historical accuracy in reference to the treatment of the insane. However, it is stated in the article itself that Charlesworth, Gardiner Hill, and Conolly did introduce it. See "Journal of Mental Science," July, 1892, p. 356.—[Eds.].

William Tuke could not possibly at that time have a perfect conception of the needs of the insane as we now recognize them, but he broke with the past, and started upon an untrodden path. His merit lies not in writing fine words, but in doing the right thing. Little by little the idea grew and formulated itself, so to speak, in a great work of benevolence and intelligent skill, the outcome of common sense and philanthropy.

“Perhaps, after all, it was an advantage that he had no knowledge of medical custom or theory, for at that period the profession did not shine in its treatment of insanity. In fact, mental medicine was at its lowest ebb, and was summed up in the well-known epigram on Lettsom. Tuke’s proposition, coldly received at first, was eventually carried into effect; but for this purpose liberal donations from his co-religionists as well as himself became necessary. He ensured success by residing in and directing the house, and subsequently by obtaining the services of an excellent man, Jepson, possessed of medical knowledge although unqualified, who cordially helped him to carry out his plans. It is evident that a resolute will, strong sense of duty, pity and good sense were essential, and with these qualities the projector of the institution was in a large measure endowed; but more than this, he not only knew where to find his tools, but how to use them.

“We have been at some pains to discover what manner of man he was, and the portrait accompanying the article referred to appears to justify the description given of him in an obituary notice. ‘In person, William Tuke hardly reached the middle size, but was erect, portly, and of a firm step. He had a noble forehead, an eagle eye, a commanding voice, and his mien was dignified and patriarchal.’ His evidence before the Select Committee of the House of Commons presents a striking picture of the treatment introduced at the Retreat, although evidently not reported *in extenso*. It is satisfactory to know that after more than a quarter of a century’s devotion to the welfare of the institution he did not pass away without knowing that the reform in lunacy was progressing, and gave promise of further extension and utility. That he impressed his mark upon his age is proved not only by the quoted testimonies to the contrast presented by the management of the Retreat to that of contemporary institutions, but by the action taken by Parliament in probing the festering wound to the bottom,

and initiating lunacy legislation, which by slow yet sure degrees led to enactments made to protect the lunatic and to provide accommodation in asylums which are now the pride of England. With regard to mechanical restraint, its abolition is stated to rest, not with the Retreat, but with Gardiner Hill, Charlesworth, and with Conolly, who attributed his remarkable career in this direction mainly to the Retreat, and observes that, 'although, certainly, restraint was not altogether abolished at that establishment, it undoubtedly began the new system of treatment in this country, and the restraints resorted to were of the mildest kind.' To him the article in the 'Journal of Mental Science' pays a glowing tribute of praise for the ultimate developments of lunacy reform. Now that the battle of humanity has been fought, and the combatants have gone to their rest, their respective share in the work can be and is judged with calm impartiality, and their respective merits justly recognized. This remark applies to those who laboured in France as well as in our own country, and at the dinner of the Medico-Psychological Association at York, a collateral descendant of Pinel was present to do honour to the Retreat on attaining its Centenary, while this physician's health was fittingly proposed by Dr. Hack Tuke, who ungrudgingly paid a warm tribute to the meritorious act of Pinel in the dark days of the French Revolution, in knocking off the cruel fetters of the insane at the Bicêtre. That there should be such a recognition of noble reforms initiated so long ago in the two countries is unmistakable evidence on the one hand of the profound impression they produced, and on the other, of the cordial relations which exist between the alienists of France and England. As we have intimated, no trace of jealousy or rivalry appears in this very pleasing episode. Would that the same happy feeling of international goodwill characterized all the victories of good over evil, and knowledge over ignorance, at home and abroad!"

The Leamington Parricide.

The trial of Ernest Greatrex for the murder of his father, at Leamington, was of more than usual medico-legal interest on account of the clear ruling by Mr. Justice Wright that the mere recognition of the nature and quality of the act of murder as a punishable offence was not enough to insure that a prisoner was responsible for the act done. The out-

lines of the case are as follows:—The prisoner belongs to a family in which there are both insanity and epilepsy in several members. There are neuroses on both sides of the family, and the prisoner's brother is at present in an asylum suffering from delusional insanity. Nothing very peculiar was noticed till the prisoner had left school, when he was placed in his father's business; there he seemed to be discontented with his position, and thought that he was not paid sufficiently, though he had really a good salary for his position. He was then sent to New Zealand as traveller for the firm, and later started a business in connection with his father there, but he managed to lose altogether about £16,000, and then returned to England not in the least seeming to take blame to himself, but rather thinking it was his father's fault for sending him to the colony just when there was trade depression; in fact, he had begun already to attribute to his father a wish to injure him and treat him unjustly. After some time in England he was again started in life, with a capital of over £5,000, on a ranche in America, but here he took to lying in bed and neglecting all business. He quarrelled with his partner and his wife, and thought that his father had poisoned their minds against him. He thought, too, that his father had advanced the money only to get 8 per cent. for it. He accused people in the neighbourhood of hinting things about him; matters got from bad to worse, so that in the end he lost his money and returned to England once more full of his grievances. He was allowed enough money to keep him, but he complained that he had less than younger members of his family, and he accused both mother and father of acting unjustly towards him, and neglecting his interests for those of their daughters who had contracted what he called disgraceful marriages, the only disgrace being that they had married doctors who were then not in large practice, and who received from the fathers of the wives money support.

The idea of persecution was growing rapidly, so that he thought all the family were against him; he was so troublesome that he was induced to go abroad, for he was then threatening his father. He also was complaining of all sorts of bodily ailments, and was, in fact, hypochondriacal. He was treated in Geneva by hydrotherapy, and he sent home piteous complaints of his illness and his need of more money; he appeared to want to blackmail his father.

He sent home paper with mustard on it, saying this was

the matter which was being sweated out of him by the doctor.

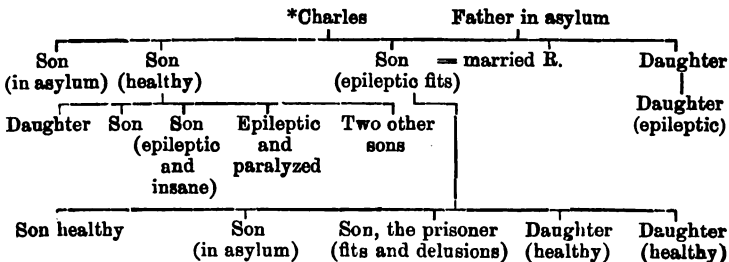
Further allowances were made him, and provision for more if he married or set up a house. Yet he was dissatisfied.

Various means were tried to please him, but he became more and more alienated from his friends. He was seen by doctors, and was referred to two London physicians, who, however, looked upon him as a bad lot instead of as a person suffering from delusional insanity.

At last, towards the end of May of this year, having moved from various lodgings in consequence of noises which disturbed him and which prevented him from sleeping, he warehoused his furniture, went down to Leamington, and knowing his father's habit of taking a morning walk, deliberately followed him, ran up to him, and shot him in the chest when he turned round; then when he fell he shot him in the back, expressing satisfaction at what he had done. He made no resistance when taken, but said he wished he had killed himself, but that he had not the courage to do it. From the time he was in Warwick gaol to the time of the trial he enjoyed good general health; he did not express any regret at the act he had committed, but frequently said he had done what was quite right and that he had rid the world of a monster. He said he might have done the same for his mother (who died earlier in the year), and to his whole family, as they had treated him badly from the first. He had the air of one who was talking in an indifferent way about an act of no great gravity that had been done by some stranger. The prisoner was described as having marked nervous twitching of the eyelids, this being most marked on the left side; also that there were very brisk knee reflexes, and it is said unequal contraction of pupils. There were no very marked physical signs of anything but nervous instability.

The prisoner, when pressed, admitted that he had had several losses of consciousness, but he made light of them, though they were evidently epileptic in nature. So much for the history of the man. The trial was not of long duration. The first points which were established were evidences of premeditation and design. He wrote many long letters; these were read in court and proved very tedious, for they repeated over and over again the groundless accusations of bad treatment, and threats of doing himself

justice. He went so far as when writing to his father's lawyer to talk of assassinating his father if he did not get immediate satisfaction. The letters themselves were very characteristic of the delusional patient, verbose and constantly harking back on the one subject of complaint, yet well composed. After the general evidence showing design, the gaol surgeon was called, and he gave evidence which was not satisfactory to the court generally, for he would only say that he from his own observation had seen nothing in the prisoner which pointed to insanity. Sir Charles Russell asked if he took into consideration the letters and the family history, but he declined to consider anything but facts observed by himself. We think such evidence is unworthy of a member of our profession. Dr. Edgar Sheppard was also called for the Crown, and though his first impressions were that the prisoner might be responsible, yet when he heard the letters and the pedigree* he quite accepted the notion that the prisoner might be insane, though he also believed he might have known the nature and quality of his act and might be considered in part responsible. Mr. Whitcombe was the last Crown witness, and he gave in a very clear way conclusive evidence that the prisoner had not only delusions, but was physically and mentally defective; he had no hesitation in considering him irresponsible for the act he had committed. Sir C. Russell now appealed to the Judge if there really were anything to go to the Jury, as the Crown witnesses had so strengthened his position as to the insanity of the prisoner. The Judge decided to call the medical witnesses for the prisoner, and Drs. Blandford and Savage gave evidence as to the state of insanity of the prisoner, and gave it as their opinions that he was suffering from chronic insanity with delusions of persecution, and that he did the act as a direct result of the delusions from which he was suffering, and that he did not



know that he was doing wrong; rather that he believed he was doing good by ridding the world of a monster. We must say that Mr. Dugdale, Q.C., who was prosecuting counsel, conducted the case in the most satisfactory way, not pressing for a verdict, but striving to place the facts and their relations clearly before the jury without prejudice, and this he did most thoroughly. Sir C. Russell spoke briefly, telling the Jury their function was to decide on the sanity or insanity of the prisoner. The Judge summed up as follows:—

It was of the highest importance in dealing with criminal cases to bear in mind that a man was not exempt from criminal responsibility merely because he had in himself or family insanity. Most criminals who committed atrocious crimes had in themselves tendencies towards insanity, and experience showed generally that their relations, or some of them, had actually shown insanity, but it had never been the law of the land that persons should escape punishment because they had insanity in them. They were often astute and careful to avoid the consequences of what they did, and were very much alive to the notion that they might escape on the score of insanity. It was very important that all should understand that such was not the case. Nevertheless, there must be in a humane country some kinds and degrees of insanity which would be regarded by courts and juries as such that it would be cruel and useless to punish persons who in those conditions committed the crime. The question was whether this was one of these cases. They must not acquit a man if he knew what he did was wrong and contrary to law, but there were cases in which a man might do wrong and know it was wrong and not be punished. That was so in that case. They ought to find that when the prisoner committed the act he was insane. The result would be that he would be confined till he recovered his mental health, if he ever did. The questions they had to consider were, first, was the prisoner in a state of substantial delusion as to the conduct of his father, mother, and perhaps of his sisters? If they believed Miss Ryder, who saw the act done, and the brothers and solicitors of the deceased, or any of the four, there never was the slightest foundation for the prisoner's belief that he was the victim of wrong at the hands of his father. Then, was a man who could entertain an idea so persistent and recurring, and so filling his own mind and life, responsible for his actions? If they thought these were delusions, and that the father and mother treated him with kindness instead of the way he suggested, then they must ask themselves, Was this delusion so violent as to cause him to do what he did? As early as October or November, 1891, he wrote to his father's solicitor a letter showing a growing intention, rather than a formed determination, to use the revolver upon his father if he

did not get what he wanted. On May 14 he wrote to his father's solicitor, saying "If you do not in a week do what I want you to do I will assassinate my father." At the end of the week he wrote: "The time is up; I must do what I said." He immediately made preparations, and without having made any preparation for his own escape he came down there and shot his father. What, to his Lordship's mind, was suggestive was that on the way to the police-station, instead of expressing sorrow such as they might expect from a man in such a situation, he was narrating his wrongs. The mere fact of the man killing his father was one they might take into consideration. Unless there were some hidden quarrel a sane man was hardly likely to follow his father and fire a bullet into his chest, and then follow him again and shoot another bullet into his back. This was hardly the action of a sane man. The examination of the doctors rather confirmed the view that he was not responsible for his actions. He, therefore, thought if they believed the evidence they might take a merciful view in this case, which was so very exceptional, and though it was not disputed that the prisoner did the act, he was irresponsible, being insane by reason of this particular delusion respecting his father's conduct. The jury, after a very short interval, found him guilty, but insane at the time he committed the act.

And thus ended the trial, and we think no more need be said than that it is satisfactory to get a judge who so fully recognizes that a man may understand the nature and quality of an act and yet be irresponsible in the eyes of the law.

Report on Hypnotism.

The Committee on Hypnotism appointed by the British Medical Association at the Birmingham Meeting, 1890, presented their Report after an interval of two years to the Nottingham Meeting, July 26th, 1892. The members of this Committee were Drs. Broadbent, Clouston, Gairdner, Needham (Chairman), Mr. Langley (Cambridge), Drs. Kingsbury, Conolly Norman, Hack Tuke, Outterson Wood (Hon. Sec.), and Yellowlees.*

The terms of reference are given at the heading of the Report.

* The late Dr. Ross was originally a member of the Committee. An interim Report was presented to the Annual Meeting at Bournemouth.

Report of the Committee appointed to investigate the Nature of the Phenomena of Hypnotism ; its Value as a Therapeutic Agent ; and the Propriety of Using it.

The Committee, having completed such investigation of Hypnotism as time has permitted, have to report that they have satisfied themselves of the genuineness of the hypnotic state. No phenomena which have come under their observation, however, lend support to the theory of "animal magnetism."

Test experiments which have been carried out by members of the Committee have shown that this condition is attended by mental and physical phenomena, and that these differ widely in different cases.

Among the mental phenomena are altered consciousness, temporary limitation of will power, increased receptivity of suggestion from without, sometimes to the extent of producing passing delusions, illusions and hallucinations, an exalted condition of the attention, and post-hypnotic suggestions.

Among the physical phenomena are vascular changes (such as flushing of the face and altered pulse rate), deepening of the respirations, increased frequency of deglutition, slight muscular tremors, inability to control suggested movements, altered muscular sense, anæsthesia, modified power of muscular contraction, catalepsy, and rigidity, often intense. It must, however, be understood that all these mental and physical phenomena are rarely present in any one case. The Committee take this opportunity of pointing out that the term hypnotism is somewhat misleading, inasmuch as sleep, as ordinarily understood, is not necessarily present.

The Committee are of opinion that as a therapeutic agent hypnotism is frequently effective in relieving pain, procuring sleep, and alleviating many functional ailments. As to its permanent efficacy in the treatment of drunkenness, the evidence before the Committee is encouraging, but not conclusive.

Dangers in the use of hypnotism may arise from want of knowledge, carelessness or intentional abuse, or from the too continuous repetition of suggestions in unsuitable cases.

The Committee are of opinion that when used for therapeutic purposes, its employment should be confined to qualified medical men, and that under no circumstances should female patients be hypnotized except in the presence of a relative or a person of their own sex.

In conclusion, the Committee desire to express their strong disapprobation of public exhibitions of hypnotic phenomena, and hope that some legal restriction will be placed upon them.

(Signed) F. NEEDHAM, Chairman.
T. OUTTERSON WOOD, Hon. Sec.

This Report was relegated to the Committee by the B.M.A. Meeting, in order that they might prepare a fuller statement of the cases which they had observed, and upon which their conclusions were based.

PART II.—REVIEWS.

The Forty-Sixth Report of the Commissioners in Lunacy, June, 1892.

The occurrence of the decennial census last year lends an additional interest to the statistical summaries appended to the Annual Report of the Commissioners in Lunacy for the year 1891. Unfortunately the census returns are not yet complete, so that a computation of the total number of insane persons in England and Wales, certified and uncertified, cannot be utilized until next year. The Report, however, deals with many points of statistical interest, but before passing to a consideration of these it would be well to draw attention to some remarks of importance. The Commissioners speak of the satisfactory condition and good management of asylums generally, alluding principally to the old grievance of overcrowding and the sanitary defects existing in some of the county and borough institutions. As regards the insufficiency of accommodation they pertinently remark that County Councils have not been found to be more prompt than their predecessors in adopting measures of relief; no fewer than thirty out of the sixty-seven county and borough asylums appear to be overcrowded. Defective sanitation appears to have originated cases of diarrhœa, dysenteric diarrhœa, typhoid fever and erysipelas, and in some the ordinary lack of precautionary measures appears certainly deserving of severe censure.

The suicides in county and borough asylums number only eight. This, as the Commissioners remark, is a decided improvement on the returns of previous years, and indicative

of the increased vigilance exercised in the care of the insane. Misadventure, other than suicides, accounts for thirty deaths during the past year; eight of these died with broken ribs, five died of choking, and five epileptics were suffocated, two were drowned, one, a general paralytic, died from self-mutilation, he having torn his testicles away, one died after rupture of the bladder, the result of some violent external injury, one, an epileptic, broke his neck by a fall out of bed, one died from heart disease "under circumstances rather suggestive of suicide," one from burns accidentally self-inflicted, one from peritonitis following rupture of the small intestines (the patient having pulled a heavy table on to his abdomen in a scuffle with an attendant); one unfortunate death by scalding with hot water is recorded through the malposition of the hot water tap in the bath-room, one died of an abscess of the liver caused by a needle which she had run into her body, and one, an epileptic, died from fracture of the occipital bone after a fall in a fit.

With the Commissioners' remarks on Registered Hospitals we cordially agree.

Notwithstanding recent legislation of a permissive character, County and Borough Councils and Asylum Committees still exhibit much reluctance to provide separate accommodation for private patients, that provision being in the nature of a pecuniary speculation. The county of London alone has moved in the matter. Adequate accommodation for the insane of the middle class has, therefore, yet to be supplied. Benevolence in the direction of hospitals for the insane who are above pauperism, has, apparently, died out. No addition has been recently made to the number of the hospitals originally founded for their care and treatment. Including the Royal India Asylum, shortly to be closed, they remain at 18. Three are for idiots only. Subscriptions and bequests to these institutions have almost ceased, and their finances will not, it seems, now admit of any considerable extension of their charity. It may, however, be a question whether some of them, while making large yearly profits, expend quite as much as they might towards additional accommodation suitable for the patients who were the chief object of the founders' benevolence. For this class of the insane not many licensed houses are open, and generally they are associated there with paupers to some extent.

Two suicides in hospitals are recorded, one by hanging, and one (by a boarder) by swallowing three or four ounces of

carbolic lotion (1 in 10); another death from carbolic acid poisoning by an idiot is mentioned.

The number of licensed houses remains at 86 (misprinted 88 in the Report). The number of patients has increased from 4,511 to 4,629, an increase of 118 compared with the decrease of 36 recorded in last year's Report. Their management has been generally satisfactory, and no suicides or deaths attended with injuries have been recorded in Metropolitan houses, evidence, as the Commissioners remark, of the care taken for the well-being of the patients in these establishments. The suicides in provincial houses were three in number, one by hanging, one by drowning, and one through cut throat. Deaths by misadventure included two from fractured ribs, two from choking, and one suffocated in a fit.

Single patients do not appear to increase in number as was anticipated when the Lunacy Act, 1890, was passed; the number remains almost stationary, the totals for the past six years being 452, 436, 442, 446, 440, and 447. There seems, however, an inclination on the part of committees to employ single in preference to asylum care, as the number of persons found lunatic by inquisition and placed under single care has been gradually rising from 120 in 1888 to 150 last year.

Of the lunatics in workhouses the total number 16,898 shows a decrease of 92 as compared with the number last year. The lunacy legislation in 1891 comprised in the amendment of the Lunacy Act of 1890 dealt with matters relating mainly to local government and pauper lunatics, touching also on points affecting private patients. By it the jurisdiction of the judicial authority ordering the reception of a private patient has been enlarged, and he is empowered to transfer a petition to some other judicial authority, and if an order should be made by a justice who is not a judicial authority it becomes valid if approved within fourteen days after its date by a judicial authority. Provision is made for the removal of private patients who become paupers in hospitals and licensed houses, under an order of a justice, to an institution for lunatics into which they could be received as pauper patients, and for the repayment of the expenses of their removal by the authority liable for their maintenance. The other clauses of importance relate to the notification to the Commissioners of reception of boarders in provincial houses, and the extension of location to travelling in England during leave of absence of private patients.

The changes in the Commission are shortly alluded to, including Mr. Salt's resignation of the Chairmanship of the Board. It is not likely anyone will be found worthy to fill a chair once filled by Lord Shaftesbury. We can heartily congratulate the Commissioners on the accession to their number of Dr. Needham, appointed to the post rendered vacant by the resignation of Dr. Clifford Allbutt.

Turning to the statistical portions of the Report we observe that the number of insane under official cognizance in England and Wales on January 1st, 1892, was 87,848, being an increase of 1,053 on the returns of the previous year, and a decennial increase of 9,320. They were classified and distributed (see table on p. 582).

On comparing this table with that of last year we find an increase in the number of insane in county and borough asylums of 1,058, in registered hospitals of 76, in Metropolitan licensed houses of 58, in provincial licensed houses of 60, in the Criminal Asylum, Broadmoor, of 15, in Metropolitan district asylums of 208, in private single patients of 7, and a diminution in the number in naval and military hospitals of 12, in ordinary workhouses of 300, and in out-door paupers of 107; or in other words an increase of 73 in the private class, an increase of 954 in the pauper class, and of 26 in criminal patients. Private patients have again increased in county and borough asylums by 26, in registered hospitals by 80, and under single care by seven, while they have decreased in licensed houses generally by 18, and in naval and military hospitals by 22. Pauper patients have increased in county and borough asylums by 1,023, in licensed houses by 136, and in Metropolitan district asylums by 208, but they have decreased in registered hospitals by six, in ordinary workhouses by 300, and as out-door paupers by 107.

As regards the further decrease of 300 in the insane in ordinary workhouses, we have to observe that it is in some measure due to the removal to asylums of patients not unfit for workhouse care, but for whom there is in workhouses a deficiency of accommodation and an indisposition on the part of guardians to provide it by building. We have also not unfrequently, in visiting workhouses, to draw attention to the fact that a certain number of imbeciles or weak-minded inmates are not allowed to discharge themselves, but are not classed as of unsound mind. To these combined causes we mainly attribute the decrease on the 1st of January last, as compared with the same date in 1891, in the reported insane in ordinary workhouses.

WHERE MAINTAINED on 1st January, 1892.	PRIVATE.			PAUPER.			CRIMINAL.			TOTAL.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
In County and Borough Asylums	445	558	1,003	24,366	30,048	54,414	69	23	92	24,880	30,629	55,509
In Registered Hospitals ...	1,840	1,686	3,526	143	92	235	2	1	3	1,985	1,779	3,764
In Licensed Houses :—												
Metropolitan	806	833	1,639	374	573	947	...	...	...	1,180	1,406	2,586
Provincial	592	810	1,402	276	362	638	...	...	...	871	1,172	2,043
In Naval and Military Hospitals, and Royal India Asylum	240	16	256	...	...	...	...	...	...	240	16	256
In Original Lunatic Asylum (Broadmoor) ... ..	...	...	...	...	...	...	482	157	639	482	157	639
In Workhouses :—												
Ordinary Workhouses ... ..	...	...	...	4,687	6,272	10,959	...	...	...	4,687	6,272	10,959
Metropolitan District Asylums ... ..	...	...	...	2,841	3,098	5,939	...	...	...	2,841	3,098	5,939
Private Single Patients	195	252	447	...	...	...	...	...	...	195	252	447
Out-door Paupers ... ..	...	...	...	2,269	3,437	5,706	...	...	...	2,269	3,437	5,706
TOTAL	4,118	4,155	8,273	34,956	43,882	78,838	556	181	737	39,630	48,218	87,848

Tables showing the causes of insanity, ages, occupations, conditions as to marriage, etc., are not included in this Report, and will be published quinquennially.

Taking the table showing the number, classification, and distribution of the reported insane with the annual increase or decrease of patients, we find that, for the decennial period 1882-1892, the average rate of increase has been 1,300.

The population having increased during the decade between the two censuses at a rate slightly below that of the official calculations, some change in the ratio per 10,000 of reported insane in England and Wales might have been expected. In 1882 and 1892, the two years after which the basis of calculation was corrected by a census, the ratios were respectively 28·34 and 29·38, an increase of 1·54, but this increase is not the true decennial one, as the ratio leapt up in 1884 to 29·17, still further increased to 29·28 in 1885, diminished to 29·12 in 1886, and to 29·07 in 1887, increased during the three succeeding years, reaching its climax in 1890, when it was 29·92. The average ratio for the last decade was 29·41; for the preceding ten years, 27·10.

Interesting also is the ratio per 10,000 to the general population of the annual admissions into all asylums, etc., as well as to single care. Here, also, the actual population, corrected by the census, comes into effect, and the ratio of admissions is higher than last year, being 5·74, as compared with 5·63 for last year.

Regarding these two sets of ratios, a casual glance would appear to indicate an increase in the number of the insane; but it must be remembered that the first set (that of the reported insane) deals with the accumulation of a certain number of incurable cases in asylums, etc., whose period of life duration approximates closely to that of the sane (those incurable cases that do survive, having a death-rate nearly equal to the sane who survive at the same age-periods, *vide infra*), and this must necessarily affect the ratio; again, as the Commissioners point out in their Report, the admissions during the last two years have been swelled by the reception from workhouses of a considerable number of patients previously classed therein as of unsound mind, and the latter ratio, therefore, does not indicate the material increase of fresh cases of insanity to the population. Looking back to previous returns again, we shall find that the ratio of occurring lunacy, though it has shown marked

fluctuations at times, is fairly constant, when allowance is made for the increase of population. It is only during the last two years that any material increase is noticeable, and this may also be explained by the stimulus to official certification by the new Lunacy Act; a slight decrease in the ratio after a few years, when the novelty of the enactment has worn off somewhat and the keenness, so to speak, of its exercise is less prominent, will cause no surprise. We have, therefore, three explanations of this apparent increase—accumulation, transfer from workhouses, and the working of the Lunacy Act, 1891. To obtain an accurate idea of the real ratio of occurring insanity to the general population and to prove that insanity is not increasing by leaps and bounds, we must deal only with first attacks; transfers, recurring cases, and readmissions during the year necessarily falsify this ratio. This, for the decennial period 1881-1890 inclusive, was 3·37 per 10,000, in the ten years 1878-1887 it was 3·32, and for successive periods of five years, 1881-1885 and 1886-1890, it was respectively 3·29 and 3·46.*

The ratio per cent. of pauper lunatics, idiots, etc., to paupers of all classes, has further risen from 9·98 last year to 10·35 this, but the total number of paupers of all classes has diminished in the same periods from 2·68 to 2·59, and though this diminution is not proportional to the rational increase of pauper lunatics, it is another proof that the proportional rise in the number of officially-recorded insane is not due to a great increase of occurring lunacy in proportion to the population.

The number of patients under detention in asylums, registered hospitals, etc., on the 1st of January, 1891, was 63,991, an increase of 1,562 on that of last year. The following table shows the increase or diminution under the various methods of care:—

	County and Borough Asylums.	Registered Hospitals.	Metropolitan Licensed Houses.	Provincial Licensed Houses.	Naval and Military Hospitals.	Criminal Asylum (Broadmoor).	Single Care.	Idiot Establishments.
Increase	1,514	59	—	—	8	4	—	27
Diminution...	—	—	39	5	—	—	6	—

* See Art. "Statistics" in Tuke's "Dictionary of Psychological Medicine," from which these numbers are taken.

The admissions during the year 1891 (exclusive of transfers and fresh reception orders due to lapsing of previous reception orders) may also thus be tabulated:—

	County and Borough Asylums.	Registered Hospitals.	Metropolitan Licensed Houses.	Provincial Licensed Houses.	Naval and Military Hospitals.	Criminal Asylum (Broadmoor).	Single Care.	Idiot Establishments.
Increase	265	—	82	78	—	—	7	4
Diminution...	—	37	—	—	4	6	—	—

The average number of admissions for the decennial period 1882-1891 inclusive being 14,859·2.

The difficulties in the working of the Act are demonstrated by the number of fresh reception orders rendered necessary by the expiration of previous reception orders. Thus, in county and borough asylums fresh certificates were needed for 263 cases, in registered hospitals (excluding idiot establishments) for 15, in Metropolitan licensed houses for 26, in provincial licensed houses for 40, and in private single care for 9, or a total of 353.

The discharges during the year as “recovered” numbered 6,846, an increase of 596 on last year; increase of such discharges being shown in county and borough asylums (470), registered hospitals (9), Metropolitan licensed houses (63), provincial licensed houses (54), and the criminal asylum, Broadmoor (7), and a diminution in naval and military hospitals (4), and private single patients (3). There have been no discharges recorded as “recovered” of patients in idiot establishments for the last three years. Other discharges (those not recovered and expired reception orders) numbered 4,473.

The deaths during the year numbered 6,484, an increase on the previous year of 63, and a decennial increase of 1,699. The average number of deaths per annum, for the decade 1882-1891, was 5,671·1. The increase occurred in county and borough asylums (68), in Metropolitan licensed houses (1), in provincial licensed houses (21), and in idiot establishments (12), while the diminution occurred in registered hospitals (10), in military and naval hospitals (6), in the criminal asylum, Broadmoor (15), and in private single patients (8).

The average daily number resident in various asylums,

etc., shows this year a gross increase of 1,383 on last year, compared with the gross increase of 1,458 and of 1,922 of last year and the year before on previous years. It is interesting to note that during the decade the number has steadily increased yearly in county and borough asylums, while the same applies to registered hospitals, the fluctuation occurring mainly in private asylums, both Metropolitan and provincial, in the latter of which there has been a gradual diminution from 1882 (2,020) until 1887 (1,563), since which time it has again risen (to 1,790 this year).

The proportion per cent. of stated recoveries to the admissions rose to 41·04, the average for the decennial period being 39·71. In county and borough asylums the ratio per cent. was 41·28, a decennial average of 39·87; the respective numbers in registered hospitals were 49·18 and 46·58; in licensed houses generally, 36·33 and 36·10; in naval and military hospitals, 46·67 and 57·23; in the criminal asylum (Broadmoor), 33·33 and 13·67; and among private single patients, 13·33 and 14·15.

Two views of the death-rate occurring among the officially-recognized insane may this year be taken, one being the usual tabulated statement, which shows the proportion per cent. of deaths to the daily average number resident, and the other a table compiled for the first time this year, giving the various ratios per 1,000 to the number of patients living on the 31st December, 1890, and separated according to their ages, comparison being at the same time made with the ratio per 1,000 of deaths to the whole population during the year 1890 (estimated to the middle of the year). Taking, for the sake of relative estimation, the totals of the two tables, we find the following ratios per 1,000 :—

	Ratios.	
	To daily average number resident.	To patients living December 31st, 1890.
County and Borough Asylums.....	104·1	105·9
Registered Hospitals (not Idiot Establishments)	63·2	71·1
Metropolitan Licensed Houses.....	131·7	135·2
Provincial Licensed Houses	93·9	89·5
Naval and Military Hospitals (males only) ...	20·6 (males only)	38·8
Idiot Establishments.....	40·5	35·8

A comparison of these columns will show that variations occur in each case, though they approximate fairly well towards each other; the total proportion of deaths per cent. is in the first method 10·02, in the second 10·20.

Comparing the insane death-rate at various ages with the death-rate among the general population for the same period and at the same ages, we obtain the following table :—

Age Periods.	Death-rate per 1,000 Insane Population.	Death-rate per 1,000 Sane Population.	Proportion of Deaths, Sane to Insane.
Under 5 {	—	Males 57·4 Females 48·8 } 52·9	—
5—9 {	Males 51·4 Females 52·9 } 51·7	Males 4·8 Females 4·8 } 4·8	1 to 10·7
10—14 {	Males 50·5 Females 46·6 } 48·5	Males 2·9 Females 3·0 } 2·9	1 to 16·7
15—19 {	Males 64·6 Females 43·3 } 53·9	Males 4·4 Females 4·3 } 4·3	1 to 12·5
20—24 {	Males 60·8 Females 61·0 } 60·9	Males 5·8 Females 5·3 } 5·5	1 to 11·0
25—34 {	Males 83·8 Females 63·8 } 78·8	Males 8·2 Females 7·3 } 7·7	1 to 10·2
35—44 {	Males 109·8 Females 60·5 } 85·1	Males 13·5 Females 10·9 } 12·2	1 to 6·9
45—54 {	Males 116·1 Females 67·1 } 91·9	Males 22·4 Females 16·2 } 19·3	1 to 4·7
55—64 {	Males 138·2 Females 88·8 } 113·6	Males 37·1 Females 30·0 } 23·5	1 to 3·3
65—74 {	Males 214·2 Females 156·8 } 185·5	Males 77·2 Females 67·2 } 72·2	1 to 2·7
75—84 {	Males 442·0 Females 294·1 } 368·0	Males 153·1 Females 141·1 } 147·1	1 to 2·5
85 and upwards {	Males 755·6 Females 443·4 } 599·5	Males 315·0 Females 287·9 } 301·4	1 to 1·9

The death-rate per 1,000 of the whole insane population being 102·0 and of the sane population 19·5, or a proportion of sane to insane deaths of 1 to 5·2. It will be seen that the rate of insane mortality in each age-period varies, that compared with the true death-rate it is highest at the earliest ages and approximates more nearly to the sane mortality rate as age advances, so that from 65 years of age and upwards the insane death-rate is only double the true sane death-rate. This explains the accumulation of elderly cases in asylums, and in a measure the apparent increase of occurring insanity. Much that is of interest may be deduced from these tables, but space will not permit us to enlarge thereon. We will therefore draw attention only to the re-

maining important items of the Report. A table which appears but once in every ten years (after each census) is given, setting forth the ratios of pauper lunatics to the population and of pauper lunatics to paupers for the different Union Counties in England and Wales. Statistics of voluntary boarders are given for the first time, and it appears from the Table that the proportion of cases admitted as such, and which have subsequently to be certified, as being insane and so unfit to remain as boarders, is somewhat high. Of 243 boarders, 66, or 27·1 per cent., were certified as patients and either detained in the institution or sent to other asylums.

The whole of this interesting Report is worthy of close study, not only by the alienist, but also by the statistician and political economist, and the Commissioners deserve the thanks of the community at large for their treatment of a vast and difficult subject.

Anleitung beim Studium des Baues der Nervösen Central-Organen im gesunden und kranken Zustande. Von Dr. HEINRICH OBERSTEINER, K.K.A.O., Prof. a.d Universität zu Wien. Leipzig und Wien, Franz Deuticke, 1892. Second Edition, pp. 498. 184 wood engravings.

As the first edition of this work was reviewed in this Journal for July, 1888, it will suffice to point out in what respects this differs from the former edition.

The present edition has been considerably enlarged, more than 100 pages having been added. To the chapter on the methods of investigation, special revision has been given, and we have the various modifications of Golgi's silver and sublimate methods, as improved by Ramon of Cajal, and others. In the section on morphology, an entirely new chapter has been written on the weight and specific gravity of the brain. In Section IV., on the structure of the spinal cord, the pathological changes are described in detail, in place of being briefly mentioned, and this part takes up nine pages.

With regard to the illustrations, which formed such an important feature in the first edition, certain alterations have been made, and the drawings are now put on the same page with the text, which will prevent much inconvenience, and the explanatory text is arranged in alphabetical order.

Of the illustrations, two are quite new, and in several cases new figures have been substituted in place of the old ones; this is especially the case in figs. 133 to 136, where enlarged drawings of sections, stained by Pal's method, take the place of smaller drawings of carmine sections; fig. 136 is an especially good drawing of a sagittal section of the medulla and pons, stained by Pal's method. The value and usefulness of this edition has been much enhanced by appending a bibliographical list to the end of each chapter.

It would be impossible to mention all the additions to the work, but it will suffice to say that, in all parts of it, reference is made to the latest works on the subject. The book is purely anatomical, and no attempt has been made to introduce any of the recent physiological results obtained by such experiments as electrical stimulation of the cortex or internal capsule. In spite of this, the work has increased by 100 pages, a matter which the author himself does not think one of congratulation, but which was necessary to increase the practical worth of the book.

It will thus be seen that the second edition fully keeps up the very high reputation which the first edition enjoyed as a standard work on the anatomy of the nervous system, and we can confidently predict that it will prove as valuable as ever to the workers in mental and nervous diseases.

Pathologie und Therapie der Psychischen Krankheiten für Aerzte und Studierende: Fünfte Auflage. Gänzlich umgearbeitet und erweitert. Von Dr. WILLIBALD LEVINSTEIN-SCHLEGEL. Berlin, Verlag von August Hirschwald. 1892.

We have always looked upon Griesinger as a classic, and, as such, not to be reproduced, but we have evidence in the two big volumes before us that some of the author's countrymen and his relations think otherwise; therefore we have to put aside any sentiment of idolatry for the first original editions, and look upon the present one as Griesinger brought up to the present date. It has always seemed to us difficult for authors who write books together, but this is comparatively easy when compared with the task of bringing the authority of one generation into line with the present. The thoughts of yesterday are not those of to-day, and the alterations of the ideas of the past are best

nected by not altering the old records. We can mark progress by retaining the mile-stones that we passed and not breaking them up for present use. We have, however, to acknowledge most painstaking editing, yet the result is not Griesinger. We shall, in more detail, refer to some of the many points in which the last edition differs from its predecessors. We cannot help comparing the two books in psychological medicine which have recently appeared, and which will make memorable the year 1892.

There is this big book by Levinstein-Schlegel, in which the opinions of many writers are collected by one author and grafted on to an old stock, and the other the "Dictionary" of Dr. Hack Tuke, in which the different writers are allowed to express themselves in their own words and are held responsible for their separate contributions. The two books are, of course, meant to serve somewhat different ends—one being a manual, the other a reference book—yet we are inclined to think that it would have been better, and would have given Dr. Levinstein greater scope for his original work and observations, if he had written a book of his own and left the classic writings of his relative as they were.

The general arrangement of the first part of the book is similar to that followed in the earlier editions, though the metaphysical part is made less of, and this we consider to be a distinct gain, for formerly this was not full enough to be satisfactory, and left the student with a general feeling of unsatisfiedness. In place of this, the present editor gives briefly the outlines of the established relations between brain and mind, and naturally refers to the principle of localization of brain functions.

A historical chapter is introduced, and we have an epitome of the history of the treatment of the insane in the classical times, in the middle-age, and in more recent periods. This part of the subject is completed by the history of the development of the present methods of treatment, which is given near the end of the second volume. In tracing the evolution of the more humane methods of treatment, the palm is given to England, the York Retreat, among others, being looked upon as the foci whence spread the benign influence.

After this historical sketch, the chapter on preliminary anatomical observation and that on the preliminary psychopathological conditions of the original are omitted. A fairly satisfactory bibliography is supplied, though we

notice our author only quotes those English writers in any detail whose works have been translated into German.

In the chapter on the elementary disorders of mind, we have the introduction of Greek terms, which are not very familiar to English alienists. Thus, disorder of feeling is called *parathymia*, while disorder of thought is *paranoia*, *parabulia* connoting disorder of will. Each group placed under these headings is subdivided in a very careful and methodical manner. We had better take one of the groups as an example of the method pursued. Under *paranoia*, or disorder of thought, are considered anomalies of perception, disorders of rapidity of conduction of thought, disorders of association and apprehension. Imperative or compelling thoughts are here referred to also; then follow disorders of perception and of thought combined. Disorders of consciousness follow, and the anomalies of memory, of fancy, and imagination, and lastly, under this head, we have a very full study of the sensory disorders (hallucinations and illusions). This is not all, for each of the above divisions is again subdivided; in fact, the process of grouping and subdividing is rather confusing, and one needs to be constantly referring back to see exactly where one is in the scheme. Then, as in the former edition, the symptoms which may occur in insanity are studied before the clinical entities are considered. We next come across part of the old work in the analogies of insanity and the criterion of insanity. These chapters are so eminently in Griesinger's best mode that we are glad to meet them again but little altered. The methods of investigating the evidences of mental and nervous disorder are given at length. Here we have many general questions, such as heredity and the like. In these questions the lights of later research have been added to the author's own experience.

In the second part of the book we have the *ætiology* considered fully, with the pathogeny of insanity, and, to our thinking, this part of the original work was specially valuable, and probably led more of the present generation of alienist physicians to think on the subject than the work of almost any other writer, so we welcome the old tale once more in much its old form. The forms of mental disorder are then investigated, beginning with the more partial and passing to the more general psychoses. In this place once more our attention is drawn to the use of uncommon Greek words, which are certainly not familiar in medicine in

England. We are used to melancholia, but though dysthymia may be Hippocratic, we hardly need its reintroduction; again, hyperthemia is used for states of mental excitement, and thus one other meaning is given to this word, which already has enough to answer for.

Paranoias are treated as a very extensive class, and are fully discussed and divided. The word is used to cover too many and various forms of mental disorder. The paranoias, according to Dr. Levinstein-Schlegel, may be divided into those with depressive and those with expansive ideas and feelings, the former including the insanity of watching, of following, and of sexual persecution; the expansive class contains the cases of monomania, of grandeur, and the insanity of litigation. Acute hallucinational and confusional insanity are here grouped.

Passing from the partial mental disorders, the general insanities are considered, and the word paraphrenia is placed fully under contribution. We have a description of a case of ordinary insanity, with a depressive stage, followed by one of excitement, followed again by mental deterioration as general paraphrenia. General paralysis of the insane is treated as paraphrenia paralytica progressiva; then, thirdly, comes paraphrenia katatonica; fourthly, we have paraphrenia hereditaria, and here we meet with the varieties of recurrent, circular, and cyclical insanities. The second great group of general or complete insanities is called that of the reflex or consensual psychoses. Here we find transitory mania, the insanities of menstruation, and disorders of the reproductive organs in women, as well as the mental disorders which follow some abnormal bodily states. This division also includes a detailed account of the relationships between epilepsy and insanity. Following the partial and general psychoses, we have the insanities of chemical and organic poisoning, very full descriptions being given of the disorders due to morphia, cocaine, chloral, sulphonal, coal, gas, lead, and alcohol. As depending on organic poisons, we have puerperal insanity, acute delirious insanity, and brain syphilis. Though this group seems to include very different subjects, yet they are linked together, and there is no harm likely to arise from this generalization. In each of these subclasses there are points which we cannot agree with, but yet they express widely accepted views.

The section on brain syphilis is written in a non-partisan way, which seems to us to be worth following by others.

Psycho-neuroses, the functional disorders, are next described; these include hysteria, neurasthenia, and hypochondria. These disorders are divided and subdivided, arranged and grouped in the most refined way, much of the work being certainly independent of anything Griesinger did or thought of. Neurasthenia had not then established itself as a far-spreading malady. We find in most of the Continental writers a great tendency to elaborate the symptoms of this state; we ourselves believe that, like hysteria, neurasthenia is an aggregate of indefinite symptoms, which are found to occur more and more frequently in the states of artificial life, and that, though it may be well to have a name for such groups of symptoms, yet it will be injurious if the name is taken to represent any very definite disease.

The following division of the book contains very interesting studies of the insanities of the critical periods of life, the ill-developing or non-developing mind as seen in idiocy, and the unstable mind of adolescence. The disorders of change of life and senility are clearly put. Prognosis and treatment naturally come after the more theoretical part of the subject has been considered, and the book is completed by consideration of asylums and their management. The burning question of non-restraint is judicially handled, the writer saying, truly, that "Es (non-restraint) ist erst in einer vollkommen wohl geordneten Anstalt die Rede."

And now we must leave this big book to our readers, promising them stores of information and many hints as to classification and the like. We ourselves leave the book with a double feeling; first, that it is not Griesinger, and, secondly, that yet it is a worthy monument to his fame, as being the painstaking work of a pupil and a relative, one who was anxious to keep fresh the memory of the great teacher.

Ptomaines and other Animal Alkaloids, their Detection, Separation, and Clinical Features. By A. C. FARQUHARSON, M.D., D.P.H., Senior Assistant Medical Officer, County Asylum, Lichfield. 8vo. 170 pp.

In this little book the author has collected together, in a very careful and succinct manner, the main facts which have been investigated concerning the animal alkaloids. The probability of toxic substances playing an important part in

the causation of acute mental disorders has recently been the subject of discussion in Austria, and is of great interest to all alienists. Chemistry has to some extent superseded bacteriological research in the solution of pathological problems. Organisms have now been discovered in connection with various diseases, but the development of accompanying products as a result of their vitality are, at the present time, giving a field for enquiry, to which much attention is being bestowed. Alkaloidal bodies resembling those produced by the action of bacteria in the decomposition of organic matter have recently been obtained from the tissues and fluids of animals, not only in pathological conditions, but also in apparent health. They appear to be the necessary products of vital functions resulting from metabolism, and if formed in excess, or if not sufficiently eliminated, produce some alteration in the blood, and exercise an injurious influence on the nervous centres. The same result may be obtained during the process of digestion from changes occurring in the intestine with formation of alkaloids, which, when excretion is seriously diminished, may be in some degree absorbed. The evil effects of constipation are too well known, especially in mental disease, and the author has reported several cases of melancholia presenting symptoms of physical debility and associated with accumulations in the bowels, which have recovered through the effective agency of purgation systematically carried out.

The different methods of alkaloidal extraction and their tests are fully given, together with their general properties and action. In this country insufficient attention has hitherto been paid to these bodies from which so much light is forthcoming. The literature is scarce and scattered about in different periodicals. Dr. Farquharson's *rèsumé* is an excellent exposition of the subject so far as it is known up to the present time, and will be useful to all engaged in this branch of medical research.

Des Troubles du Langage chez les Aliénés. Par J. SÉGLAS, Médecin Suppléant de la Salpêtrière. Paris, 1892.

This is one volume of a series, the "Bibliothèque Médicale," of which several have been published. Others are promised, one being "Les Troubles de la Mémoire," by P. Sollier.

The author is already favourably known by his contributions to psychological medicine. In this treatise he commences with the development of language in idiots and imbeciles. He then proceeds to consider the disorders of language among the insane, commencing with those which occur from intellectual derangement along with the normal state of the instrument (*dyslogie*). Under this head are considered modifications in the rapidity of speech, mutism, changes in form, as the timbre of the voice, accentuation and verbigeration, *paralogia*, *embololalie*, *pleonasm*s, *echolalie*, constant punning, emotional language, stammering. Such are the main examples of *dyslogia*. The next group of disorders of spoken language comprises those which result from derangement of the organ itself (*dysphasia*). Such are *aphasia*, verbal amnesia, and sensory verbal hallucinations. Many pages are devoted to them.

The third group includes disorders of speech (*dyslalie*), comprising congenital or accidental malformations, speech disorders in general paralysis, and spasmodic affections.

Written language is the subject of the second great division of the work, and is similarly divided into affections which spring from intellectual disorder with integrity of the linguistic function, and those which arise from its abnormal condition (*dysgraphia*). Under the first, the modifications of writing are evidenced by rapidity or hesitation, the amount and general aspect of the writing, the repetition of words, stereotyped formulas, omission of letters, etc. Underlined letters are not overlooked. Then come disorders of writing arising out of the disordered linguistic function. These embrace organic and functional *dysgraphia* and involuntary and unconscious writing. The writing of general paralytics is necessarily important.

The last and third division has reference to mimetic language, whether accompanied by the various causes which may modify mimicry, independently of intellectual disorder, or not. There is a mimicry with a state of repose and with expression of the features. Lastly, under this head there are perversions, including psycho-motor trouble, systematized and automatic movements, maniacal and melancholy agitation, motor impulses, inco-ordination, *katatonia*, unconscious and involuntary movements.

The foregoing rapid sketch of the scope of Dr. Ségla's work will indicate the ground over which he travels. It is remarkable that so few have occupied themselves with this

study, except in the case of general paralysis. It is, however, full of interest, and will well repay the student of psychological medicine. The book deserves success and we think that it will obtain it.

Report of the Commissioners appointed to enquire into the Prison and Reformatory System of Ontario. Toronto, 1891.

This Report contains a large amount of valuable information, some of which bears upon the insane. Many pages are occupied with evidence given before the Ontario Prison Reform Commissioners. Among those who were examined was Dr. Bucke, the Medical Superintendent of the London Asylum (Ont.). He urged that there was a class born largely devoid of moral nature; that the criminal is a defective individual, and that heredity, as he said, governs everything. Asked as to the best treatment of criminality in children, he declared himself opposed to all punishment of any criminal whatever. "I look upon all punishment as simply revenge, neither more nor less than a barbarous thing. I am perfectly certain it does harm to the people who endure it, to the people who inflict it, and it does harm to the community in which the system exists. In the second place, I would recommend that the rights of the civilized portion of the community should be protected against the savage. It is just simply this, that we law-abiding citizens are more civilized than the criminals, and those who are civilized have a right to protection from the savages. I would not punish savages any more than I would punish animals, but they should be prevented from the perpetuation of their degraded race, and I would try to prevent that as far as possible."

Dr. Bucke expressed himself strongly against the immigration of a certain class. "There are associations formed in England for bringing out to Canada what are called gutter children from the slums of England, Scotland, and Ireland. Thousands are brought out by these organizations. I think this is scandalous and outrageous. I think it is ridiculous for us to allow this to go on. These people might as well collect small-pox and typhoid fever and send them out. It is just adding so much more to the numbers for which we have to provide. These are not only savages, but they are nearly all diseased savages."

Dr. Bucke is a pessimist in regard to the reformation of

criminals. As to drunkards, he thinks that inebriate asylums have been a perfect failure. He would treat drunkenness as he would treat vagrancy and petty thieving.

After all, however, it does not appear right, on Dr. Bucke's own showing, to abstain from doing anything whatever to better the degenerate and their progeny. He was asked the following question:—"Some of the gaolers and other authorities tell us that crime is largely diminishing, that the world is made better by churches, Sunday Schools, by good influences, and better social conditions of various kinds. I suppose you would hardly agree with this?" The reply was, "Oh, yes; I do not see anything out of accord with anything I have stated to you to-day."

Our space will not admit of quotations from other witnesses; the whole book is of interest to anyone desirous of studying the great problem of the best mode of preventing crime and reforming criminals.

L'Education des Facultés Mentales. Par le Dr. J. J. NOGIER.
J. B. Baillière et Fils. Paris, 1892.

This brochure constitutes one of a series, "La Petite Bibliothèque Médicale." It is not necessary to do more than to indicate its general object, which is that of emphasizing the necessity of definite views and practice in educating the mental faculties, and of supplying for this purpose sufficient physiological knowledge to those engaged in imparting instruction to the young. He who teaches must no longer remain in ignorance of the fundamental mechanism of the faculties of the mind or the favourable or unfavourable conditions attaching to their development and action. These indispensable opinions of educational anthropology constitute the basis of this little book.

L'Hypnotisme, Ses rapports avec le Droit et la Thérapeutique de la Suggestion Mentale. Par ALBERT BONJEAN. Paris, 1892.

(See *Journal*, p. 123.)

This book, which is ably written, is a *résumé* of the opinions of several eminent continental psychologists on the question of hypnotism in relation to law. The author, in

the earlier pages, discusses the miracles of the New Testament in their relation to hypnotism, and tries to show how many of them may reasonably be put down to conditions known to exist during a state of hypnosis, and that some of them can be explained in that way. He then proceeds to refute the theory of Lafontaine as to the existence and power of the magnetic fluid. He declares that Lafontaine defends a hazardous theory, that that theory is contradicted by facts, that the fluid has never been demonstrated, and that suggestion is at the bottom of it.

“*Le magnétisme thérapeutique*,” which makes up the third chapter, contains the records of many interesting cases, and discusses the various opinions held on one view or other of certain phenomena into which it is unnecessary for us to enter. The fact remains that the therapeutic value of hypnotism is conclusively shown. As demonstrating the power of post-hypnotic suggestion, the production of a red spot on the arm of a girl by pure suggestion is described with startling clearness; the spot appeared as suggested ten minutes after the state of hypnosis had ceased and lasted several hours. Our author is inclined to think that “spiritualist mediums” are good examples of self-suggestion, and that they sometimes veritably believe they see and hear the spirits as subjective phenomena.

Of course he enters largely into the question of suggestion being made use of by unscrupulous persons for criminal purposes, and quotes eminent authorities for and against the attempts made to prove the possibility of demonstrating crimes committed under artificial circumstances. These laboratory experiments, as they have been called, must, for the present at any rate, be looked upon with an eye of caution, and certainly one’s feeling is against using hypnotism as a means of extracting evidence of his own crime from a criminal, when we know the power of suggestion might be unconsciously used unfairly and unjustly under such circumstances however safeguarded.

Another point which is discussed, and discussed in a clear and very interesting manner, is the power of a hypnotized person to resist the suggestion to do wrong.

The book is well worth perusal, and cannot fail to be of interest to those who have studied the subject.

Epitome of Mental Diseases, with the Present Methods of Certification of the Insane, etc., etc. By JAMES SHAW, M.D. Simpkin, Marshall Hamilton, Kent and Co. London, 1892.

This will be found to be a useful little book carefully prepared by the author, who modestly represents it as an introduction to the more comprehensive treatises and exhaustive monographs. It hardly admits of review, but we cannot allow it to pass through our hands without a friendly welcome and the expression of our appreciation of the pains taken by Dr. Shaw to prepare a handy reference book for students and practitioners. It will probably be criticized on the ground that so large a mass of different, and, to some extent, conflicting opinions from various alienists, at home and abroad, compressed into a small volume, bewilders rather than instructs; but without denying that the student may lose his way if not his head in the psychological labyrinth into which he is introduced, we would say in defence that the reader is expected to use the book merely as a help in studying the standard works on insanity, where he will be guided to more definite conclusions. If this is borne in mind, and the scope of this handbook as set forth by the writer himself is borne in mind, we do not think that there will be found much, if any, occasion for fault-finding. The authorities are carefully and conscientiously acknowledged.

PART III.—PSYCHOLOGICAL RETROSPECT.

1. *Dutch Retrospect.*

By DR. J. F. G. PIETERSON.

The Toxic Action of Sulphonal. DR. CAMILLO FUERST ("Nederlandsch Tijdschrift voor Geneeskunde Dij.," No. 1, July 2nd, 1892).

Dr. Koster draws attention to an article by Dr. Camillo Fuerst, in the "Internationale Klinische Rundschau," 1891, p. 1873, in which an account is given of certain cases in which administration of the usual dose of two grains of sulphonal was followed by toxic effects, and in some instances by death.

Breslauer, in the "Wiener Medizin. Blätter," 1891, No. 1, communicates some additional cases, five of which terminated fatally. Fuerst contributes instances noted by himself and others

bringing the total of hitherto described cases of sulphonal intoxication up to sixteen. We cannot follow all these cases closely here; the symptomatic analogies are fairly constant, while little light is thrown on the pathological and therapeutical action of the drug itself. In all the described cases the intoxication was preceded (or caused by?) obstinate constipation and diminution in the secretion of urine. Death resulted in those cases in which the use of sulphonal was persisted in. It does not appear evident from Fuerst's communication whether the constipation and oliguria was the result, or merely a coincidence in the use of the drug, or whether some sulphonal idiosyncrasy exists, the accumulation of this agent in the intestinal canal or elsewhere causing a sulphonal intoxication in certain subjects only. To a greater or less degree the following phenomena were noticed in each case:—

1. Muscular jerkings and tremors.
2. Nausea and retching.
3. A tendency to syncope and vertigo.
4. Rigors, with cold, dry skin.
5. The most characteristic symptoms observed were paretic conditions and ataxic phenomena in certain muscular groups, primarily in those of the lower extremities; difficulty in movement of the tongue.
6. Constipation and oliguria.
7. Exanthemata, brown patchy discoloration of the skin; small itching papulæ.
8. Diplopia, tinnitus aurium, scotomata.

The heart's action appears to have been unaffected, but the respiratory movements became, in the worst cases, weak and laboured. When the drug was discontinued and the intestinal canal was cleared with purgatives and enemata, recovery speedily ensued. Muscular spasms and slight paresis of the lower extremities persisted for as long as two weeks subsequently. Sulphonal may, however, be considered a perfectly harmless hypnotic so long as the peristaltic action of the intestinal canal, or the secretory action of the kidneys is not in abeyance, and it is therefore necessary, carefully, to observe the functions of these organs during exhibition of the drug.

The Size of Asylums. DR. VAN DEVENTER ("Psychiatrische Bladen," Deel x., Af. 2).

Dr. van Deventer considers, in an article, the disadvantages arising from the use of extensive asylum buildings, and the congregation of large bodies of insane. The question frequently occurs whether it will not become necessary to adopt a plan whereby asylums for cure and asylums for care could not be instituted. In the first named from one to three hundred patients might be accommodated, the incurable cases being gradually eliminated. The latter might be spread over some large area, preferably

in the form of a colony, and some twelve hundred patients might be associated in some useful farm work. Dr. v. d. Chijs in his recent report of the Zutphan Asylum also remarks as to the evils of large establishments for the insane, regarded as they are by the laity, not as hospitals for the cure of mental disease, but merely as conveniences for the concealment of what is socially obnoxious. Tellegen expresses the opinion that large asylums render careful observation and individual treatment of patients a matter of difficulty ("Psych. Bladen," D. viii., p. 189), while van Persijn ("Psych. Bladen," D. ix., p. 295, and D. viii., p. 153) considers that no asylum should contain more than six hundred patients for treatment, and declares himself unable to see how the chances of recovery can be increased by the close association of large bodies of curable and incurable insane. He further remarks: "For nearly forty years I have been engaged in the direction of Meerenberg Asylum, and I have watched its growth from a small establishment to its present proportions. But as the asylum has grown, so the number of medical officers has been increased, and the aim has always been to make each medical man as much as possible responsible for a certain section of the asylum. Meerenberg, therefore, may be said at the present moment to consist of six small asylums, at the head of each of which there is a medical man who has an independent sphere of activity." This quotation from the pen of one of the leaders of psychological medicine in Holland is worthy of observation as denoting the means that may be adopted for counteracting the evils of a large establishment. But next to a suitable disposition of buildings, good management and individual care and treatment, it is essential that there should be one organizing and superintending head to each establishment, and this condition cannot possibly be fulfilled in conjunction with the others in the over-grown and over-filled asylums of the present day. Quotations from a report by Professors Lombroso and Tamburini, recently issued at the instance of the Italian Minister for Home Affairs ("Centrl. f. Nervenheilk. und Psych.," 1892, p. 132), may here be made. They regard it as essential that into asylums for the insane those only should be admitted who evince symptoms of acute and recent insanity, that special establishments should be erected for the care of idiots, those suffering from alcoholism, pellagra, epilepsy, moral insanity, and chronic harmless dementia; that suitable cases should, with proper legal precautions, be put under the care of private individuals; that criminal asylums should be established for the care of adjudged criminal lunatics; that where these special establishments cannot be provided, every asylum should consist, in addition to the usual subdivisions, of a section for the recently admitted, a section for the convalescents, preferably some colony, a section for those insane criminal lunatics awaiting trial and who have not yet been adjudged

as criminal lunatics, an annexe for chronic demented and harmless insane; that in every asylum there should be at least one medical man to every one hundred patients and one attendant for every twelve insane.

Sollier ("Prog. Médical," No. 37, 1891), in reviewing the causes of the diminution in recovery rates in French asylums, attributes it, with Pierret, to the inadequate psychological treatment afforded by large institutions, the superintendents of which, engrossed in administrative work, find it impossible properly to supervise the mental and bodily treatment of every patient. A superintending physician for an asylum of from five hundred to six hundred patients cannot possibly keep himself even fairly well acquainted with each individual inmate. He considers it, therefore, necessary that separate asylums should be erected for the curable and incurable cases.

In Germany, too, there is a feeling that separate asylums for cure and care should be instituted.

By means such as these recent cases can be more adequately received and treated, and the constant complaint of over-crowding of asylums by chronic cases would in some measure be lessened.

A New Method of Determining the Relation of the Cerebral Convulsions and Fissures to the Outer Surface of the Scalp. Dr. C. WINKLER ("Nederlandsch Tijdschrift voor Geneeskunde," July 16, 1892.)

Dr. Winkler, in a long and able article, demonstrates the possibility of more accurately determining the localization of the different cerebral fissures and sutures. His method is an elaboration of that proposed by Müller,* who first divided each cranial hemisphere into areas having a mutual relationship to each other. For this purpose he took two fixed points, the glabella (or smooth prominence on the frontal bone just above the root of the nose) and the external occipital protuberance, and joined these by two lines, one over the arch of the skull and another running in a horizontal direction. Each line he divided into ten equal portions and united the corresponding points of the superior and inferior lines; each division of the skull thus formed was divided into sections, and each of these trephined—the circular portion of the cerebrum thus exposed was marked with some colouring material, and the topography of the convolutions was thus simply obtained. Fraser† adopted the same plan, taking the most prominent portion of the occiput as one fixed point and the glabella as the other, dividing his base lines into eight sections and subdividing these

* "Ueber die topographische Beziehungen des Hirns zum Schädeldach." Berlin., 1889.

† Alexr. Fraser, "A Guide to Operations on the Brain." Lond., 1890.

once more, trephining and employing photography for the recognition of the different cerebral landmarks. He showed that in fifty photographs the same convolutions were constantly to be found in the same sections and subsections. It was thus proved to be possible to find the various portions of the cerebrum by other means than by the somewhat uncertain method of taking the cranial sutures as fixed points. Winkler claims for his own process that it is far more accurate than that of Müller or Fraser. He adopts the system of drawing triangles between definite points, and proves that a fixed relationship exists between these superficial areas and the subjacent cerebral structures. It is difficult without the aid of the diagrams, which elucidate the text clearly, to demonstrate Winkler's process. Taking his fixed points at the glabella and the external occipital protuberance he draws, as Müller does, two lines, a sagittal, or one passing over the cranial dome, and a horizontal line round the base of the skull on one side. Each of these base lines he divides into four parts. The corresponding and opposite dividing points of these base lines are united, and the uniting lines bisected; these bisecting points are again united to each other, to the glabella point, the occipital point, and the four dividing points of the base lines by straight lines. In this manner we obtain four triangles and four quadrilateral figures; the latter are divided by diagonals into triangles, and each cranial hemisphere is thus divided into twenty triangles. By a series of experiments, details of which cannot be entered into here, he shows that within and subjacent to the spaces occupied by these triangles portions of brain structure can be constantly found to lie. Slight variations necessarily occur in the exact topography of each triangular space, but these are provided for in the diagrams which accompany the article, and it appears simple from these to find any one of the cerebral convolutions or fissures. The only parts of the brain which cannot be said to bear a truly constant relation to the superficial triangles are the portions of the occipital lobe. Winkler in his experiments found that by taking the occipital protuberance as his fixed point his transfixing pin for determining the underlying structures almost always penetrated the superior longitudinal sinus, and he considers Fraser's fixed point for this reason only as preferable to his own. The sutural lines, which have hitherto been accepted as fixed points from which the underlying structures could be measured and determined, are shown by him to vary in their position to such a degree that it is difficult to understand how their constant location could have been believed in so long. Winkler's topography has been practically verified by Profs. Korteweg and van Iterson and Dr. Guldenarm. We certainly think with the author that his process is far simpler and more trustworthy than the old methods, as the various triangular

subdivisions of the skull are proportionate to the skull development and shape, and so in all probability proportionate to the brain development.

Artificial Aid in Childbirth and the Occurrence of Idiocy. Dr. A. MIJNLIEFF, ("Nederlandsch Tijdschrift voor Geneeskunde," July 23rd, 1892).

The interest attached to this question has again been raised by an article appearing in the "Deutsch. Med. Zeitung," No. 30, 1892, by Künkel, to which A. Mijnlieff draws attention in the above publication. Our readers may remember that Drs. Fletcher Beach and Langdon Down in the "Lancet" * promptly contradicted the theory advocated by Winkler and Bollaan in the "Nederlandsch Tijdschrift," in which they attributed the occurrence of certain forms of post-genetous idiocy to instrumental aid in childbirth, an assumption to which Krafft-Ebing lent his support. Künkel in his publication shows by statistical investigation that the statement has no foundation in fact. He could only discover three cases in the literature of post-genetous idiocy which could with any truth be attributable to the traumatic influence of forceps-pressure. Out of 86 cases, the histories of which he has carefully followed, in which artificial aid was given during labour, 74 could with exactness be used statistically—of these 25 had undergone version, the birth having been assisted by traction, and 49 had been delivered with forceps, but in neither of these two classes was there any intellectual arrest or the least sign of idiocy or imbecility. The investigation furnishing a purely negative result, he carefully inquired into the histories and especially the method of birth of 450 cases of idiocy—in 10 of these he found that forceps had been employed while version had been resorted to in one case; but hereditary predisposition entered as an indisputable factor into the history of nine of these 11 cases, convulsions and meningitis had previously occurred in two, while in two others worry and grief of the pregnant mothers had been cited as causes. In four only, *i.e.*, in .9 per cent., could one assume, and then only because of the absence of any other known cause, that the idiocy was due to artificial aid during labour. Over against this we have as the history and only attributable cause in 20 cases (or 4.8 per cent.), a very difficult and prolonged labour in which artificial aid had not been resorted to. The following case, too, is of interest. In a family of nine sisters eight were delivered by forceps, and none of these had the least mental failing or affection during life; the one whose birth was left to nature and who was delivered with difficulty, became an idiot. Künkel therefore concludes that artificial aid, so far as can be proved by statistics, cannot possibly be an originating cause of

* See Vol. i., 1889, pp. 34, 97, and 147.

idiocy, but that a long continued and difficult labour without artificial aid may certainly be looked upon as a cause.

Examinations in Nursing for Attendants. ("Psych. Bladen," D. x., Af. 2, 1892).

We are pleased to observe that examinations for attendants have been instituted in Holland. The committee appointed by the Dutch Psychological Association for drawing up a scheme for these examinations has issued the following syllabus:—

The examination demands—1. A knowledge of the first principles of the physiological functions and structures of the human body. 2. A knowledge of the elementary principles of hygiene. 3. A knowledge of the fundamental principles of sick nursing. 4. A knowledge of the nursing and care of the insane. The examination is to be both theoretical and practical, and the regulations require candidates to be of good address, to produce certificates of good moral character, and to be in the possession of good bodily health. Age to be not less than 22 at the time of examination; evidence must be given that the office of attendant has been filled for two years in some asylum for the insane, or in an institution for nervous affections. Those already in possession of nursing certificates may with the consent of the committee be excused sections 1, 2 and 3 in the above scheme. The committee consists of Drs. van Deventer, Tellegen, and Ruysch, the last-named acting as secretary.

2. *American Retrospect.*

BY FLETCHER BEACH, M.B., F.R.C.P.

American Journal of Insanity, October, 1891, and April, 1892.

Alienist and Neurologist, January and April, 1892.

Journal of Nervous and Mental Diseases, January and April, 1892.

The first paper in the "Journal of Insanity" is "The New York Law for the State Care of the Insane," and is written by Oscar Craig, President of the State Board of Charities of New York, who, owing to his position, is fully conversant with the subject. At first the dependent insane were sent to the New York Hospital, and even in 1843, although the State Lunatic Asylum at Utica was opened, yet the great mass of the indigent insane remained in the poor-houses. This was partly remedied by the opening of the Willard Asylum for the Chronic Insane, which received patients from all the counties of the State except Albany and Jefferson, New York, Kings and Monroe. Then arose this difficulty, that the insane in the exempted counties were four times as many as

those accommodated in the asylum. To remove this scandal the Legislature in 1871 delegated the State Board of Charities authority to grant to county superintendents of the poor exemption from the Willard Asylum Act and to issue instructions for the removal of the insane from county poor-houses to State institutions. For nineteen years the Board carried on the work and effected many improvements, but in 1889 it was decided to petition the Legislature to provide State care for the insane, or county care so reformed as to be governed by trustees appointed by the Supreme Court. As a result a statute was passed which put the four hospitals for the acute insane, the new St. Lawrence Hospital, and the two asylums for the chronic insane upon the same basis. They are all hospitals for the dependent insane, and are State institutions. A Bill embodying these and other recommendations was brought before the Legislature and finally enacted in 1890. The syllabus of the law prepared and published by the Charities Aid Association is appended, from which we learn that the chief reasons for the insane being entrusted to State as distinguished from county care are medical supervision, beautiful environment, adequate means of classification, and individual care; there is also the advantage of transferring cases from the acute to the chronic asylums, and *vice versa*. "New York's new law is a development from first principles of State care in the Willard Asylum Act; it is an evolution or growth and not a special contrivance or creation."

"The Mechanism of Insanity," by Edward Cowles, M.D., is the continuation of an article which was noticed by us in the "Journal of Mental Science" for January, 1892. The mental elements in normal fatigue and in pathological fatigue, or neurasthenia, are now discussed. The author wishes "to show how it is that the mental symptoms furnish a ready index of the fatigue and auto-intoxication of nerve and muscle tissues as a guide for diagnosis, prophylaxis, and treatment; and also to show how the general symptoms of nervous exhaustion can be better understood by a proper interpretation of the mental symptoms." All mental activities have to deal with sensations, for they are the primary data of their operations. In the study of the mental mechanism it has been shown that there are two groups of these sensations, viz., the general organic sensations and those of which we are conscious as presented through the special senses. Among the first are a sense of well-being and a sense of ill-being; the latter is no doubt due to auto-intoxication, for in all forms of functional activity, besides the fatigue, there is the toxic influence of self-produced waste products. The author then studies the sensations from the special senses—perceptions, ideas, etc., and disorders of intellect and will. The faculty of attention is considered, and it is shown that when the higher control power is lessened there is a gradual reduction of power of voluntary attention, as is seen in fatigue, neurasthenia, and melancholia. The mental symptoms

which appear in normal fatigue and in pathological fatigue are described, and it is seen that there is a correspondence in the train of mental and physical events in neurasthenia. The symptoms, diagnosis, and treatment of this condition are fully described, as the author considers the disorders that constitute insanity are, in their initial stages, varied manifestations of this disease.

"The Dream State and its Psychic Correlatives," by Henry Smith Williams, M.D., is an attempt to show that the dream state is closely allied to certain delusional insanities. The mind follows the same laws and lines of actions in dreams as during waking hours, and the associations of ideas are the same in both conditions, but the reason why the most grotesque changes occur, with apparently no connecting link, when endeavouring to recollect the dream, is that the minor vibrations, which constantly introduce new subjects and carry the mind hither and thither, are so feeble that they are not reproduced by the waking mind, and hence are lost. No doubt this is due to the fact that the supply of blood to the brain during sleep is limited. The author considers the dream state as a perfectly normal condition, because he thinks it impossible to pass from the condition of waking to that of sleep without dreaming, but a vivid dream he regards as an abnormal mental phenomenon. Cases of melancholia characterized by painful delusions place the patient in a condition very little removed from the dreamer. The patient is usually anæmic, and there is insufficient blood to furnish the brain with the stimulus to active vibration. He does not appreciate his condition any more than the dreamer does, and the creations of his fancy seem as real as the vagaries of a dream. Just as the dream may be suggested by some objective appearance which it does not resemble, so the mind, when in a state of delusion, may invent a train of grotesque conceptions from some insignificant object in its environment, and, not being able to note the connecting links, will "retain the same personality for the entire line of concepts." In this way an insane person may develop illusions out of perceptions that in themselves were not perverted. A similar condition sometimes comes on during the depressed stage of general paralysis, when the subject is not robust; in such a case there is a history of syphilis, and the patient probably suffers from endarteritis, which shuts off the blood in part and produces a condition similar to the cachectic melancholiac patient. In the general paralytic, when the condition of arterial dilatation supervenes, a sense of well-being supplants the depressed condition; and in the melancholiac, as there is a return to physical health, the delusions fade away, and the period of depression and delusion is remembered as a kind of terror, which the patient likens to a hideous, half-forgotten dream. The most eminently sane mind is that which keeps constantly in view a wide field of observations, and so is able to test its thoughts by wide comparisons; "while it

is the essence of the insane mind to think in imperative concepts and ignore the broad fields of association."

The well-worn subject of "Mechanical Restraint in the Treatment of the Insane" is treated by Dr. Worcester. He had been reading an article on the subject in the "Medico-Legal Journal," and was struck with what he had noticed before in discussions on restraint, viz., a tendency to deal entirely in generalities. He is of opinion that histories of concrete cases are far superior to discussions of abstract principles, and his object in writing this article is to give his experience of fourteen years among the insane and to illustrate his conclusions by giving some of the facts which led to them. He had seen both systems, viz., restraint and non-restraint, faithfully tried, and had arrived at the opinion held by very many physicians in England, viz., that while restraint can usually be dispensed with in most cases, yet there still remain some where its use is beneficial as a means of promoting the comfort and well-being of the patients. Cases of persistent violence and destructiveness and of filthy habits are related in which restraint was found useful, as being the most humane means of preventing injury and of curing disgusting habits. The alternatives to mechanical restraint, viz., manual restraint, seclusion, and the administration of sedatives, are severally considered, and the author concludes that mechanical restraint in properly selected cases is the most beneficial of all.

"Relations between Chorea and Epilepsy" is the title of a paper by Dr. Trowbridge in the "Alienist and Neurologist." The author is of opinion that there is a very close connection between certain forms of the two neuroses, and confines himself to considering the relations between idiopathic chorea and epilepsy. Both are no doubt due to disordered nerve centres, but the opinion of Dr. Trowbridge that "in nearly every case of chorea there is more or less mental impairment" is rather too strong to be generally accepted. The co-existence of the two diseases is rare, as is also the existence of chorea, then epilepsy and finally chorea again in the same individual. There is no doubt that epilepsy may be present in one generation and chorea in the next, for this is only an example of the alternation of neuroses which has been treated by various writers and its existence generally acknowledged. The author believes that in all cases of chorea, especially those of long standing and accompanied by mental disturbance, the lesion is in the brain, though many consider that the mental strain in a choreic patient who knows his case to be hopeless is the cause of mental disturbance. When first the author thought of writing on the subject he addressed several questions to the superintendents of various asylums, and the results are given in a clearly drawn up table.

Dr. Pershing writes on "Traumatic Neuroses in Damage Suits." This term he thinks will finally replace those which were formerly

known as concussion of the spine, railway spine, nervous shock, and railway brain. Many writers appear to be of opinion that the prospect of damages is the main cause of the trouble, and that those whose claims are paid disappear from view or rapidly recover, but this opinion is not in harmony with the facts as now known. Most of the controversies on the subject have been due to a wrong method and lack of thoroughness in examining the patient, as well as to the imperfections of neurological knowledge, which were greater years ago than they are now. The examination must be made on the neurological standpoint, and be rigorously conducted. General and localized weakness, paralysis of a single limb, local spasm, a reeling gait, tremor, pain, especially in the spine and head, perverted sensation, loss of sensibility, deafness, dulness of taste and smell, hurried nervous action of the heart, and many other, including mental symptoms, if thoroughly tested, will leave little doubt whether the claimant has really been injured or not. Then comes the question, What is the nature of the malady? and light will often be thrown upon the matter by comparing the symptoms with those of hysteria and neurasthenia. The most difficult question to answer is with reference to the ultimate result; it is best to err on the side of caution, and let it be known that the future is doubtful.

"Is Genius a Neurosis?" is the title of an interesting paper by Dr. Kiernan, of Chicago. Dryden and Shakespeare have both in their writings re-announced a doctrine which early obtained dominance in consequence of an evolution of arts, sciences, and religions from superstition. The supernatural influences which were supposed to underlie epilepsy were thought to be malignant or benign. Later on the demon-possession theory gained dominance, and finally the demon was replaced by disease. Throughout this evolution the belief in an affinity between insanity and genius persisted. The disease notion was becoming known in the time of Aristotle, yet he, Plato, and Seneca all thought that insanity was allied to genius. Coming to later times we find that Lord Beaconsfield and Ouida are of the same opinion. Moreau of Tours, Lombroso, and Nisbit all insist that genius is a neurosis, and Huxley considers, from a biological point of view, that genius among men is of the same nature as a "sport" among animals. The moral and physical stigmata of degeneracy are found in men of genius; smallness of body, cerebral and cranial lesions, submicrocephaly, stammering, left-handedness, precocity, and tardy development have been present in many cases. The faculty of attention is more important than any other for intellectual progress, and as the amount of attention depends to a great extent upon the power of association, and this power is greatest in the genius, so the power of attention is greatest in him. After considering the psychiatric and biological as well as the psychological evidence, the author concludes that "genius is not a product

of morbid mind. In the exceptional instances, where the two co-exist, the genius is evidence of a healthy, conservative element, struggling with the incubus of disease."

"Art in the Insane" is another paper by the same author. There is no doubt that art was an early acquirement of mankind, for even at the time when the cave-dwellers of the Dordogne appeared, art had passed beyond the figures of the primeval age. These figures were arabesques and geometrical forms, and were produced by chipping stone in the late palæolithic age. Symbolism controlled in no small degree the evolution of art, and commingling of symbols soon became a canon of art. The Egyptian, Chinese, and Chaldean types are characterized by mingling of inscriptions and drawings, and in the latter an abundance of symbols and hieroglyphics appear. Imitation, undue minuteness, and repetition were especially noticeable then, and these qualities are now noticeable in the art of the insane. In the early races the sense of colour and its contrasts were deficient. Primeval and mediæval art exhibit the same peculiarities, and they appear in the insane, who also have a tendency to attach occult significance to trivial analogies. According to Lombroso the chief characteristic of art in lunatics is absurdity in drawing and colouring; this is supposed to be due to an exaggerated association of ideas, so that the connecting links which would explain the author's meaning are lost. According to Ruskin the difference between the higher and lower artists is that "all great men see what they paint before they paint it, not daring to alter one jot or tittle of it as they paint it down." The greater the power of association the more vivid the picture, and the more vivid the picture the greater the need of manual inhibition to symbolize the clearness and rid it of an injurious subjective element. On this principle turn the differences in the products of the imbecile and dement from those of other insane artists. In the insane there is a conservative factor which is absent in congenital paranoiacs who are further advanced in degeneracy. The author considers that "in the art, as in the literature of the insane, evidence is found that insanity mars, but does not make genius."

"The Epidemic Inflammatory Neurosis, or Neurotic Influenza," by C. H. Hughes, M.D., is a contribution to a subject which of late has excited considerable attention, not only in England, but on the continent. All authorities both at home and abroad are of opinion "that the toxic matter of the influenza has an injurious effect upon the whole nervous system, and that it acts most powerfully upon those who already have an hereditary tendency to insanity." Professor Kirm, of Freiburg, concludes that influenza is a more frequent exciting cause of insanity than any other febrile affection, and classifies the cases which pass into insanity under two heads:—1st, where delirium occurs during the febrile condition; and 2ndly, where insanity supervenes after the cessation of the fever.

The opinions of various authorities on the question are quoted, and the author observes that in his practice the marked feature of the disease was to bring out latent morbid predispositions, such as neurasthenia, neuralgia and syphilis of the nervous system. The poison so weakens the nutrition of the nerve-centres that there is no resistance to agencies which interfere with this nutrition, and nervous instability shows itself in an acute form. The author then relates several cases which occurred in his practice, and mentions certain conclusions which he has come to by observation on his own patients. These are that it is a toxic neurosis, adneurial in its effects upon the central nervous system, its sequences acting more like post-diphtheritic nervous diseases as regards curability; and that it brings into activity "latent neuropathic and other organic morbid aptitudes."

There are several other short papers in the "Alienist and Neurologist," including one by Dr. Ireland on "Pessimism in its Relation to Suicide."

"The Journal of Nervous and Mental Disease" contains several interesting articles. Among these is one by Dr. Tomlinson, being "A Study of the Indications for, and Application of, Physical Culture in the Treatment of Insanity and Allied Diseases." The author first studies the changes which take place in the processes of nutrition and the nature of the perversions of functional activity of the brain and nervous system in the class of cases to which this form of treatment seems applicable. In all forms of primary insanity, except the degenerative, there is impaired vitality produced by excitement and motor disturbance, or auto-intoxication occurring in states of depression.

The special characteristic of nervous protoplasm is its excessive irritability, and anything that interferes with the general organism impairs the functional activity of the nervous system. Where a strong, persistent exciting cause brings on maniacal excitement, the continuance of the excessive activity produces general impairment of nutrition and failure of power, so that the patient either dies of exhaustion, or mental annihilation supervenes. In states of depression from auto-intoxication the same results ensue, but the mechanism is different. Having these conditions in view, we shall find that all means that improve general nutrition should be brought to bear upon the treatment. Even when the plan of treatment by drugs is apparently efficient, we find physical culture a successful adjuvant. "The tendency towards recovery is at the subsidence of a wave, or the completion of a cycle," and anything which prevents the commencement of a new wave or cycle accelerates recovery. In this way physical culture acts, as well as by stimulating the circulation and causing muscular movement. In addition, it has an effect upon the mental processes of the patient, and last, but not least, there is brought to bear the attitude of expectant attention. Under physical culture Dr. Tomlinson

includes massage, passive and resistive muscular movements, galvanic and faradic muscular stimulation, systematic voluntary muscular movements, and light gymnastics. He does not claim for physical culture a place except as an adjuvant, but he is of opinion that under its influence a great many patients will be restored to mental soundness who would otherwise become chronically insane, and finally pass into a state of dementia.

Dr. Hammond has a paper on "The Bicycle in the Treatment of Nervous Diseases." There is no doubt that exercise, when prescribed for nervous affections, should be taken out-of-doors. The exercise should also be combined with pleasure, so that not only may the muscles be strengthened, but the thoughts diverted from morbid channels, by which means brain-rest and mental refreshment may be gained. The proper use of the bicycle produces these results, since the exercise of skill in guiding it, the exhilaration coming from rapid motion, the continual change of the panorama, and the exercise of almost every muscle in the body make it an apparatus potent in stimulating healthy cerebral activity and arousing the mind from a lethargic condition. The author prescribed its systematic use in sixteen instances; of these three were cases of paralysis due to anterior poliomyelitis; one was a case of paralysis resulting from multiple neuritis; in one there was hysterical paralysis with slight contracture; six were cases of neurasthenia; in one there was sexual perversion, and in one abnormally-developed sexual appetite. In all these cases there was marked improvement, and Dr. Hammond believes that if physicians would prescribe its use intelligently, the results would be far in excess of their expectations.

Dr. Preston writes on "Tumour of the Cerebellum, with Report of Cases." The subject is important, on account of the frequency with which new growths occur in this situation, and because they can often be sufficiently well localized to warrant an attempt at removal. The relative frequency of tumour of the cerebellum is well shown in the collection of cases reported by Dr. Gowers. In 650 cases of intra-cranial growth, 295 were in the cerebrum and 179 in the cerebellum. The disease may occur at any age, but is more common in early adult life, and certain varieties chiefly are present in the first decade. The growths may be tubercular or syphilitic; less commonly are found glioma, sarcoma, carcinoma, parasitic cysts, and fibroma. Pain is the most common symptom, and in a considerable proportion of cases it is distinctly occipital, and is often felt at the back of the neck. Very early in the disease is noticed the peculiar staggering gait, resembling that of a child learning to walk, or of a person trying to do so after a very exhausting illness. Muscular weakness and loss of the muscular sense are present in some cases, but the deep and superficial reflexes are, as a rule, unaltered. Optic neuritis is a valuable symptom for consideration, and if present with the symptoms

above mentioned, the diagnosis of cerebellar tumour is reasonably certain. Nystagmus is not common, nor are general convulsions, but rigidity of the muscles of the neck, often drawing the head back upon the shoulders, is very common, and may be said to be characteristic of the disease. Slight mental disturbance is frequently seen, and occasionally there is an outburst of acute mania. Three cases are related in which the diagnosis was proved by the autopsy to be correct, and confirm the author's opinion that it is possible to localize tumours of the cerebellum with some degree of exactness. He discusses the question of removal of these tumours, and is of opinion that operation, offering as it does the sole chance of relief, should be oftener resorted to.

PART IV.—NOTES AND NEWS.

ANNUAL MEETING OF THE MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

CENTENARY OF THE RETREAT. (1792-1892.)

The members of the Medico-Psychological Association of Great Britain and Ireland held their Fifty-first Annual Meeting at the York Retreat, on Thursday, the 21st day of July last, in honour of the Centenary of the foundation of that Institution. The proceedings commenced at the early hour of 9.15 a.m., when a Council meeting was held in the large Recreation-room of the Retreat, at which several papers were read and discussed, and various resolutions were passed. This was followed at eleven o'clock by a general meeting of members for the receipt of reports, the election of officers, and the transaction of other business. Dr. Baker, Superintendent of the Retreat, presided, and amongst those present were Dr. Jules Morel, from Belgium; Dr. Semelaigne, Paris; Drs. Murray Lindsay, Clouston, Outterson Wood, Savage, Spence, Ireland, Urquhart, Whitcombe, Hack Tuke, S. Tuke, Yellowlees, Rayner, Keay, Campbell-Clark, Bonville Fox, Hayes Newington, Agar, Wiglesworth, Pierce, Rutherford (Dumfries), North, Swanson, McDowall (Menston), Percy Smith, Merson, McDowall (Morpeh), Chambers, Rees Philipps, Kay, Major, Richards, Conolly Norman, Ernest White, Mercier, Paul, Nicholson, Hitchcock, Fletcher Beach, Shuttleworth, Tregelles Hingston, Weatherly, Eastwood, and others.

The election of officers took place as follows:—

Parliamentary Committee re-elected (unchanged).

<i>President</i>	ROBERT BAKER, M.D.
<i>President-Elect</i>	JAMES MURRAY LINDSAY, M.D.
<i>Ex-President</i>	E. B. WHITCOMBE, M.R.C.S.
<i>Treasurer</i>	JOHN H. PAUL, M.D.
<i>Editors of Journal</i>	{ D. HACK TUKE, M.D. { GEORGE H. SAVAGE, M.D.
<i>Auditors</i>	{ HENRY RAYNER, M.D. { *PERCY SMITH, M.D.

Honorary Secretaries { CONOLLY NORMAN, F.R.C.P. (I.), for Ireland.
A. E. URQUHART, M.D., for Scotland.
FLETCHER BEACH, M.B., General Secretary.

Registrar J. B. SPENCE, M.D.

Members of Council.

HAYES NEWINGTON, M.R.C.P.Ed.	C. HETHERINGTON, M.B.
J. B. SPENCE, M.D.	T. OUTTERSON WOOD, M.D.
W. R. NICHOLSON, M.R.C.S.	F. C. GAYTON, M.D.
D. NICOLSON, M.D.	F. H. WALMSLEY, M.D.
OSCAR WOODS, M.D.	H. T. PRINGLE, M.D.
J. G. McDOWALL, M.B.	*J. MACPHERSON, M.D.
H. GARDINER HILL, M.R.C.S.	*A. R. TURNBULL, M.B.
B. B. FOX, M.D.	*C. A. MERCIER, M.B.
J. E. M. FINCH, M.D.	*E. W. WHITE, M.B.

* *New Officers or Members of Council elected at the Annual Meeting, 1892.*

Dr. WHITCOMBE, the retiring President, in asking Dr. Baker to take the chair said he was sure none of them required any recommendation as to Dr. Baker occupying that position, and they most heartily congratulated him upon his election to it. He hoped that Dr. Baker would fill the chair with as much pleasure as he (Dr. Whitcombe) had done.

The PRESIDENT in acknowledging his election briefly thanked the members for their kindness. He afterwards announced that Drs. Mickle, Wiglesworth, Campbell Clark, Urquhart, Ringrose Atkins, and Oscar Woods had been appointed examiners, and that 18 candidates had passed the examination for the Certificate in Psychological Medicine in Scotland, and seven in England.

PRESENTATION OF BALANCE SHEET.

Dr. PAUL next presented the Treasurer's balance sheet, which he remarked was a very fair one. There was a little alteration with regard to the money in hand, in consequence of a change that had been made in reference to the auditing of the accounts, which now took place before the meeting, with the result that several subscriptions were not included. (For balance sheet see next page.)

Dr. J. A. CAMPBELL moved a vote of thanks to the Treasurer, which was heartily accorded, and was duly acknowledged by Dr. Paul.

THE NEXT ANNUAL MEETING.

Dr. MURRAY LINDSAY, the President-elect, being requested to name the place of meeting for next year, said he should prefer either London or Derby, but expressed a wish to allow it to stand over for further consideration.

THE NEXT QUARTERLY MEETING.

The PRESIDENT announced that the next Quarterly Meeting was arranged to be held in London on the third Thursday in November.

ELECTION OF ORDINARY MEMBERS.

The following candidates for ordinary membership were then elected:—E. Milliken Goldie, M.B., C.M.Edin., Assistant Medical Officer, the Asylum, Bootham, York; Cuthbert S. Morrison, L.R.C.P., and L.R.C.S.Edin., Assistant Medical Officer County and City Asylum, Burghill, Hereford; Lewis Dunbar Temple, M.B., C.M.Edin., late Clinical Assistant, Darenth Asylum, Ballantrae, Ayrshire; Arthur Edward Patterson, M.B., C.M.Aber., Assistant Medical Officer, City of London Asylum, Stone, Dartford.

THE RETREAT CENTENARY.

Dr. YELLOWLEES said that it seemed to him that meeting there as they did, they could not do less than adopt some such Resolution as this:—"That the Medico-Psychological Association of Great Britain and Ireland, assembled in its annual meeting at the York Retreat in the year of its Centenary, desires to

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

The Treasurer's Annual Balance Sheet, 1891-92.

RECEIPTS.		EXPENDITURE.	
£	s. d.	£	s. d.
To Balance—Cash in Hand from last account	325 15 8	By Annual, Special, and Quarterly Meetings	33 4 6
Subscriptions, England and Wales	306 12 0	Expenses of Reporting at various Meetings	21 15 0
Subscriptions, Ireland	32 11 0	Printing, publishing, engraving, advertising, and postage of Journal	464 7 1
Subscriptions, Scotland	57 15 0	Less special subscription for engraving	4 4 0
Sale of Journal	135 6 0	Editorial Expenses	460 3 1
Dividends on Consols, Gaskell Fund,	27 1 9	Printing and Sundry Expenses	12 12 0
3-4ths of year on £1,347...	6 3 0	Treasurer	59 12 1
Invested, 3-4ths of year on £306	33 4 9	Accountant	6 6 0
Fees received from Examinations for the Certificate of Psychological Medicine		Secretary for Ireland	4 4 0
England	12 12 0	Secretary for Scotland	2 17 11
Scotland	40 19 0	General Secretary	6 12 0
	53 11 0	Examiners' Fees (Ireland)	8 15 11
		(England)	6 2 6
		(Scotland)	8 8 0
		Allan Wyon, paid for Designing and Engraving Die, Plate, etc., for Certificates	25 5 9
		Balance in hand	39 16 3
			68 10 6
			220 6 2
			<u>£944 15 5</u>

(Signed) ERNEST W. WHITE, } AUDITORS.
HENRY RAYNER, }

Examined and found correct.

July 16th, 1892.

place on record its admiration of the spirit which animated William Tuke and his fellow-workers a hundred years ago, its appreciation of the mighty revolution which they inaugurated, and its thankfulness for the beneficent result which their example has secured in the humane and enlightened treatment of the insane throughout the world." He had thought it desirable to put the resolution in the plainest words that he could, feeling that language of a fulsome character would be out of place in paying their tribute to such men. They were earnest men, who feared God and loved their fellows, and who gave all the kindly help they could to the men who needed it most. They were men actuated by the highest motives, men of sound judgment and wise action, and he wished that all those who had appreciated their motives had emulated their wisdom. They were no faddists who were carried away by ideas, and still less were they Pharisees who attempted to earn the good opinion of men. William Tuke, when he built that Retreat, never imagined that he was building a famous name. It seemed to him that they were better able to appreciate the great work that he did in those days by reason of their distance, and they could realize that it was really a revolution. It was something more than dispensing with needless restraint. It was a revolution, a recognition that insanity was a disease, not a doom, and that insane people needed sympathy, kindness, and care instead of the harshness and cruelty which they had hitherto received. The results of their work they, too, could better appreciate. It took a hundred years to tell how a great work would proceed, and they knew now how mighty the change had been. The contrast between the condition of things before the establishment of the Retreat and the condition of things now was the contrast between light and darkness. It was one of the greatest triumphs of humanity and philanthropy that their era had seen. (Loud applause.)

Dr. WHITCOMBE said he had the greatest pleasure in seconding the resolution so beautifully proposed by Dr. Yellowlees.

Dr. JULES MOREL, on behalf of the Society of Mental Medicine of Belgium, said he heartily endorsed the resolution. (Applause.)

The motion was then carried, and feelingly acknowledged by the President.

PRESENTATION BY DR. HACK TUKE.

Dr. HACK TUKE here presented to the library of the Retreat the first copy of his "Dictionary of Psychological Medicine," in honour of the Centenary. (Applause.)

PROXY VOTING.

Dr. MERCIER moved "That whenever a question is put to the vote any member may, immediately after the result of the voting is declared, demand a *referendum*, and if a referendum be demanded, the question shall again be put to the vote at the next ensuing Quarterly Meeting, and at this second vote the voting may be either personal or by proxy." In proposing the resolution for the consideration of the Association Dr. Mercier said he was not by any means insensible to its great importance. It was a resolution which, if carried, would certainly effect a revolution in the Association. It went down to their very foundations, as it was intended to do. There was no Association, he ventured to say, the members of which were more closely bound together by the same interests, and were pursuing with more singleness of purpose the same aims, than the members of that Association. It should be the ultimate authority on all matters connected with insanity, but none of them could claim that the Association occupied that position. Although matters had greatly improved of late years, there was not that amount of interest taken in the meetings of the Association, nor was there that fulness of attendance that they had a right to expect considering what the constitution of the Association was. In proposing the resolution he had endeavoured to find a means of increasing the interest of all the members of the Association in it, of binding them still closer together and of finding a more powerful motive force in carrying the Association forward to the great aims that it had in view. Originally he asked a few members their

opinion as to the matter of proxy voting, and he was surprised to find the unanimity and strength of feeling in its favour. Upon that, in conjunction with Dr. Weatherly, he sent out a circular to a considerable number of the members, and the answers to that circular astonished him not only in the readiness with which the opinion was given, not only in the overwhelming proportion of members who were in favour of the change, but more than anything it discovered in the ranks of the Association many members, rarely able to attend its meetings, in whom there was an amount of enthusiasm and even a fervour of interest in the affairs of the Association for which he was totally unprepared. They sent out circulars accompanied by a postcard for reply. It was not only returned, but in a number of cases they got voluminous letters, not only endorsing their action in that particular, but also full of suggestions—judicious and useful suggestions—with regard to the future conduct of the Association. He might say that one gentleman sent a most admirable dissertation on some ten pages of foolscap (laughter) with regard to the conduct of the Association. He brought that forward to show how very strong was the interest of members of the Association who were not able to attend its meetings, and how very powerful a motive force lay latent in their interest which they ought to utilize. At present they were not moving as fast as they ought to, and were, he might say, in the position of the crew of a ship which was not moving fast enough through the water and yet had stowed down under hatches a crew only too anxious to take their turn at the oars. It had been said that members who did not attend the meetings had no right to have a vote, because if they were sufficiently interested in the Association's affairs they would attend and vote. However true that might be of other societies, it was not true of that society, because theirs was the only Association the majority of whose members were necessarily absent from its meetings. They were largely composed of medical officers of asylums, where they knew that only one officer could be spared at one time, and the others must stay at home and be excluded from exercising any voice in the Association. Such an exclusion was impolitic and it was also unjust. Some who sent replies said that they had ceased to take an interest in the affairs of the Association, and that they were going to withdraw their names from it, but that they would wait before doing so until they heard the result of that resolution. There were, of course, objections to proxy voting, and the most important of those objections he would enumerate and answer. Proxy voting was not without precedent. He had himself, and no doubt others present had received a proxy to vote for the members of the Council for the Royal College of Surgeons of England, and if so important a body as that elected its Council by proxy voting, their own Association need not fear to encourage the same system. The objections to the resolution were, some of them, grounded upon wrong apprehension of its terms. One was that members would come to the meetings with their pockets stuffed with proxies. That was impossible if they noticed the terms of the resolution. The only case in which it was to be called into existence was when a subject was put to the vote, a referendum demanded, and the question was again voted upon at a subsequent meeting. A quarter of a year was allowed to elapse, during which the discussion appeared in the Journal of the Association; therefore such a thing as a surprise vote was quite impossible. Then it was said that, if proxy voting was allowed, it would diminish the attendance at the meetings. He did not think people went there to vote. Members attended the meetings for the sake of the meeting, the discussion, and the good fellowship, and they did not go solely for the purpose of voting. He, however, thought that it would so increase the interest of even the humblest member of the Association that the attendance would become more numerous instead of diminishing. The last objection that he would deal with was that it would place too large a power in the hands of a single member. One member might get up and demand a referendum, and might thus postpone an important reform for three months. Even if that were so, three months was not a very long time, but he quite admitted there was some objection to proxy voting on that ground. He was perfectly

willing to accept any amendment, especially that a certain strength of minority should be necessary for the motion on the referendum before it was granted, either a certain proportion or a certain absolute number, and if that was done he thought all objections would be done away with.

Dr. WEATHERLY seconded the motion. Regarding the letter sent out to obtain the opinions of the members of the Association, he certainly, with Dr. Mercier, never believed for one moment that there would be such unanimity on the subject of that resolution. After reading a copy of the circular sent out by Dr. Mercier and himself, Dr. Weatherly went on to say that they received 167 answers to the 200 circulars which they issued. Of these 146 were very decidedly in the affirmative, and only six were decidedly in the negative. Of the rest some said they would wait until the meeting, and others had either left the Association or were contemplating such a step. Those figures proved that an overwhelming majority of the members approved of the proposed change. All he could say was, that if the resolution was passed and it worked for harm instead of for good, he would readily take as much part in getting it rescinded as he had done towards its introduction.

Dr. J. A. CAMPBELL would agree to the referendum, provided a quarter of the whole meeting supported the motion. He voted on his own opinions, and was not in any way influenced by wire-pullers.

Dr. IRELAND proposed that a minority of one-third should be necessary for the subject under discussion to be deferred for a referendum, and remarked that he had had no opportunity of speaking about it to anyone. He knew there had been a great deal of talk among the provincial members about the affairs of the Association being almost confined to London, but he had always thought that the London men occupied a central position, and as long as they managed the affairs of the Association well, he was not in the least inclined to displace them. In his opinion, the affairs of the Association were very well managed.

Dr. CAMPBELL said he would formally move that Dr. Mercier's suggestion be adopted, provided that a third of the whole meeting present agreed to a referendum.

Dr. IRELAND seconded the proposition, and Dr. MERCIER intimated his willingness to incorporate it with his resolution.

Dr. SHUTTLEWORTH said that perhaps he had had his attention called to the matter under notice in a greater degree than some of the gentlemen present, and it seemed to him that there were many reasons why such a step as that should not be taken in haste. He did not say that proxy voting was wrong in principle, but he did say that, in the working of large Associations like theirs, there were very important considerations as to the manner in which proxy voting should be conducted, which they could hardly settle in a meeting of that kind. His own view was that the principle should be carried out, that a committee should be appointed by that general meeting to consider the subject in all its bearings and details, and, if thought desirable, to ascertain officially, and in the way already pursued by the issue of private circular, what the real opinion of the majority of the members was. It was an organic change, which might make a very important difference either for the good or evil of the future of the Association, and he thought it was very desirable that every step should be taken with deliberation in a matter of such magnitude. Therefore, he wished to propose the following amendment: "That, having regard to the important practical matters involved in the resolution of Dr. Mercier, a committee, to be appointed, shall consider the whole matter, with power to ascertain the opinions of the Association at large." That was what he had hastily written, and he thought his meaning would be sufficiently obvious.

Dr. WHITCOMBE said that for some time past he had had something to do with proxy voting, and he would like to point out to the members of the Association that it was a very dangerous matter for our Association to use. Lately, the Medical Defence Union, which numbered its members by thousands instead of hundreds, had the power of proxy voting, and it was

determined to make an attempt to do away with it. They looked upon proxy voting as a retrograde step. A general meeting was called, and to show how much interest was taken, he might state that, out of a union consisting of thousands of members, there were five members present. But the President (who favoured the abolition of proxy voting) of the Union came in with a large bundle of proxies under his arm. (Laughter.) A power such as that should not be placed in the hands of one individual in any Association of that character, but he must say that Dr. Mercier had pointed out to them matters which he thought the Association should seriously consider. There was the question of the younger members of the Association taking part in its management. He could not help remarking that after his four years' experience as a member of the Council, that there was absolutely no ground for the idea that the Association was managed by the London members. He only pointed to the list which they had before them, and asked how their Council was constituted? The majority of the members were from the country. He might also ask them to look round the room and note the number of town members in comparison with those from the country. That was always the case, and he said that the affairs of the Association were not a monopoly, and he said, further, that the London members did not take a greater interest in its management than the remainder of the members. But he felt that it was very necessary and desirable that the Association should carry itself very carefully in a resolution of that character. He thought it was one which required a large amount of consideration before it was adopted, and since he had been President he had had to go into the rules of the Association, and amongst them there were a large number that were being broken. He did not think that was right, and he would move, as an amendment, "that a committee should be appointed to revise the rules of the Association and to consider the question of proxy voting, and report at the next annual meeting." It was a very dangerous matter to alter the constitution of their Association in a few minutes, when, after looking at the matter for a little time, they might every one of them regret it. He personally felt certain that proxy voting was a retrograde step. Anything in the place of it, to enable the younger members to take part in the management of the Association, he should heartily agree to, and would like to see adopted. He thought they had all felt that the assistant medical officers in asylums, although members of the Association, were rarely able to be present at their Annual Meeting and seldom took part in the management of the Association. But he must call particularly to mind the fact that they had been represented upon the Council of the Association, and, therefore, he thought that they might with perfect confidence, looking at that fact and that the Council was constituted, not of London members only, but of a representative number of gentlemen, leave the management of the Association in the hands of the Council. At the same time, he felt it was absolutely necessary that their rules should be revised, and they might also consider the question of proxy voting. He formally moved the amendment.

Dr. URQUHART, in seconding, said that the question of the assistant medical officers having greater part in the management of the Association was one that had been constantly before the Council and before individual members of the Association for many years. It had been said that day that the crew were battened down, but the hatches were open and they had been shouting for the crew to appear on deck ever since the Association was formed. No one could say that assistant medical officers as a body were prevented from being present by the attendance of even a majority of the medical superintendents; still less that they were not heartily welcomed at these meetings. He could not support Dr. Mercier's motion. They had all got their pet expedients for enlarging the number of members attending the meetings. He had one himself some years ago, and he was able at that time, by a majority of those present, to get the collective opinion of the whole Association without any resort to the method of proxy voting, but simply by a majority of the members at the Annual Meeting. He must say that he had never received one of Dr. Mercier's

circulars, and he thought it was hardly a fair thing for him to appear there with a number of circulars which did not represent the whole voice of the Association. They should have been sent to everyone. Dr. Urquhart also pointed out that Dr. Weatherly had admitted the possibility of the motion working harm, by stating that he should be glad to take part in rescinding it in such a case.

Dr. RAYNER supported the amendment, not that he had any great objection to proxy voting if it was safe-guarded by a referendum. It was not likely to result in very serious harm or in any very great change, but he wished to point out that for many years past it had been the custom of the Association, if there was any point at the Council's Quarterly Meeting which demanded the attention and interest of the members at large, to obtain their opinion by general circular. The Secretary would tell them that he had sent out a very great many such circulars. He thought that was a better way than the institution of proxies, because it obtained the votes of the members without any solicitation for one side or the other, whereas in the case of proxies they might be so solicited.

Dr. ERNEST WHITE said that it appeared to many of them that the time had come for the revision of the rules of the Association, and he thought they would all desire to see a strong committee appointed to consider the matter.

Dr. YELLOWLEES did not know that there was any absolute risk to be urged against the proposal, but it ought to be carefully considered.

Dr. SPENCE pointed out that the opinion of those members of the Association of great experience might be entirely swamped by the assistant medical officers, who out-numbered the superintendents by a proportion of two or three to one.

Dr. FOX had not pledged himself to the support of proxy voting, but he was bound to say that what he had heard inclined him very much to the opinion that, in the circular that had been sent out, only one view of a very important question had been put before the gentlemen to whom it was sent. Before they pledged themselves to proxy voting, he thought the subject ought to be considered dispassionately in all its bearings by people who had not the slightest degree of the personal feeling that the movers of any motion must have, and he should very much prefer personally, before pledging themselves on the matter, to have it referred to a small and quite impartial committee for consideration.

Dr. MERCIER said he wished to reply to some strictures that had been made in the course of the discussion.

Dr. EASTWOOD rose to a point of order. Dr. Mercier must reply on the amendment.

The PRESIDENT ruled that Dr. Mercier might proceed, and

Dr. MERCIER remarked that he had never said he was not going to speak to the amendment. He thought that strictures had been made upon the mover and seconder of the resolution, to which they were entitled to reply. Matters had been imported into the discussion which he had been careful to exclude. As to the preponderance of the assistant medical officers, he had gone through the membership of the Association and found that the medical superintendents were in a decided majority. It was said that the resolution was directed against the London men. He was a London man himself, lived in London, was educated at the London Hospital, graduated at the London University, served in the City of London Asylum. To say that he was acting in antagonism to the London men was ridiculous. The resolution for a committee to revise the rules he should strongly support. He did think their rules needed revising. At the same time there was no reason why his resolution should be superseded. The recommendations of a committee like that would carry far more weight if endorsed by the opinion obtained through a referendum such as he had suggested. Then he thought the gentlemen who had opposed the resolution had not sufficiently considered the safeguards which surrounded it. Proxy voting was not to be the rule, but the exception. It was only to be enforced after an ordinary vote, and only on matters of vital concern to the Association, and on

these matters all the members were surely entitled to have a voice. It was only to be granted if the referendum was supported by one-third of the members present.

The voting on Dr. Whitcombe's amendment was then taken, with the result that 27 voted for and seven against it.

Dr. MERCIER asked that his original motion might be put. (Cries of "No, no.")

Dr. YELLOWLEES thought Dr. Mercier was quite entitled to have his motion submitted to the meeting.

Dr. EASTWOOD rose to a point of order. The amendment having been carried, must be put as a substantive motion, or else it was of no value.

The PRESIDENT accordingly asked the members to vote on the amendment as a substantive resolution, and it was adopted.

Dr. MERCIER again asked that his resolution might be put from the chair.

Dr. YELLOWLEES remarked that if passed it would, along with the other rules, be subject to the revision of the committee.

Dr. WHITCOMBE—As a rule it would be in force.

Dr. YELLOWLEES—But subject to the revision of the committee.

Dr. HAYES NEWINGTON said they were not considering the rule, they were considering the principle. (Hear, hear.) If they passed the principle the committee were bound to act upon it. The resolution they had already passed specially provided that the principle of voting by proxy should be considered by the committee.

Dr. MERCIER pressed for the President's ruling, and

The PRESIDENT intimated that the resolution could not be submitted to the meeting.

The committee was appointed as follows:—The President, Secretary, Dr. Fletcher Beach, Drs. Mercier, Yellowlees, Newington, Tuke, Spence, Conolly Norman, Urquhart, Weatherly, White, and Whitcombe.

PROPOSED ADMISSION OF STRANGERS TO THE ASSOCIATION'S MEETINGS.

Dr. MERCIER said that he also had a resolution standing in his name proposing to add the following to the rules, Chapter 4, Rule 10:—"The President and Council collectively may invite strangers to be present at the public business of an Annual, Quarterly, or Special Meeting, and strangers so invited may take part in the discussions." He thought it was exceedingly desirable when, as occasionally happened, some burning question arose that the opinion of the Association should be known, and he thought it would be better for the discussion of such questions if distinguished strangers were asked to take part in them. As, however, the rules were to be revised he did not wish to press his motion just then.

THE REPORT OF THE CARE AND TREATMENT COMMITTEE.—MOTION BY DR. URQUHART.

Dr. URQUHART moved:—"That a copy of the report of the Care and Treatment Committee be sent to each County Councillor and to each member of Committees of Asylums not managed by County Councils within the United Kingdom." In doing so he said that at the last Annual Meeting there was brought forward what seemed to him to be a very important report, and he thought that it was very much to be regretted that that report should fall to the ground, and not be known to those members of the public who were chiefly interested in the different public asylums of the kingdom. He did not think he need say anything in support of the desirability of it, but simply move the resolution.

Dr. RAYNER seconded.

Dr. McDOWALL (Morpeth) quite agreed with what the mover of the resolution wished to do, but he thought that, instead of sending it only to the County Councils in the district, if each superintendent put in his report as a sort of supplement or appendix it would reach a much larger section of the community. He had added it as an appendix to his own report. In his own county the

annual report of the asylum was not only sent to the members of the County Council, but to all the Justices of the Peace and the clergymen of every parish, so that they would see that the circulation of the report was thereby largely increased.

Dr. MERCIER said that if the report was to be extensively circulated they ought to be very sure that it did represent the deliberate opinion of that Association. They ought to be very sure of the ground they were going upon. From the report he gathered that the Association would by so doing pledge itself to the deliberate opinion that "insanity was a symptom." Was it? It was the first he had heard of it. ("Oh.") He should rather like to hear the opinion of the Editor of the "Dictionary of Psychological Medicine" upon that point. He thought that if they were to send round to all the Committees and County Councils that opinion they ought to be sure that it had been arrived at deliberately. He wanted to know when it was arrived at? It would take too long to go through the report, but it seemed to him that every one of the statements it contained was open to objection.

Dr. WHITCOMBE thought it was rather late to criticize the report, seeing that it was passed twelve months before.

Dr. YELLOWLEES said it was perfectly well understood what was meant by the expression that insanity is a symptom, and he also believed every statement in that report to be substantially true. He did not think the Association could do greater public service in the question of enlightenment than in the manner suggested by Dr. Urquhart, and he thought it was too late for Dr. Mercier to discuss the report, which was approved at the last Annual Meeting. They had had a large number of copies of the report printed, and the best use they could put them to was to distribute them.

The voting was then taken, with the result that 24 voted for and 20 against the resolution, which was, therefore, declared carried.

PUBLIC ASYLUMS DIETARIES.—APPOINTMENT OF A COMMITTEE.

Dr. CAMPBELL (Garlands, Carlisle) moved:—"That a committee be appointed to consider and report on the subject of public asylums dietaries, with the view of improving them and rendering them more varied."

The resolution was seconded by Dr. MERCIER.

Dr. ERNEST WHITE said that some asylums had completely revised their diets, introducing the greater variety to which Dr. Campbell alluded. The subject was one which could very well be undertaken by that Association, provided, of course, that they did not trench upon any prerogatives.

After some further discussion the resolution was carried, and the committee appointed as follows:—Drs. Reid, Macphail, Turnbull (Secretary), Thompson, Campbell, Conolly Norman, and Shuttleworth.

PROPOSED ADDITION OF "ROYAL" TO THE ASSOCIATION TITLE.—REGISTRATION UNDER THE COMPANIES ACT.

Dr. HACK TUKE moved the following resolution, which had been recommended by the Council for adoption at the Annual Meeting:—"That the Association should apply to the Home Office for the prefix of the word 'Royal' to the name of the Association, and, if desirable, to apply also to the Board of Trade for Registration under section 23 of the Companies Act, 1867. The amount expended not to exceed £50." In doing so Dr. Tuke reminded the Association that a resolution had been passed at the Annual Meeting, 1891, to the effect that a Royal Charter should be applied for. Counsel's opinion had been taken on the matter, and in consequence of the difficulties which had presented themselves the Council had to take into consideration the other alternative which was open to them, namely, the application for the prefix "Royal," which was given under certain circumstances by the Home Office. It was agreed at their meeting in December as follows:—"That the subject of the application for a Royal Charter be referred to the Council to report on at the next Annual Meeting." The Council met, and the result of their consideration

of the subject was the resolution that they had before them. It was not necessary to state in detail the reasons in favour of this proposition, but he might ask what would be the feeling of those institutions which already possessed the title if it were proposed to deprive them of it? He moved the adoption of the resolution.

Dr. PERCY SMITH thought there would be some objection to the registration under the Companies Act of 1867. He did not think it was worthy of the Association, and he should like to move that the last part of the resolution be omitted.

Dr. URQUHART said that there were certain advantages to be obtained by a scientific Association being registered under that Act. If they could show that their objects were purely scientific, and unconnected with any prospect of personal interest, they might be registered under the Companies Act, and gain certain facilities for collecting money and for holding money. For instance, he was in the unfortunate position of having once had to collect some money, and he was told that as they were not incorporated and not registered under that Act they had no power whatever to collect subscriptions.

Dr. TUKE said that they had had their solicitor present at the Council meeting, who convinced them that on several points they would be in a better position if they became registered in the way referred to. Amongst the societies who had taken this step he might mention the British Medical Association.

Dr. EASTWOOD and Dr. WHITCOMBE continued the discussion, and

Dr. SMITH remarked that he did not know the British Medical Association were so registered. That quite altered the case.

The resolution was then adopted.

COMPILATION OF A NURSES' AND ATTENDANTS' HANDBOOK.

Dr. WIGLESWORTH submitted the appended resolution:—"That a committee be appointed to compile and issue a handbook of instruction to nurses and attendants on the insane, which shall be published under the authority of the Medico-Psychological Association." He said that now that the training of nurses had received official sanction it must necessarily be that they must have some handbook to issue to them, and to the attendants as a guide to their studies. There was, however, already a handbook in existence, and as the terms of his resolution did not recognize that he should like to alter it so as to read: "That a committee be appointed to revise and reissue the handbook of instruction to nurses and attendants to the insane now in use," etc.

Dr. WHITCOMBE seconded the resolution, which was carried, and the committee was constituted as follows:—Drs. Campbell Clarke, Turnbull, Campbell of Murthley, Urquhart, Newington, Conolly Norman, Rayner, Whitcombe, together with the President and Secretary.

THE PROPOSED IMPROVEMENT OF THE EXAMINATION, ETC., RULES.—THE COMMITTEE'S REPORT.

Dr. HAYES NEWINGTON presented the report of the committee appointed to consider suggestions for the improvement of the rules for the training, examination and certificates of attendants and nurses, and said that they had sent out notes to the various superintendents interested in the matter, asking them to make suggestions to the committee. They had got some answers, and the report brought forward every suggestion in paragraphs, so that the meeting could express its opinion as they went on. The committee recommended that a registrar should be appointed to take over the work in connection with the scheme, and, further, that this officer should be an *ex-officio* member of the Council.

This was agreed to, and Dr. CLOUSTON moved that Dr. Beveridge Spence be appointed Registrar of the Association.

Dr. WHITCOMBE seconded, and the motion was carried.

Dr. SPENCE quite appreciated the amount of work that he had before him, but he would do his best for a year or so, and if he found he could not do it conveniently he should ask them kindly to relieve him of it.

It was further resolved that any expenses incidental to the duties of the Registrar be disbursed out of the Society's funds.

The committee brought forward a suggestion that the travelling expenses of assessors should be allowed them, but did not recommend this, and the suggestion was not adopted.

It was recommended that a syllabus should be prepared to act as a guide both to pupils and examiners. This was approved by the Association, and the task of preparing this syllabus was referred to the Handbook Committee.

It was recommended and agreed that the application for permission to be examined, together with certificates, undertakings, etc., should be on one sheet or "schedule," and that this should reach the Registrar one month before examination.

The committee recommended that a fee of 2s. 6d. be charged to each candidate, and 1s. for each reappearance at examination in case of failure.

Dr. CLOUSTON thought the fee should be 5s., and proposed that that should be the amount.

Dr. ERNEST WHITE seconded the proposal.

Other suggestions were made, but the fee was finally fixed at 2s. 6d. as recommended.

Suggestion—That an attendant be permitted to retain his certificate at all times, etc. The committee did not express an opinion on this point.

Dr. CLOUSTON thought those who had gained the certificate should be allowed to retain them in their own possession, and he thought it would be a wise move on the part of the Association to allow that. If an attendant chose to change his asylum there was no rule by which the parchment should be transferred to his new employer, and as they (the members) were allowed to keep possession of the diplomas they gained from the Universities, so he thought the attendants should be allowed to retain their certificates.

Dr. YELLOWLEES urged that it should be an absolute rule that the certificate should be dated with the date of the examination.

Dr. FOX hoped the meeting fully realized the extreme importance of the rule, and the dangers to which they were very possibly opening the door. It was not only attendants in asylums who would use those certificates, but those who were not under supervision. There were attendants who had been in asylums, and had taken private nursing for themselves, and with regard to these there was a certain element of danger if their conduct should not be all that was desirable.

Dr. NEWINGTON said that the one thing that was impressed upon the Nursing Committee was that the certificate should not become a certificate of morality, and they took every step to show that they did not vouch for the person's good conduct. Still, they took strict precautions to ensure that he should be of good conduct at the time the certificate was granted, and they thought that if an attendant went into private nursing he should be followed as far as possible, and the certificate taken away from him if he misused it.

A MEMBER—How can you take it away from him?

Dr. NEWINGTON—Because he signs an undertaking to return the certificate if it is demanded from him. His employer is requested to send it to the Association.

Dr. SPENCE understood as a member of the committee that there was a reference on the back of the certificate to the effect that it was only as to professional ability.

Dr. NEWINGTON replied in the affirmative, and read the clause. The certificate was not a testimonial. It was a document given to a person as the result of passing an examination. It was intended that the certificate should be dated, and this would be the case in future.

Dr. URQUHART said the point was thoroughly well thrashed out in committee. It was a point that gave a great deal of trouble, and the arrangement was made that the person gaining the certificate and signing the undertaking should leave the parchment with his employer, so that the latter might com-

municate with the Secretary of the Association if there was anything wrong with the conduct of that person.

Dr. YELLOWLEES thought they had made a mistake, and that they must leave characters and conduct out of the certificate. No employer would be bothered with it. He thought it should be more of the nature of a diploma, and simply a testimonial as to knowledge.

Dr. RICHARDS proposed that the words character and conduct be left out.

Dr. YELLOWLEES moved that they should ask the Nursing Committee to reconsider the whole matter at the next Quarterly Meeting.

Dr. RICHARDS seconded.

Dr. NEWINGTON said that was quite impossible. The Association ought to come to a decision on the principle. They could not alter the document without involving a question of principle.

The meeting then voted on the point, and decided that the attendant should be allowed to retain his parchment at all times.

On the question that the reference to conduct and character in the certificate should be omitted, after further discussion it was resolved, on the motion of Dr. MACLEOD, that the face of the certificate should remain as it was, with the date added.

It was further resolved that the rules as amended should be reprinted.

On the motion of Dr. CAMPBELL the thanks of the Association were tendered to Dr. Hayes Newington for his services in connection with the work of the committee.

MEDICO-PSYCHOLOGICAL TEACHING.

The following resolution, passed at a special meeting of the Council, held at Bethlem Hospital, on June 23rd last, was next submitted:—"That this meeting recommends to the Annual Meeting that a Board of Education be appointed to consider all questions affecting medico-psychological teaching. The Board to consist of all members of the Association who are lecturers and teachers of psychological medicine in the Universities or Medical Schools of the United Kingdom."

This was agreed to.

NOMENCLATURE OF CAUSES OF DEATH IN ASYLUMS.

Dr. WHITCOMBE submitted a resolution, passed by the Council at their meeting that morning, to the effect that a committee, consisting of Drs. Tuke, Savage and Whitcombe, be appointed to suggest to the College of Physicians a nomenclature of causes of death in asylums.

Dr. YELLOWLEES—Will they accept of our co-operation?

Dr. WHITCOMBE—I think they will.

The resolution was agreed to.

ELECTION OF TWO HONORARY MEMBERS.

Dr. TUKE submitted the name of Dr. Needham for election as an honorary member, and referred in felicitous terms to his appointment as a Commissioner in Lunacy.

Dr. URQUHART proposed the name of Dr. Féré.

Both gentlemen were elected.

VOTES OF THANKS.

The usual votes of thanks to the retiring President, Secretary, etc., were passed, and the members adjourned for luncheon, after a protracted sitting.

THE AFTERNOON MEETING.

THE PRESIDENTIAL ADDRESS.

The afternoon meeting was held on the lawn under the shade of the trees. Dr. Baker presided, and called upon the Hon. Gen. Secretary, Dr. Fletcher Beach, to read letters expressing regret at being unable to be present, received from the Commissioners in Lunacy for England, Dr. Sir Arthur Mitchell, representing

the Board of Lunacy in Scotland, the Board of Lunacy in Ireland, Dr. Lockhart Robertson and Sir Crichton Browne, Lord Chancellor's visitors, Sir Andrew Clark, President of the Royal College of Physicians of London, Mr. Bryant, President of the Royal College of Surgeons of England, Mr. Jonathan Hutchinson, ex-President of the College of Surgeons, Dr. Howden, etc.

These included the following communications :—

From the Commissioners in Lunacy.

“ Office of Commissioners in Lunacy,
“ 19, Whitehall Place, S.W.,
“ 18th July, 1892.

“ SIR,

“ The meeting of your Association at the Retreat at York in this the centenary year of that Institution affords an opportunity, of which the Commissioners in Lunacy desire to avail themselves, of expressing their high appreciation of the humane principles of treatment of the insane first practically introduced into this country by its founder, and since constantly applied there.

“ The value and importance of those principles were fully recognized by the Commissioners' predecessors, the Metropolitan Commissioners in Lunacy, who in their Report for 1844 referred to the Retreat in the following terms :—

“ The Retreat at York was established in the year 1792, and introduced a milder system of managing the insane than any then previously practised. This admirable Institution has from its foundation up to the present time steadily preserved the same humane and benevolent method of treating its patients with which it commenced.’

“ The Commissioners are satisfied that these words are equally applicable at the present day.

“ I am, Sir, your obedient Servant,

“ G. HAROLD URMSON,

“ Secretary.

“ The Secretary of the Medico-Psychological Association.”

Letters were also received from the Medical Commissioners, Mr. Cleaton, Dr. Southey and Dr. Needham, expressing regret at their inability to attend.

Scotch Lunacy Board.

Letter from SIR ARTHUR MITCHELL, K.C.B.

“ General Board of Lunacy,

“ Edinburgh, 9th July, 1892.

“ DEAR SIR,

“ I beg to thank the Council of the Medico-Psychological Association for their invitation to be present at the annual meeting of the Association to be held in York on the 21st of July, under the presidency of Dr. Baker, in honour of the Centenary of

the foundation of the Retreat. I greatly regret that, in consequence of the state of my health, I cannot accept the invitation; but, though not present, I shall join most heartily in the celebration of an event which has proved so great a blessing to the insane of our country and of all countries.

"The whole work of my life has been coloured by Samuel Tuke's description of the Retreat. It was William Tuke who founded the Retreat, but it was Samuel Tuke who made it known to me, and I think I lift my hat as high to the grandson as to the grandfather. If the Description of the Retreat had not been written I might have been well up in years before I had known much or anything about it. Samuel Tuke's Description spread the story of William Tuke's good deed, and brought imitations everywhere—filled men with the desire to do likewise.

"The title of Tuke's work misleads. It is much more than a description of the Retreat. It is a presentation of the principles which should guide men in treating and caring for the insane. It is beautifully written, and I find it still delightful and instructive reading. Our friend Dr. Hack Tuke should be proud of having such ancestors. And proud he is, I doubt not, for he inherits their spirit as well as their name.

"I hope you will have a very successful meeting.

"Believe me, very faithfully yours,

"ARTHUR MITCHELL.

"Dr. Fletcher Beach."

From DR. SIBBALD, a Commissioner in Lunacy for Scotland.

"General Board of Lunacy,

"Edinburgh, 11th July, 1892.

"DEAR DR. FLETCHER BEACH,

"I have to thank the Council of the Medico-Psychological Association very sincerely for their kind invitation to the annual meeting to be held at York.

"It is with great regret that I find myself unable to avail myself of this invitation, especially on account of the connection of the meeting with the Centenary of the foundation of the Retreat.

"I gladly take this opportunity, however, of expressing my hearty concurrence in the intention to do honour to the projector of the Retreat. No one who is interested in the welfare of the insane can fail to be grateful to William Tuke and his associates and successors in that Institution, where those principles were first carried into operation, upon which the efficient treatment of insanity must always rest.

"Had it not been for the Tukes and their fellow workers, one of the most gratifying chapters in the history of British philanthropy might not have been, as it is, a chapter of which we are proud.

"With earnest wishes for the success of the meeting, believe me,

"Yours very truly,
"JOHN SIBBALD."

Dr. Howden, the Medical Superintendent of the Montrose Royal Asylum, regretted his inability to attend.

From the Irish Lunacy Board.

"Office of Lunatic Asylums,
"Dublin Castle, 19th July, 1892.

"DEAR SIR,

"Since we cannot attend in person, may we ask you to convey to the members of the Medico-Psychological Association, assembled at York on the 21st July, our warm congratulations on the celebration of the 100th anniversary of the York Retreat, a place ever memorable as the fountain-home of the system of non-restraint in the British Isles, from which the first step was taken to banish the dark ages of cruelty and terror, and to inaugurate a new era in the humane treatment and care of those who, owing to mental defect or perversion, are unable to protect or help themselves.

"The founder of the York Retreat, William Tuke, was like his great compeer, Pinel, one of the truest philanthropists of all time, and to his memory and to his descendants is due a tribute of gratitude from all those interested in the care of the insane in every part of the British Empire, and from no country can it be more heartily offered than from Ireland, where his great work has received such heartfelt sympathy.

"A Centenary celebration, which must ever be a landmark in the study of psychology, should instil in our minds the desire to emulate the great work of the illustrious family, who, discarding old methods and treatment, inaugurated the great work of reforming the mad-houses of old, and of freeing the patients from fetters and restraint, and a thousand inhumanities.

"We are, Sir,

"Your obedient servants,

"GEO. PLUNKETT O'FARRELL, M.D.

"E. MAZIERE COURTENAY.

"To Fletcher Beach, Esq., M.B.,

"Hon. General Secretary Medico-Psychological Association."

From DR. LOCKHART ROBERTSON, Lord Chancellor's Visitor in Lunacy.

"Gunsreen, The Drive, Wimbledon,
"July 10th, 1892.

"DEAR SIR,

"I extremely regret that I shall be unable to avail myself of the invitation which the Council of the Medico-Psychological

Association have honoured me with for the 21st inst. Had it been a week earlier, when I shall be in York, I should gladly have availed myself of the opportunity you afford me of meeting Dr. Baker and many other of my old friends. But I am due in Edinburgh on the 18th inst., and I have an important professional engagement there on the 20th or 21st which I cannot alter.

“Believe me, sincerely yours,

“C. L. ROBERTSON.

“Dr. Fletcher Beach.”

From SIR JAMES CRICHTON BROWNE, *Lord Chancellor's Visitor in Lunacy.*

“Queen Anne's Mansions, St. James's Park, S.W.,

“July 6th, 1892.

“DEAR DR. FLETCHER BEACH,

“I am much gratified by your courteous note, and sincerely wish it in my power to avail myself of the invitation which it conveys, for nothing could give me greater pleasure than to meet a group of old friends and colleagues in medico-psychological conclave assembled, on ground, too, hallowed by a century of the calm and persistent pursuit of humanity in the treatment of the insane. But alas! I have official duties on the date of your meeting which I cannot put aside. Pray express to those assembled at York my regret that I cannot join them, and my unabated sense of fellowship with them in their work, their trials, their aspirations. With kind regards,

“Yours very faithfully,

“JAMES CRICHTON BROWNE.

“Dr. Fletcher Beach, F.R.C.P., etc.”

A letter expressing regret at being unable to be present at the meeting, received from the President of the Royal College of Physicians, Sir Andrew Clark, Bart., acknowledged “The inexpressible benefits conferred upon the insane by the Retreat.”

From JONATHAN HUTCHINSON, F.R.C.S., F.R.S., LL.D., *Ex-President of the Royal College of Surgeons.*

“15, Cavendish Square, W.,

“July 16th, 1892.

“MY DEAR SIR,

“I much regret that it will not be in my power to be present at the centenary celebration of the Retreat at York. Had it been practicable I should have much liked to avail myself of the invitation with which I have been honoured, to take part in the proceedings. In common with all who are acquainted with the facts, I look back with great interest and thankfulness upon the part which was taken by the founder of the Retreat in bringing about that kindly reformation in the treatment of the insane which has been achieved during the last century. For many

years it was almost the only Institution in England in which the poor sufferers from mental disease were received with sympathy, and where the avoidance of all harsh measures was systematically enforced. Nor when the humane principles which it was the first to recognize and to practise had made their way into general acceptance, did this Institution in any way fall behind in the race of progressive improvement. The Retreat has been through its whole career, and I believe still is, a model of what may be effected in such establishments by persevering and judicious kindness. In addition to these general considerations I have also personal memories which would have made it a great pleasure to me to take part in the proposed meeting at York. As a pupil of the late Dr. Caleb Williams I long resided in York, and was very frequently, during a period of five years, within the walls of the Retreat. I well remember many of its patients, and with one or two formed friendships which I valued. Under the guidance of the late Dr. Thurnam the foundations of my knowledge of pathological anatomy were laid chiefly in the post-mortem room of the Retreat. I have good reason for remembering the Institution and its officers with warm gratitude, and I wish its Centenary every success.

“Believe me, yours truly,
“JONATHAN HUTCHINSON.”

From DR. FIELDING BLANDFORD.

“48, Wimpole Street,
“20th July, 1892.

“DEAR DR. BEACH,

“I greatly regret that circumstances prevent my attending the meeting of the Medico-Psychological Association at York. I have a strong feeling of admiration for the work begun at the York Retreat a hundred years ago and carried on since in a way worthy of the founder thereof, and it would have given me great pleasure to have been present on this occasion. With good wishes,

“I remain, yours truly,
“G. FIELDING BLANDFORD.

“Dr. Fletcher Beach.”

The PRESIDENT then delivered his Address. (See Original Articles.)

Dr. WHITCOMBE proposed a vote of thanks to Dr. Baker for his able and interesting address. He had stated, at the commencement of his address, that one of his great difficulties was the choice of a subject on which to address them; but he (the speaker) thought that under the circumstances, and as that year was the Centenary of the institution, no better subject could have been brought before them, and, moreover, he thought it was a subject that would suggest itself very naturally to Dr. Baker. (Hear, hear.) They had heard an interesting account of the advances which had been made in that and in other institutions, and those advances, it seemed to him, had been carried on up to the present moment.

Dr. CONOLLY NORMAN, in seconding the proposition, said on an occasion like the present, when they had assembled to celebrate the Centenary of that great institution, the subject which Dr. Baker had chosen to address them upon was one which they had listened to with very great satisfaction. Dr. Baker had shown that the great work which was commenced there one hundred years ago was still carried on in the same admirable spirit that inspired the Tukes of that day and their descendants. Dr. Baker had touched on some recent developments of their ideas of the treatment of the insane, and had dwelt in an interesting manner on two points which were particularly modern and of great importance, those of the personal influence of the sane mind and the increased need of a larger medical staff than used to be considered necessary in olden times. He had also indirectly spoken of the question of medical treatment. Some confusion occurred in the minds of many people between medical and medicinal treatment. Dr. Baker had wisely avoided the latter, and he (the speaker) hoped that none of them would forget there was a great deal in medical treatment outside of mere medicinal treatment.

Dr. JULES MOREL, on behalf of the Society of Mental Medicine, of Belgium, expressed hearty sympathy with the kindred English Association. The Medico-Psychological Association of Belgium did not forget that they had had in that country Guislain, a man who was very well acquainted with the subjects that had been treated of that day. The speaker also referred to the fact that they had present in the person of Dr. Semelaigne a descendant of the celebrated Dr. Pinel; and, in their member Dr. Tuke, a descendant of those who had founded the Retreat. He had thought it, personally, a duty to be present there and express his best thanks for what William Tuke did for the English people and certainly for the Association indirectly.

Dr. SEMELAIGNE concurred in the remarks of the last speaker, and wished to add his tribute to the splendid results that had followed on the work of William Tuke.

The motion was cordially carried, and acknowledged in a few appropriate remarks by the PRESIDENT.

Dr. HACK TUKE said that it had struck him that the two most salient points connected with the treatment at the Retreat referred to, were first, restraint; and secondly, the use of stimulants in the place of depressants. With regard to the former, it was not historically true that the Retreat introduced absolute non-restraint, and he thought it should be clearly understood that they should not take credit for having introduced it. They never took the view that non-restraint should be adopted as a hard and fast line. Whatever view they took of the advisability or otherwise of putting a strait waistcoat on a patient, they never thought it desirable to put one on the superintendent, but left him to use a certain amount of restraint or not, according to his judgment. It showed what a remarkable advance had been made in one hundred years that it should be considered so much to the credit of the Retreat in the early days that they would not use chains when most other institutions were using them. It was very interesting to note that at an early stage of their history they rarely used the lancet, emetics, or purgatives, or any depressants. The patients in many cases of mania were given ale or porter instead. That caused great surprise and a large amount of scepticism, but they were all agreed at the present time that they did not err in using more stimulants and fewer depressants.

The proceedings then terminated, and the members were subsequently taken over the new buildings at the Retreat by the President.

In the evening the members attending the meeting, together with a number of specially invited guests, were entertained at dinner, Dr. Baker presiding.

The Hon. Secretary, Dr. Fletcher Beach, read additional letters

of non-attendance and congratulations to the Committee of the Retreat on its completion of the Centenary:—

From the American Medico-Psychological Association.

“Buffalo State Hospital,

“Buffalo, N.Y., July 7, 1892.

“TO THE PRESIDENT OF THE MEDICO-PSYCHOLOGICAL ASSOCIATION
OF GREAT BRITAIN AND IRELAND.

“We take the occasion of the Centennial of the York Retreat, on behalf of the American Medico-Psychological Association (formerly the Association of Medical Superintendents of American Institutions for the Insane), to express the indebtedness of the alienists of America to the York Retreat and to the pioneer work of its Founder in bringing about the improved treatment of the insane. The reform in the treatment of this unfortunate class, inaugurated by the establishment of this Institution, and the principles confirmed by its experience, have gone forth to their beneficent work for successive generations to every land where the English tongue is spoken or English thought dominates public sentiment. The importance of this work has had fresh emphasis during the past ten years in America, where the methods of managing insane patients have been practically revolutionized by discarding mechanical restraint and promoting the employment of every class of insane patients. Many officers of American institutions for the care of the insane felt renewed courage to undertake these reforms after visiting the York Retreat and observing personally what had been accomplished there.

“It should be a matter of congratulation to the descendants of William Tuke that the good work which he began one hundred years ago has been increasingly effective year by year since. Kindness, tact, and employment seem very simple means to accomplish such wide-reaching results, but they have proven more effective in the management of the insane than the sterner measures formerly in use. The physicians of America engaged in the treatment of the insane beg to join with the British Medico-Psychological Association in doing honour to the memory of those pioneers in the humane treatment of the insane who bore the name of Tuke.

“With great respect, we remain,

“J. B. ANDREWS,

“*President.*

“HENRY M. HURD,

“*Secretary.*”

Dr. Hurd, of the Johns Hopkins University, Baltimore, in forwarding the foregoing, expressed his hope that Dr. Walter Channing, of Boston, then visiting England, would be able to present it to the Retreat meeting on behalf of the American Association,

but unfortunately his engagements obliged him to return home before the day of the Celebration.

From Dr. JOHN CURWEN, Medical Superintendent of the Hospital for the Insane, Warren, Penn., U.S.A.

“Warren, Penn., July 11, 1892.

“DEAR SIR,

“It gives me great pleasure, as one of the oldest members of the American Medico-Psychological Association, to be able to send a most hearty greeting to the British Medico-Psychological Association assembled in the ancient city of York to commemorate the great event in the history of the care of the insane in England, instituted by William Tuke at the Retreat.

“Believing fully in the practice commenced at that time at the Retreat that restraint should only be used as a means of protection to the individual, the effort has been constantly made to minimize its use.

“We need to have our thoughts directed more earnestly and intently on a greater variety of diversion and occupation for all the insane, as that seems to be a more direct appeal to the mental structure, while the medical, dietetic, and hygienic treatment build up the physical structure.

“The American Medico-Psychological Association expects to celebrate its semi-centennial in 1894, when it is hoped that many members of the British Medico-Psychological Association will be able to meet with us, if they do not feel able to attend the meeting in Chicago in June, 1893.

“Very cordially yours,

“JOHN CURWEN.

“Fletcher Beach, M.D.”

From Dr. STEARNS, Medical Superintendent of the Retreat, Hartford, Connecticut.

“Hartford, July 4th, 1892.

“MY DEAR DR. HACK TUKE,

“It would certainly give me great pleasure to be present at the meeting of your Association at York, not only because of my present interest in Old York and its vicinity, but especially that I might present in person the greetings and congratulations of the Hartford Retreat to her Elder Sister on the occasion of her centennial anniversary. It is certainly unusual for a younger sister to congratulate an elder one on the attainment of an advanced age, but when, as in the present case, she has long been the mother of many vigorous children who rise up, not only in all parts of Europe, but also in America, and call her blessed, surely congratulations may be considered in order. On this birthday

anniversary of our country, therefore, the Hartford Retreat sends salutations and greetings to the York Retreat, and begs to drink to her health.

“May the coming century of her life be characterized by the same high purposes, and crowned with the attainment of even greater successes than those of the past. With best wishes for a good meeting,

“I am, most sincerely yours,
“H. P. STEARNS.”

From DR. JOHN B. CHAPIN, Medical Superintendent of the Pennsylvania Hospital for the Insane.

“Philadelphia, July 6th, 1892.

“MY DEAR DR. TUKE,

“It is a subject of regret that I cannot be one of those who will assemble at York, on the 21st, to recognize in some appropriate way the founding of the Retreat, one hundred years ago. It is not so much the fact that at that period improved accommodation was made for a certain number of afflicted and helpless insane persons, but that the principles which actuated the Founder—William Tuke—should be the leading thought on an occasion like that which calls you together.

“It is fitting and becoming that the Medico-Psychological Association of Great Britain should commemorate and honour the Centenary of the establishment of the Retreat by holding its Annual Meeting this year at York. Those engaged in the treatment and care of the insane at this day may well come together to bear testimony to the great advances that have been made during the past hundred years, mainly along the lines originated in the action taken by the founder, that they should recognize the fact that those principles of the humane care of the insane which were then inculcated have been universally confirmed by actual experience, and that the present event may be regarded as a milestone in the great march of humanity by all the English speaking people throughout the world.

“At the date of the founding of the York Retreat, the Pennsylvania Hospital was the only established institution for the insane in the United States. This hospital has always been largely under the influence and control of the Society of Friends. Many of our contributors and managers have from time to time visited the Retreat to observe its operations, and to derive from the fountain-head a new inspiration for their own work. I voice the sense of the contributors and managers of this hospital when I ask you to be the medium of conveying to the managers of the Retreat the deep sympathy and interest they have in the auspicious

event they are about to celebrate, and our congratulations on the direct and indirect results of one hundred years.

"I remain, dear Sir,

"Sincerely your friend,

"JOHN B. CHAPIN,

"Physician and Medical Superintendent."

Telegram from the Russian Medico-Psychological Association.

"St. Petersburg, June 20th. To Dr. BAKER, The Retreat, York.

"The Medico-Psychological Association of St. Petersburg congratulates the York Retreat, from which humane ideas were originally propagated throughout the Universe, and contemplates on the occasion of the Centenary the glorious memory of the celebrated William Tuke."

From PROFESSOR MIERZEJEWSKI, St. Petersburg, Honorary Member of the Medico-Psychological Association of Great Britain and Ireland.

"MY DEAR CONFRÈRE,

"I write to inform you that I exceedingly regret my inability to be present at the meeting of the Association held at York on the occasion of the Centenary of the Retreat, but I beg of you to accept the expression of my most cordial felicitation on the occasion of this fête of humanity, which is unique in character, and is associated with glorious memories."

"Yours, etc.,

"J. MIERZEJEWSKI."

From PROFESSOR BENEDIKT, of Vienna.

"July, 1892.

"MR. PRESIDENT,

"My desire to be present at the meeting of the British Medico-Psychological Association was never greater than this year, and I am very unhappy to be prevented enjoying the honour and pleasure.

"You celebrate at York a feast in which every friend of civilization must participate with enthusiasm. You in England have, before all, good reason to be proud of this memorial feast. The English can boast to have taken the lead in a great work in which intelligence, nobility of heart, and energy have an equal share.

"The combination of energetic manifestation of individualism, with pronounced common sense, exhibited in the features of William Tuke is characteristic of Englishmen, and this national stamp is evident in the great deed at York.

"Accept the expression of his greatest esteem from his respectfully affectionate Socius,

"PROF. BENEDIKT."

Telegram from the German Association of Psychological Physicians.

“Berlin, July 20, 7.50.

“The Association of German Psychologists sends its heartiest greetings to the Centenary Meeting of the Retreat, to the Superintendent, to the family of Tuke, and to the Colleagues present at the meeting.

“PROF. JOLLY.

“DR. LAEHR.”

From DR. HEINRICH LAEHR, of the Schweizer-hof, near Berlin.

“July 14, 1892.

“Mental physicians have their eyes at this moment directed to the building where for the first time after a long night in which a bitter fate befel the insane, the morning sun shone on their humane treatment. . . .

“How gladly would I have laid on the day of celebration a laurel-wreath upon the foundation stone of the Retreat, and have expressed my good wishes to the English nation, but alas! I am prevented by illness.

“German alienists have always had great sympathy with those of England. We have learnt much from them, and still do so. Our younger colleagues travel there, and forward to me as Editor of the ‘Zeitschrift’ most excellent articles, and express themselves even with enthusiasm as to what they find in England. . . .

“It is justly observed in the last number of the ‘Journal of Mental Science’ that when Jacobi undertook the management of an asylum in his 50th year he, in the first instance, visited England, and found in the Retreat a model, in the spirit of which he conducted Siegburg. Thither we young psychiatrists directed our steps in order to acquire a practical knowledge of its teachings. Jacobi also made himself personally acquainted with Samuel Tuke, and became his warm friend.

“I am convinced that in the collective name of German mental physicians I may convey their hearty congratulations on the celebration of this Centenary. Pray assure the assembled colleagues that when they visit our asylums, when they give us their experience, and when they gladden us by their presence, it is to us also a festival. Accept once more the expression of my friendly respect and the cordial greetings of my colleagues by their friend,

“HEINRICH LAEHR.”

From DR. HENRICH SCHÜLE, Medical Superintendent of the Illenau Asylum (Baden).

“July 17th, 1892.

“HONOURED COLLEAGUE,

“Accept, among other hearty greetings, the expression of Illenau’s warmest good wishes for the remarkable secular festival

of the greatly renowned institution at York. May it be granted to the famous Retreat to be true to its honourable history; also to continue to be a blessing to the homestead of noble humanity, the handmaid of science, and to us all an example.

"Our Illenau also will on the 27th of September celebrate its Fiftieth year Jubilee. United in aims and endeavours, it reaches forth its hand to its elder sister in good wishes—*ad multos annos*.

"In fraternal esteem,

"Your devoted Colleague,

"DR. H. SCHÜLE.

"Dr. H. Tuke."

From M. MOTET, Ex-Hon. Sec. Société Médico-Psychologique de Paris.

"Paris, July, 12, 1892.

"MONSIEUR LE PRESIDENT—HONOURED COLLEAGUE,

"I should have been very glad to accept the gracious proof of your sympathy. My regret in being detained in Paris is so much the greater from the sincere pleasure it would have given me to join in the words which will be uttered on the occasion of a glorious anniversary to celebrate the memory of the originator of the York Retreat.

"England and France have had as contemporaries two men with generous hearts, who, breaking with the past, have taken pity on the insane, and been the means of emancipating them from their chains.

"There is no room for jealousy between them. They have similarly marched onward in the path which sentiments of humanity have thrown open. From this memorable epoch, with both the French and English, the progress in the treatment of the insane dates. It is the duty of our generation to express our gratitude, after the lapse of a century, to the worthy men to whom we owe so much.

"I have pleasure in presenting my hearty salutation in assuring you that I am with you on this solemn occasion, and in conveying to you the expression of my respectful sympathy.

"I am, Mr. President and honoured Colleague,

"Your very devoted,

"A. MOTET."

From DR. COWAN, Netherland Medico-Psychological Association, Dordrecht, Holland.

"Dordrecht, June 28th, 1892.

"GENTLEMEN,

"At the last meeting of the Medico-Psychological Association of the Netherlands, on June 22nd, 1892, a Resolution was unanimously passed to congratulate you on the Centenary of the

Retreat at York, and to express a hope that a happy retrospect may be yours.

"Need we add, gentlemen, that we take part in your rejoicings, and that we sincerely hope the good example set in 1792 may act as a salutary example to all the world, and that the time may come when an *asylum* will be thought of only as a *Retreat* for mental sufferers.

"We send you our fraternal greetings, and add the wish that both the British and the Netherland Societies may long continue in peaceful strife to relieve the sufferings of the insane.

"The Medico-Psychological Association of the Netherlands.

"DR. F. COWAN,

"*President.*

"DR. POMPE,

"*Secretary.*"

From Switzerland a sympathetic letter was received from Dr Wilhelm von Speyr, Medical Superintendent of the Waldau Asylum, near Berne.

Speeches were delivered by Dr. CLOUSTON, the CITY SHERIFF, on behalf of the Lord Mayor of York, and Mr. JOSEPH ROWNTREE, the Chairman of the Retreat Committee, who proposed the "Medico-Psychological Association," coupling with it the name of Dr. Baker. He thought that the occasion of the Centenary of the York Retreat might be made the starting point of another forward movement. The time of gloomy and forbidding buildings for the insane had passed away, and they had palatial edifices with corridors decorated by Italian artists, and rooms furnished according to the latest teachings of the gospel of æstheticism, but it appeared to him that the Association might be of very great service in creating public opinion on the question of the conditions favourable for the treatment of insanity. If any of them were ever to suffer from that great affliction, he thought there would be something which they would desire more than beautiful rooms, and that would be that they should have companionship and sympathy from men of their own plane of thought and education. Within the lifetime of everyone in that room Miss Nightingale had been able with her wonderful enthusiasm to draw from the educated classes a contingent of ladies willing to enter upon the life of a hospital nurse, and in thinking about that meeting of the Association it occurred to him that probably there might be a possibility that in many of the asylums they should train a body of cultivated attendants willing for a term of years to be the companions of those who were afflicted with insanity.

The PRESIDENT, in responding, said they must feel deeply obliged to Mr. Rowntree for the way in which he had spoken of the work of their Association. They all felt deep admiration for Tuke, and for Pinel, who amidst the throes of the great revolution inaugurated humane movements such as that, the Centenary of which they were now celebrating.

Dr. YELLOWLEES eloquently proposed the next toast, "The Dictionary of Psychological Medicine," as fittingly placed on the shrine of the memory of the author's ancestors in their silent presence on the occasion of the Retreat Centenary.

Dr. TUKE expressed his acknowledgments and his unabated interest in an Institution in which he resided many years ago. Over the entrance of a Buddhist Temple in Japan there was an inscription "Stranger, whosoever thou art, and whatsoever be thy creed, when thou enterest this sanctuary, remember that the ground on which thou treadest is hallowed by the worship of ages," and if an inscription were placed over the entrance to the Retreat, he would

suggest this paraphrase:—"Stranger, whosoever thou art, and whatsoever thy creed, when thou enterest this Hospital, remember that the ground on which thou treadest has been hallowed by a noble deed, and by the humane work of a century." He concluded by proposing the "Health of Dr. Semelaigne," who had come from Paris to be present at this Centenary. He was not only the son of a distinguished alienist in Paris, but was the great-grand-nephew of the illustrious Pinel. They all appreciated the feeling which brought him to York, and the testimony which he bore to the work which the Retreat had performed. With regard to Pinel, there had never been a nobler, never a more humane man in all France. The more he (Dr. Tuke) studied his character, the more he admired him. Therefore it was most fitting that they should on this occasion receive Dr. Semelaigne with the greatest cordiality.

Dr. SEMELAIGNE responded in suitable terms, and observed that two men in France and England, without knowing anything of each other, resolved on each side of the Channel to introduce a humane treatment of the insane. At that moment the two nations were enemies, now they were friends, and the book of wars was closed for ever. As the great-grand-nephew of Philippe Pinel, he was proud to sit among them to celebrate the name of William Tuke. He would never forget his journey to York, where he was allowed to see that the two great sister nations had become so friendly and united—England and France, as also two great philanthropic names—Tuke and Pinel.

Dr. URQUHART proposed "The Visitors," coupling with the toast the names of Mr. W. HARGROVE, of the *Yorkshire Herald*, and Dr. JULES MOREL, who responded.

IRISH MEETING.

An Irish Quarterly Meeting was holden at the College of Physicians, Kildare Street, Dublin, on May 26, 1892. Present: Dr. Patton (in the chair), Drs. Finnegan, Drapes, Cope, R. V. Fletcher, Molony, Eustace, Nolan, Nash, and Conolly Norman (Secretary).

The minutes of the preceding meeting having been read, confirmed, and signed, the SECRETARY read apologies from a number of members who regretted being unable to attend. He also announced the date and place of the Annual Meeting for 1892, as fixed at the last Quarterly Meeting held in London.

The following resolution was proposed by Dr. MOLONY, seconded by Dr. FINNEGAN, and unanimously adopted:—"That this meeting fully endorse the resolution unanimously adopted by the Association at the meeting held in London on the 19th inst. relative to the recent Privy Council Rule on the subject of the abolition of Visiting Physicians to Irish District Lunatic Asylums."

Dr. John Neilson Eustace was elected a member of the Association.

Dr. M. J. NOLAN read a paper on "Katatonia." (See Original Articles and Clinical Cases.)

Dr. DRAPES discussed the subject at some length, illustrating his remarks by reference to a number of cases. On the whole he felt that the group of cases which had been called Katatonia was too ill-defined to be considered as a distinct type. Various men formulated various classifications; men of a synthetic mind, which sought chiefly for similarities, simplified classification; men of an analytic mind, which most readily saw points of difference, constructed classificatory schemes enfolding numerous subdivisions. He spoke highly of the value of the paper.

Drs. MOLONY, FINNEGAN, and CONOLLY NORMAN also spoke.

Dr. VINCENT NASH read a paper on "Alcoholic Neuritis," describing two cases of this affection recently under treatment in the Richmond Asylum, Dublin, in which the characteristic mental disturbance was well marked.

Drs. PATTON, COPE, and CONOLLY NORMAN spoke.

The proceedings then terminated.

The members subsequently dined together at the Central Hotel. The following guests were present:—The Registrar-General, Dr. Walter G. Smith, Dr. J. W. Moore, Dr. Sigerson, and Dr. Guy P. L. Nugent.

ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION,
HELD AT NOTTINGHAM, JULY, 1892.

SECTION OF PSYCHOLOGY.

<i>President</i>	W. BEVAN LEWIS, L.R.C.P.
<i>Vice-Presidents</i>	{ W. BARNEY TATE, M.D. HENRY RAYNER, M.D.
<i>Honorary Secretaries</i> ...	{ FLETCHER BEACH, M.D. EVAN POWELL, M.B.C.S.

WEDNESDAY, JULY 27.

The proceedings of the Section were commenced by the President, who read an admirable address "On some desirable extensions of Asylum Ministration,"* in which he dealt with the duties and status of a skilled pathologist as a member of the medical staff; and he spoke encouragingly of the working of out-patients' departments in connection with our asylum system, the nursing and ambulance lectures developed by the Medico-Psychological Association, and outdoor private nursing he also discussed and praised highly.

Dr. RAYNER proposed, and Dr. MURRAY LINDSAY seconded, a vote of thanks to the President for his able and instructive address, which was carried by acclamation.

Dr. JULIUS ALTHAUS then opened a discussion on psychoses after influenza (this paper will appear as an Original Article in this Journal). The discussion was continued by the President, Sir Frederick Bateman, Dr. H. Rayner, Dr. Goodall, Dr. Murray Lindsay, Dr. Urquhart, Dr. Mickle, Dr. Batty Tuke, Dr. Corner, Dr. J. Peeke Richard, Dr. Richardson, and Dr. Aldridge.

Dr. URQUHART proposed, and Dr. H. RAYNER seconded, the following resolution:—"That a recommendation be made to the Council that a committee be appointed to consider the influence of influenza on the insane in asylums." This resolution was carried unanimously.

Dr. JULES MOREL, Commissioner in Lunacy for Belgium, gave an interesting account of the creation of a medico-psychological service in his country in connection with the prisons. Three alienists were now appointed to supervise the mental condition of prisoners. He contended that prisons always contain a certain proportion of insane people among the prisoners, and he advocated the importance of having them looked after in other countries as they were in his own. The aim of the alienists appointed by the Belgian Government was to remove and to certify the mental cases to asylums and to call the attention of the prison officials to any doubtful cases. The system had worked most favourably in Belgium and had been the means of giving many prisoners, whose insanity had not previously been recognized, a fair chance of recovery.

Dr. BEVAN LEWIS congratulated Professor Morel on the admirable results he had obtained, and thanked him for his able and highly suggestive paper. He was convinced there was a growing feeling in favour of the necessity for better

* See "British Medical Journal," July 30, 1892, p. 246.

supervision of the prisoners in this country by alienists. The prison medical officers were keenly alive to the necessity of asylums experience and the matter had not been lost sight of by Government.

Dr. URQUHART had great pleasure in welcoming Dr. Morel, and he supported his view of this important subject. Dr. Morel appeared as the exponent of the system in actual use in Belgium, and he could substantiate the theories he advanced by reference to the work done.

Dr. BAYNER thanked Dr. Morel for his interesting presentment of the subject. He agreed that certain criminal cases required treatment and not punishment, and he believed the result would be of great advantage both to the criminals and to society.

Dr. F. ST. JOHN BULLEN read a paper entitled "Enquiries into a variation of type in general paralysis." He was impressed with the fact that general paralysis is undergoing some modification under various influences. The points upon which he proposed to dwell were as follows:—(1). The relative frequency of certain recognized types of general paralytic, and the prominence or predominance of any one type. (2). Evidence that locality, this including questions relating to urban or rural life, occupations, modes of life, etc., has any notable influence on this change of type. (3). Whether any alteration is observable in (1) the age at which patients are attacked, (2) the duration of the disorder, and (3) its distribution as to sex. (4). Whether convulsive and apoplectiform seizures bear the same relation to each other, and to this disorder now as formerly (1) in frequency of and (2) period of occurrence, and what is their present significance in prognosis. (5). Whether there are any changes to be noticed in the coarse post-mortem features. With regard to the relative frequency of certain types he found dementia occurring within a month of the earliest symptoms in 28% by the end of three months, 38% by the end of 12 months no less than 62%; 23% were fatuous within a year, 53% by the end of the second year, and 79% by the end of the third. The admission rate in general paralysis seems to move up with the diminution of rural and the increase of urban employments, but besides variation in numbers there are differences of type in different districts. Dr. Smith, of Durham County Asylum, states that he finds the former boastful, elated characteristics replaced by violent and aggressive tendencies. The average age of all cases of general paralysis would seem to be about 42 years. The author found that $\frac{1}{4}$ th die by the end of the first year, $\frac{1}{3}$ ths by the end of the second, $\frac{1}{2}$ ths by the end of the third, and nearly $\frac{3}{4}$ ths by the end of the fourth year. The increase in the proportion of females to males seems probable. Convulsive attacks are less frequent, Dr. Bullen only recording twenty cases of convulsions among a resident number of 50 males, and he thinks the number of cases where mening-encephalic adhesions occur remains unchanged.

Dr. JULES MOREL finds that although general paralysis is increasing in Belgium the patients are more demented. He considered the disease remained as fatal as ever.

Dr. MICKLE thought there was some ground for believing there was a slight change of type from the excited expansive maniacal forms towards the depressed, and also probably the supposed change of type in many cases resulted from an earlier recognition of general paralysis.

Dr. FRANCIS WARNER read a paper on "Neural Action corresponding to the Mental Functions of the Brain."

The PRESIDENT remarked, we are all profoundly interested in the neural actions underlying attentive ideation and volitional activities. He gave reasons for assuming that attention is of a sensory and not of a motor nature. Motor accompaniments, however, occur, as we see by altered facial expression and altered rate of breathing in cases where the attention is strained. Again the flood of convulsive twitchings which pass across the forehead of the chronic alcoholic under strained attention, and the unilateral brow spasm which dis-

tinguish the chronic alcoholic from the general paralytic. The sudden arrest of the articulation, the sudden lapses of attention, the snipping of a word all seem to indicate a disorder of the motor adjustments associated with speech. The one important feature to recognize is the fact that the current passes through an intermediate centre of resistance, through which all sensory stimuli must pass to be interpreted into volitional actions. The feature he considered all important is the fact that ere these centres can issue in action the initiatory phase of consciousness has passed away. Our appreciation of the guidance we afford our movements is, of course, due altogether to the ingoing sensory currents aroused by the act itself.

Dr. MICKLE said that the early movements in the infant mentioned by the reader of the paper were those due to the inherited constitution of some of the comparatively higher centres, the infant inheriting a very slight nascent degree of co-ordination of some higher centres, the co-ordination of some lower centres, such as deglutition and phonation, being inherited in a somewhat complete condition. He also discussed the question of attention and volition referred to by the reader of the paper and the President.

Dr. HARRY CAMPBELL said that all parts of the body may be dynamically affected from the highest level in the cortex. This is proved by the effects of emotion, in which all the non-nervous parts of the body may be profoundly influenced. It is also shown by the effect of directing the attention to different parts of the body when an agitation occurs of the sensori-motor representatives of the part attended to in the highest level.

Dr. WARNER, in his reply, remarked that his views of neural action corresponding to mental action have mainly resulted from observation and inspection of children, and that in such work it is impossible to note and record objective and subjective consciousness. For physical study it is desirable to learn to describe mental states in the terms of the physical expression. The main point insisted on was the representation of mental acts by groups of centres, not by single centres.

Dr. HARRY CAMPBELL read a paper on "Minor Psychical Disturbances in Women," in which he discussed the liability of women to psychical disturbance and enumerated many examples—thousands of these women were treated in the out-patients' departments of the London hospitals—and exemplified in a remarkable degree the cases known as borderland. His deductions were based on an analysis of 200 cases, none of whom became actually insane—(1) Depression of spirits in varying degree; (2) irritability, (a) sensorial, (b) emotional; (3) fear; (4) fear of impending insanity; (5) loss of memory and power of attention, so common among climacterics; (6) hallucinations; (7) unpleasant dreams. With regard to the causation of the above symptoms the question as to how far they were the result of heredity and environment or defective organization had to be considered.

Dr. URQUHART congratulated the section on having had an opportunity of learning from Dr. Campbell's careful study of the slighter psychoses how these maladies came under the review of the hospital physician. Especially it is important for those of us who practise in asylums to learn how the minor psychoses are developed and treated and cured in the outer world. He referred to the practice in asylums of giving nourishment in the early morning when melancholic and irritable patients first awake. The treatment directed to driving toxic elements from the system evidently had the sanction of Dr. Campbell, and he hoped that Dr. Macpherson's paper on "Intestinal Disinfection" would still further elucidate the matter.

Dr. G. M. ROBERTSON thought it was most important that a study should be made of the minor psychoses and the early stages of insanity. He wished to bring forward a physiological view of sleep. There are two varieties of chemical metabolism which take place in the brain, the anabolic or building up or feeding of the nerve cells, and the katabolic or burning up or energizing of

the nerve cell. The former takes place at night when the brain is anæmic, the other when the brain is hyperæmic. In an excited brain the nerve cells will be in action during the night, when they are supplied with less oxygen, than during the day, and hence they will degenerate more and there will be greater exhaustion in the morning. Whenever the blood supply increases, as it does after food or stimulants, the morning depression will pass off.

Dr. FRANCIS WARNER remarked on the frequency of delusions and ocular illusions in women, and the importance of ascertaining their existence, as when kept secret they frequently engender the fear of insanity.

Dr. DUNN—Many of the cases alluded to seemed to him to correspond to cases of slight melancholia. Dr. Mercier insisted in his work upon the importance of the somatic nerve current in the production of such conditions. The fact that they are relieved by food in the early morning is significant.

Dr. JOHNSTON LAVIS considered these conditions were due to low nutrition at a period when vitality was at its lowest. He considered that caffeine or any drug that increased the blood supply would relieve the symptoms by driving towards the brain cells a larger quantity of nutrition.

Dr. CAMPBELL was gratified with the discussion his paper had elicited, and thanked the members for the views expressed in confirmation of his own.

Dr. JOHN MACPHERSON'S paper on "The Influence of Intestinal Disinfection in some Forms of Acute Insanity" referred to the too great readiness with which narcotics were employed in some asylums, and this led to the desire to find if possible some more appropriate line of treatment. The use of narcotics often produced a reaction which could only be overcome by the continuous administration of the drug, which in many cases meant the emaciation of the patient and the depression of his physical vitality. It was a matter of common knowledge that acute attacks were frequently averted by the simple exhibition of a purgative, for constipation of the bowels undoubtedly tends towards the exacerbations of the symptoms of acute mental disease, and an instantaneous, though maybe temporary, improvement follows the relief of a loaded intestine, which is so frequent a symptom of the mental malady. Indeed, as had been pointed out by Lauder Brunton, nux vomica in small doses acts in some cases as a mild hypnotic, and Sir Charles Bell, in his work on the nervous system, gives the notes of a case, among others, where a man was cured at once of a painful nervous affection by the exhibition of a simple purgative. We must not forget the depression accompanying hepatic derangement, nor the form of mental depression, which we might describe as visceral. He would point out that the acid of the gastric juice is primarily and chiefly antiseptic, and that where the gastric secretion is perverted, as in acute mental disease, its antiseptic power is in abeyance, and the line of treatment he now advocated was by the exhibition of antiseptics to remedy this defect. He selected a suitable case, washed out the stomach, and then gave a dose of calomel varying from 2½ to four grains at night, with a mild cathartic in the morning. This was followed by the exhibition of mild laxatives to keep the bowels acting daily. On the second day naphthalin in ten grain doses three times a day between meals is given, and this may be gradually increased until 80 grains are given in the course of twenty-four hours. In his experience in no instance was there the most remote symptoms of poisoning apparent. Dr. Macpherson gave the details of cases illustrating the benefits of the treatment. During the treatment nitrogenous foods were eliminated as much as possible from the patient's dietary. In the treatment of thirty acute cases there was no apparent interference with the general health. The action of the drug in preventing and removing anæmia was very marked. The bodily weight increased steadily; in fact, none of the cases lost weight. The tendency to pigmentation of the skin so common in melancholia was checked, and the skin lost its dry appearance. The promotion of sleep was, however, the most gratifying result, for when fully under the influence of naphthalin the patients slept normally and naturally for seven or

eight hours, and the sleep was undoubtedly not narcotic. What Dr. Macpherson claims for the remedy is its power to modify the prominent, troublesome, and distressing symptoms of acute melancholia; that it is safe and harmless; 120 grains were given to one patient in twelve hours with no ill effect; that its influence upon the bodily condition is to promote nutrition and induce normal sleep, and that its influence upon the mental symptoms is beneficial.

Dr. SUTHERLAND was anxious to know the formula used in the exhibition of naphthalin, and also if it could be used in cases with organic disease of the heart where the ordinary sedatives had failed to procure sleep?

Dr. GOODALL doubted the antiseptic influence of naphthalin in the doses mentioned, though he valued the paper as highly suggestive, and trusted it would lead to further developments in the same direction.

Dr. JOHNSTON LAVIS mentioned two cases in which a similar line of treatment had been followed. One was a case of mania, and the other of melancholia.

Dr. RAYNEE agreed with the author in considering the disinfection of the intestine a matter of great importance, and referred to the observations of Dr. E. Blake upon the absorption of pus leading to disorders of the nervous system, etc.

Dr. URQUHART referred to a series of experiments he had made some years ago in this direction. Latterly he had given eucalyptus, which seemed to him equally efficacious as naphthalin, and more readily accepted by the patients. Not only did calomel also act like a charm, but it was a possible purgative where a tasteless drug was necessary, and this added greatly to its value. He regretted the absence of Professor Ball, of Paris, and Dr. Clouston, of Morningside, for both could have added to the interest of the discussion by a statement of their special experience on the subject.

Dr. G. M. ROBERTSON urged the importance of the antiseptic line of treatment in mental cases where the disordered condition of the gastric juice so plainly indicated it, and he pointed out the advisability of digesting the food for acute cases. Antiseptics need only be sufficiently strong to enfeeble the germs formed in the intestines, and prevent them producing ptomaines.

Dr. MACPHERSON, in reply, pointed out the effect that naphthalin had in reducing the sulphates in the urine, and that the fæces of patients treated by it were almost devoid of smell. Naphthalin was, however, a difficult drug to administer, for it was not readily soluble, and its odour was unpleasant. He was glad to hear his views corroborated by other members of the section who used different antiseptics. Naphthalin had one strong point in its favour; it was, as far as his experience went, a safe drug to administer.

Dr. E. L. DUNN read a paper on "Paranoia and its Relationships," in which he dealt with the views of various authors upon this much-debated form of mental alienation. He discussed the various phases and symptoms of the disorder, and gave his views with regard to secondary paranoia, in which a small group of delusions might remain and become systematized as the outcome of a previous acute psycho-neurosis. The symptoms in these cases were generally of the melancholic type.

Dr. HACK TUKE recalled the time when *Verrücktheit* was the popular term abroad, and English alienists were thought behindhand in not adopting it. He thought the course pursued by the latter was justified. Now paranoia is substituted for *Verrücktheit*. It must, however, be remembered that there exists the greatest difference of opinion as to its definition, and he thought that a very difficult subject had been made ten times more so by the conflicting views expressed. If it could be shown that three stages followed one another as asserted by certain authors, there would be a justification for the adoption of a separate term. He thought, however, that the term "systematized delusional insanity" sufficed for a large group of cases, and that if ideas of persecution are present the term can be qualified accordingly. He of course admitted the importance of recognizing persecutory mania.

Dr. MICKLE divided paranoia into two great divisions of the depressed and expansive, and subdivided the former into the persecutory, hypochondriacal, and querulous; and the latter into the ambitious, the religious, and the erotic. All cases of paranoia do not belong to the great group of hereditary degenerates. He referred to the change in paranoia by conditions of ill-health.

Mr. J. PERKE RICHARDS quite agreed with Dr. Hack Tuke in deprecating the creation of so many fresh and new sub-divisions of mental disease. He thought the term paranoia quite unnecessary. Our own language was comprehensive enough.

Dr. RAYNER wished to endorse Dr. Mickle's opinion that the emotional state accompanying systematized sensory delusions was due rather to the bodily health of the patient than to the definite progress of the disorder.

Dr. MACPHERSON stated that so far as he remembered Magnan excluded all hereditary degeneracy from his special entity—all cases who had had previous attacks of insanity and all cases commencing in early life.

Dr. GOODALL suggested that the term paranoia might be used to describe that form of insanity which, commencing with auditory hallucinations, passes through stages of persecution and exaltation, and terminates in weakness of mind. He did not think the terms hereditary and acute paranoia should be employed. He should like to know if heredity was considered essential to paranoia.

The PRESIDENT was quite in accord with Dr. Hack Tuke in his dislike to the use of the term, because he doubted if the mutual cohesion of the branches was sufficient to justify its elevation to the dignity of a special morbid entity. Secondary paranoia he considered was merely another name for delusional insanity. So far as he understood the form paranoia persecutoria there was the necessity for a psychopathic basis. The paranoiac has arrived at a level at which affective disorder is no longer possible in most instances. He maintained that what was termed paranoia is simple delusional insanity engrafted on a psychopathic basis. The question of systematization depends upon the incidence of insanity in a psychopathic subject, and has had too great an emphasis assigned to it.

Dr. DUNN, in reply, said he was aware that there existed a prejudice in England against the term paranoia—a prejudice for which there was probably a considerable amount of ground. Still he thought that these cases were well worthy of separation from others for the purposes of clinical teaching, prognosis, and cure.

"Insanity as a Plea for Divorce" was the title of an interesting paper by Dr. WEATHERLY. He pointed out that the existing law was to the effect that if one of the contracting parties was insane at the time of the marriage contract the marriage was void. Dr. Weatherly, among other points in his paper, which he placed before the section with great clearness, laid particular stress upon those cases in which the insanity of one of the contracting parties prior to the marriage had been kept from the knowledge of the other contracting party, and he held that this was a contract which should be set aside. He also held that incurable insanity arising after marriage which had existed for say seven years under skilled supervision, and then pronounced incurable, should be a plea for divorce.

Dr. RAYNER thought the marriage contract was one which should not be set aside, and that the maintenance of the contract would tend to make the contracting parties more careful to ascertain family tendencies before entering into it.

Dr. HACK TUKE also advised caution in endeavouring to set aside the marriage contract, though he fully agreed that insanity at the time of marriage should invalidate it. He could not agree that in cases where insanity occurred after marriage the contract should be set aside.

Dr. KINGSBURY thought that where a marriage had been entered into during a lucid interval between two attacks, the marriage should be set aside.

Dr. SUTHERLAND mentioned cases which had come within his experience where the maintenance of the contract inflicted great hardships.

Dr. STEWART believed that the relief sought should be confined to incurable cases.

On the discussion closing, the subject was put to the vote, and the questions the section was asked to decide were:—

1st. Is insanity at the time of marriage a sufficient plea for divorce?—This was unanimously agreed to.

2nd. Is a fraudulent marriage (that is, where the knowledge of the insanity of one is kept from the other contracting party) a sufficient plea for divorce?—This was also agreed to unanimously.

3rd. Is incurable insanity, after a specified time of skilled supervision, a sufficient plea for divorce?—Ayes, 17; noes, 13.

Dr. WARNER gave a report upon exceptional children, and Dr. POPE, of Leicester, read a note on the establishment of a special class for feeble-minded children by the School Board of Leicester.

Mr. ABEL, Clerk of the Nottingham School Board, also spoke as to the value of Dr. Warner's researches in this connection, and a resolution confirmatory of Dr. Warner's report was passed.

Papers were also read by Dr. Lloyd Tuckey on "The Value of Hypnotism in Chronic Alcoholism;" and by Dr. Robertson on "The Use of Hypnotism among the Insane." Drs. Hack Tuke, Draper, Stewart, and Bedford Pierce joined in the discussion.

THE INTERNATIONAL CONGRESS OF EXPERIMENTAL PSYCHOLOGY.

The subject of experimental psychology seems to be attracting an ever-increasing number of scientists, and the Congress held on the first four days of August last will be remembered, not only for the many valuable papers read and the discussions connected with them, but also from the large number of eminent men from other countries who were present, and who contributed largely to the business of the meetings. In fact, so numerous and varied were the communications that the executive found it necessary, in order to get through the business, to divide the work of the Congress into two sections. Each morning there was a general meeting of the whole Congress, and in the afternoons the two sections sat.

Professor Sidgwick, who presided, was supported by the following vice-presidents:—Professor A. Bain, Professor Baldwin, Professor Bernheim, Professor Ebbinghaus, Professor Ferrier, Professor Hitzig, Professor Liégeois, Professor Preyer, Professor Delbœuf, Professor Richet, and Professor Schäfer. The honorary secretaries were Mr. F. W. H. Myers and Mr. James Sully, and to their energy and skill in organizing the work of the Congress the success achieved was mainly due.

The meetings were held in University College, where ample accommodation was afforded for the large number of members present. The Congress numbers about 270 members, and a large proportion were present each day.

In the space at our command we can but give the list of the papers read; to enter into a description of them would be impossible. The greatest interest seemed to be centred in the question of Hypnotism and cognate questions,

which were discussed in Section B, while in Section A Neurology and Psychophysics were the topics for consideration.

The proceedings commenced with an opening address by the President, who in cordial terms welcomed the numerous members from across the Atlantic and from the Continent. There were many ladies present each day, and several took an active part in the work of the session. Mrs. Sidgwick's paper on "Thought Transference" was, indeed, one of the most interesting contributions to the Congress, whether convincing or not.

The following is a list of the papers set down for reading on Monday, August 1st:—

Professor Bain, "The Respective Spheres and the Mutual Aids of Introspection and Experiment in Psychology;" Professor Baldwin, "Suggestion and Will;" Professor Ribot, "General Ideas;" Professor Richet, "The Future of Psychology;" Professor Janet, "Loss of Volitional Power;" Dr. Newbold, "The Characteristics and Conditions of the Simplest Forms of Belief;" Professor Lombroso, "The Sensibility of Women: Normal, Insane, and Criminal."

TUESDAY, AUGUST 2ND.

Professor Henschen, "The Visual Centre in the Cortex of Calcarine Fissure;" Professor Horsley, "The Degree of Localization of Movements and Correlative Sensations;" Professor Schäfer, "The Anatomical and Physiological Relations of the Frontal Lobes;" Dr. Waller, "On the Functional Attributes of the Cerebral Cortex;" Professor Bernheim, "The Psychical Character of Hysterical Amblyopia;" Dr. Van Eeden, "Principles of Psycho-Therapeutics;" Professor Liégeois, "The Female Poisoner of Ain-Fezza;" Dr. Liébault, "A Case of Suicidal Monomania Cured by Suggestion;" Professor Preyer, "The Origin of Numbers;" Professor Ebbinghaus, "Theory of Colour Perception;" Mrs. C. L. Franklin, "Colour Perception;" Professor Lloyd Morgan, "The Limits of Animal Intelligence;" Professor Lange, "A Law of Perception."

WEDNESDAY, AUGUST 3RD.

Dr. Verriest, "The Physiological Basis of Rhythmic Speech;" Dr. Mendelssohn, "Investigations into the Parallel Law of Fechner;" Professor Heymans, "Inhibition of Presentations;" M. Binet, "The Psychology of Insects;" Professor Delbœuf, "The Appreciation of Time by Somnambulists;" Professor Hitzig, "Attacks of Sleep and Hypnotic Suggestion;" Mr. Myers, "The Experimental Induction of Hallucinations;" Professor Münsterberg, "The Psycho-Physical Basis of the Feelings;" the President, Professor W. James, and M. Marillier, "Reports of the Census of Hallucinations;" Professor Beaunis, "Psychological Questioning."

THURSDAY, AUGUST 4TH.

Dr. E. B. Titchener, "Binocular Effects of Monocular Stimulation;" Dr. Donaldson, "Laura Bridgman;" Professor Lehmann, "Experimental Inquiry into the Relation of Respiration to Attention;" Dr. Goldscheider, "Investigations into the Muscular Sense of the Blind;" Dr. Berillon, "The Application of Hypnotic Suggestion to Education;" Mrs. Sidgwick, "Experiments in Thought Transference;" Dr. Lightner-Witmer, "The Direct and Associative Factors in Judgments of Æsthetic Proposition;" Dr. Wallaschek, "Natural Selection and Music;" Professor von Tschisch, "Relation of Reaction-Time to Breadth of Perception."

At the conclusion of the papers on the last two days, Dr. Bramwell gave demonstrations of the phenomena of Hypnotism. These demonstrations attracted a crowded audience, and much interest was shown in the effects of post-hypnotic suggestion.

Correspondence.

THE BRAIN THEORY OF MIND AND MATTER, OR THE UNIVERSE AS MENTAL PERCEPT AND CONCEPT.

All Perception and Conception only spell Apperception (Self-Perception).

To the Editors of "THE JOURNAL OF MENTAL SCIENCE."

GENTLEMEN,—Perhaps I may be allowed to make a further minute on the above auto-cosmic system of the Universe in continuation of the expositions by Mr. McCrie and myself in the July issue of your valuable Journal. I shall be as brief as possible, the question, when rightly understood and realized, lying in a nutshell, which can, however, only be got at by physiological, not by any mere philological methods. Descartes already said that if it is possible to perfect (rationalize) mankind the means of doing so would be found only in the Medical Sciences. And when asked for his library he pointed to his dissecting room. In fact, my position is only a familiar truism, as old as Philosophy itself; and even older, as identical with the *Atman* or Self of the Prehistoric Brahmans, as also with the principle of the Protestant Reformation—the main element of Luther's revolt from Rome being insistence on the supremacy of Private, *i.e.*, Individual Judgment and Conscience—a position of which Egoistic All-aloneness is only an extension. The sum and substance of the latter doctrine consists in the *certainly*—a certainty based on Dynamic Anatomy, that, until entering into Consciousness "things" (objects) are as good as non-existent; in other words, that all external objects are interned by the mere fact of their being perceived, or conceived, by a sentient Being. This, as I have constantly insisted on, is really only the Protagorean formula, *Man the measure of all things*, etc., thing being converted into thought, that is, into mental imagery, during the process of thinking. If thought, as cannot nowadays be doubted, be a natural organic function and the homologue of cerebration, it will be at once seen by the competent physician at least that such function can no more be vicariously or altruistically exercised than Respiration or Assimilation. And that is all that is contended for by Monist in the sense of Auto-Cosmism or Hylo-Idealism. No one can thus pass from solipsismal Egoism to Dualism in any shape or form. Each of us—brute or man—is limited to the range of his or its own personality. And yet this verbal "limitation" is, in no sense, what the word implies, as transcendence of this natural boundary is, in the "nature of things," an obvious impossibility. Thus necessity is merged in Free Will, as to a sentient being in a phenomenal sphere of existence. Determinism and Indeterminism, as indeed Epicurus already formulated, are *Solidaire*. I have always valued this solution of the Universe riddle as placing medicine in the supreme position claimed for it by Cartesianism as the foremost and innermost of the sciences. Even astronomy, in an eschatological direction and point of view, must pale its ineffectual fires before Somatology, which is the proper epithet for the negative term, Anatomy or Dissection. Transcendentalism thus receives its death blow. The "*nullius in verba*" motto of the Royal Society herein reaches its highest confirmation and consummation. If all knowledge be ultimately self-knowledge new vistas open before our race which vastly simplify and render accessible to human intelligence the great problems of existence. And, as I say above, corroboration of Descartes, in whose time the question was still problematical, the Medical Sciences, and especially those branches with which "The Journal of Mental Science" is chiefly concerned, are the unique *media* by which were reached these epoch-making results. The Cartesian formula "*Mens sana in corpore sano*" ought to read "*Corpus sanum = Mens sana.*"

R. LEWINS, M.D.

[Here the correspondence must close.—Eds.]

A DISCLAIMER.

To the Editors of "THE JOURNAL OF MENTAL SCIENCE."

GENTLEMEN,—Some months since, in common with other medical superintendents of the Lancashire and Yorkshire Asylums, I received from the Editor of "The New York Medico-Legal Journal" a circular letter on *Restraint*, as practised in American and British asylums. This circular embraced the published communications of a large body of American alienists, the expression of whose views on the subject had been invited; and I regarded this rather unusual procedure as implying that British superintendents were invited to forward their own convictions (if they desired) to the Editor of "The New York Journal."

This procedure did *not* recommend itself to my adoption, for, with respect to the general question of exposing to odium the opinions of those who differ from us upon any principle of treatment, it appeared to me not only a retrograde step in medico-ethics, but an inquisitorial infringement of the liberty of the subject and individual judgment, entirely opposed to the best tendencies of the age. I desire to make no further comment here on the very ill-advised circular, beyond indicating that as a purely business arrangement each recipient had endorsed the fly-leaf ere forwarding it to his brother superintendent—obviously to avoid its being returned to him a second time. I, in common with others, did this; but I am now told that this might be regarded as an endorsement of the general tone of the circular itself, and, moreover, what is more to the point, might be regarded as implying our concurrence with a most ungenerous and unjustifiable attack made upon two of our most respected English alienists, whose opinions I, for one, hold in the highest esteem, and whose names are household names in English lunacy. This imputation, Sirs, I desire most emphatically to repudiate, and, moreover, would desire not only to express my hearty sympathy with those who have the courage of their opinions despite all odds; but also, whilst deprecating the publication of the letter referred to, would wish to express my very sincere *personal* concern that any such endorsement of the circular letter by myself should have been so interpreted. From what I have already heard from other superintendents I judge that no such invidious meaning was for one moment entertained.

I am, Gentlemen,

Yours very faithfully,

W. BEVAN LEWIS.

West Riding Asylum, Wakefield,
August 14th, 1892.

Obituary.

WILLIAM WOOD, M.D., F.R.C.P.

Dr. Wood's health had been failing for some time, so that surprise was not felt, considering his age (76), when it was announced that an attack of congestion of the lungs had ended fatally on the 27th of August. After his medical education at University College, he passed some time in the Paris Schools of Medicine, and in 1848 took his M.D. degree at the St. Andrew's University. In 1864 he was elected a Fellow of the Royal College of Physicians, London. We have heard him speak of Dr. Elliotson with great respect, and as having assisted him in his experiments in what was then known as mesmerism at University College. In 1845 he was elected to the post of resident medical

officer at Bethlem Hospital, and held the office until 1852. The governors had succeeded in their attempt to exempt the hospital from the visitation of the Lunacy Commissioners, required by the Lunacy Acts; the organization of the staff, medical and non-medical, resident and non-resident, was most unfortunate, and worked disastrously. The rules crippled the action of the resident surgeon, and vested too large an authority in the visiting surgeon and physicians, who, it must be admitted, utterly failed in their duty. Hence it was impossible that Bethlem could be managed satisfactorily, and an official inquiry led to its being placed on the same footing as other registered hospitals, and under the inspection of the Commissioners. The result was that Dr. Wood resigned. From that time he proved his energy and force of character by his successful career as an alienist. He was in the first instance a partner in a private asylum at Kensington. He became before long sole proprietor, and resided in Harley Street. He was appointed visiting physician to St. Luke's Hospital in 1861. It is quite recently that he resigned the appointment and became consulting physician.

The Priory, Roehampton, was purchased by him in 1870. To it two years afterwards he transferred his patients from Kensington House. He conducted his asylum with the energy and kindness which were to be expected from him. He added largely to the original buildings, and "The Priory" justly stands in the first rank of licensed houses.

Dr. Wood was at one time President of this Association, and took an active part in its proceedings for many years.

He strongly opposed Mr. Dilwyn's Bill for the abolition of private asylums, and with equal vigour certain clauses in the Lunacy Bill of 1889 and 1890. He could never reconcile with his views the interference of the magistrate in the admission of patients into asylums, and he applauded the course pursued by the Earl of Shaftesbury when Lord Selbourne introduced the Bill. He spoke with contempt of the vexatious and petty clauses by which the Bill was disfigured. As is well known, those which bore hardly on licensed houses were greatly modified by the exertions which he, in common with other asylum proprietors, especially Dr. Hayes Newington, made.

Dr. Wood was not a great writer, but contributed several articles to "The Journal of Mental Science," "The British and Foreign Medico-Chirurgical Review," and "The Journal of Psychological Medicine," as also two brochures on "Insanity and the Lunacy Laws" and "The Plea of Insanity."

The funeral of Dr. Wood, at Putney, was attended by a large number of mourners desirous to pay the last tribute of respect and affection to his memory.

EXAMINATION FOR CERTIFICATE OF PROFICIENCY IN NURSING.

The next examination for this certificate will be held on the first Monday in November. All inquiries in connection with this examination should be addressed to the Registrar,

DR. SPENCE,

Burntwood Asylum, Lichfield,

And not as heretofore to the General Secretary.

Winner of the Bronze Medal and Prize of 10 Guineas,

G. M. Robertson, M.B., C.M.,

Senior Assistant Physician, Morningside Asylum, Edinburgh.

Winners of the Gaskell Prize.

Nathan Raw,	} Equal.
George R. Wilson.	

M.P.C. EXAMINATION.**ENGLAND.**

The following candidates for the M.P.C. passed the Examination, held at Bethlem Hospital, July 7th, 1892:—

Frank Belben,
E. Milliken Goldie,
W. A. Haslam,
E. J. Hutchinson,

Robert H. Lloyd,
J. H. Sprout,
W. F. Umney.

SCOTLAND.

F. S. Ainley,
S. C. Brush,
G. Cruickshank,
P. Campbell,
A. B. Dalgetty,
A. Davidson,
E. Ferguson,
W. Hector,
F. Kelly,

T. B. Law,
G. B. D. Macdonald,
C. R. Nair,
W. C. Pieris,
W. H. de Silva,
R. S. Trotter,
D. A. Welsh,
J. B. Yeoman.

Candidate who passed the Examination for the Certificate of Proficiency in Nursing, May, 1892, omitted in last list:—

West Malling Place.

Julia F. Ferguson.

The next Examination for England and Scotland will take place in December next.

List of Attendants and Nurses who possess the Certificate of Proficiency in Nursing the Insane:—

William Butterworth,
Thomas Connor,
John Andrew Parkes,
George Lees,
George Richard Evans,
Sarah Ann Devlin,
Mary Ann Kings,
Kate Millward Coaling,
Edith M. Bearpark,
Mabel Moore,
Francis Parkes,
Ann Philippe,
Mary Jane Moore,
Charles Henry Henson,
Charles M. Clarke,
Laura Mary Potter,

Sarah Jane Builder,
Peter Devlin,
Arthur Prior,
John Willcocks,
William Hammersley,
Elizabeth Anne Hughes,
Adelina Maria Bailey,
Frances Ada Berks,
Harry Gill,
John Burton,
William Webber Sampson,
Albert Edward Mitchell,
William Hamilton Swift,
Theodore Ross Gates,
James Graham,
Arthur Lawrence Smith,

Sarah Fisher,
 Clara Helen Swift,
 Elizabeth Annetta Gittins,
 James Smith,
 Robert Knight,
 William Douglas Pennycook,
 Isabella Scott,
 Alice Mary Jamieson,
 Duncan Haggart,
 Catherine Smith,
 Jessie Jamieson,
 Donald Macrae,
 James A. G. Mowatt,
 George Gladstone,
 William Robbie,
 Jeanie McLeod,
 Mary A. Mason,
 Maggie M. Stuart,
 Jane Ross,
 John Barrie,
 Donald S. Fraser,
 John Fraser,
 James Grant,
 John Innes,
 Alexander Mackenzie,
 Daniel Burgess,
 John Ogg,
 Charles Tough,
 George Wilson,
 Jessie Hodge,
 Christina Leith,
 Mary Mather,
 Christina Watt,
 Jemima Watt,
 Marjory McIntyre,
 William George Sadler,
 Leonard Dobbin Rea,
 Philip Harmer,
 William Tom Osborne,
 Violet Edith Ross,
 M. Francis Bromley,
 Mary Humphrey,
 Elizabeth Jupe,
 Jasper H. Smith,
 Frederick Cook,
 Emma Ware,
 Kate White,
 Mary Alice Warner,
 Caroline M. Walton,
 Alice Ann Derham,
 Henry Ambrose Hill,
 Peter Warburton,
 Harry E. Drew,
 Robert Barwell,
 Harry B. Ellis,
 Herbert Brooke,
 Thomas George Harrison,

Jonas Edward Roberts,
 Harriet Allison,
 Frances Mary Browne,
 Annie Elgie,
 Phœbe E. Allen,
 Mary Marshall,
 Annie Pyrah,
 Fanny Hansom,
 George Taylor,
 William Hewlett,
 Henry House,
 Harriet Bowyer,
 Mabel Taylor,
 Martha Driver,
 Ada Bennett,
 Janet Summers,
 Elizabeth Lamport,
 Harriet Budge,
 Harriet Kendrick,
 Alice Yates,
 Mary Harriet Deacon,
 Hannah Simpson,
 Eleanor Whitehead,
 Catherine Edith Sibary,
 Lucy Thackray,
 Martha Dyson,
 Jane Copley,
 Annie Atkinson,
 Marian Conway,
 Edith Asquith,
 Thomas D. Leadbeater,
 John Gutteridge,
 William Gutteridge,
 Rebecca Sutton,
 Eliza Woollatt,
 Louisa Asbury,
 Elizabeth Milne Withers,
 Elizabeth Macaulay,
 John Backhouse,
 Albert George Wake,
 George Catchlove,
 Timothy Callaghan,
 James M. Le Patourel,
 Francis Matheson,
 James Sim,
 John Lawson,
 William Fraser,
 Kate Dunbar,
 Margaret Mulfeather,
 Donald McMillan,
 John Campbell,
 Hugh McEwan,
 Isabella Henderson,
 Joseph Ormston,
 Robert Cooper,
 John Campbell,
 Peter McArthur,

William Severns,
 James Dolan,
 Abraham F. L'Amie,
 Joseph Ashby Dixon,
 Arthur W. Redfern,
 Nelson Webster,
 John Moore,
 Albert W. Jones,
 Shaw John Davies,
 Flora F. Drabble,
 Ellen Healey,
 Mary Madeley,
 Christiana Emmerson,
 Elizabeth Cullabine,
 Fanny Wheatley,
 Annie Marks,
 Lizzie Cousins,
 Elizabeth Fraser Scott,
 Eliza Robinson,
 William Reed,
 Eyra Frost,
 Richard Steele Robinson,
 James Arthur Hadfield,
 George Hobbs,
 Richard Howden,
 John Whipp,
 James Wright,
 Henry Wright,
 Joseph Storer Noon,
 William Philipps,
 Kate Cocks,
 Nellie Shields,
 Emily Worrall,
 Edith Cutler,
 Martha Sayers,
 Emily Taylor,
 Sarah Bishop,
 Emily Arundel Withers,
 George Baker,
 Robert James D. Brown,
 Thomas Flanagan,
 William Philipps,
 Frances Jane Richardson,
 Susannah Thompson Palmer,
 Elizabeth Crake,
 Melville Annie Armstrong,
 A. Pratt,
 Henry James Lee,
 John McLaren,
 George Wright,
 Ann Raw,
 Annie Cornaby,
 Annie Oliver,
 Jane Chapman,

Isabella Grierson,
 Mary Johnston,
 Maggie Clarke,
 Jemima Riddock,
 Edith Thorburn,
 Jessie Mackay,
 Elsie Annie Leslie,
 Barbara Scott,
 Jane Williamson,
 Marian Cocker,
 Mary Dolan,
 Alice Noble,
 David Anderson,
 Gilbert Miller,
 Mary M. Reid,
 John Nicoll,
 John Wallace,
 James Thornton,
 James Durward,
 Duncan Urquhart,
 Helen Begg,
 Margaret Innez,
 Christina Robertson,
 Helen Sutherland,
 Jane Barr Gray,
 Margaret Stewart,
 Isabella Gillies,
 Harriet McIntyre,
 Margaret Hendrie,
 William A. Bremner,
 Allan Grant,
 James Eadie,
 James Ness,
 Alexander Soutar,
 George Lumsden,
 Helen Burton,
 Elsie M. Hadden,
 Margaret Kirkcaldy,
 Amelia Kennedy,
 Sophia Ballantine,
 Agnes Taylor,
 Betsy Culbert,
 Eliza Honeyman,
 Jessie Bonthron,
 Lillias Ames,
 Thomas Boyd,
 James Inches,
 Charles Chalmers,
 Jane S. Alison,
 Joan M. Finlayson,
 Jane McGarrock,
 Sarah McGarrock,
 Jessie Shand,
 Julia F. Ferguson.

Appointments.

BRISTOWE, H. C., M.D.Lond., appointed Medical Officer to the Somerset County Asylum, Wells.

BRYAN, FREDK., M.B., M.R.C.S., L.S.A., appointed Senior Assistant Medical Officer to the Colney Hatch Asylum.

BRUCE, L. C., M.B.Edin., appointed Assistant Medical Officer in the Derby Borough Asylum.

CRAIG, J. W., M.B., C.M., appointed Clinical Assistant to the Fife and Kinross Asylum, Cupar.

DALGETTY, ARTHUR B., M.B., C.M.Aberd., appointed Assistant Medical Officer to the Dundee Royal Lunatic Asylum.

ENSOR, C. W., L.R.C.P., appointed Senior Assistant Medical Officer to the Cheshire Asylum, Macclesfield.

EWART, C. TH., M.D., C.M., appointed Senior Assistant Medical Officer to the Female Department, Colney Hatch.

FARQUHARSON, WM. F., M.B.Edin., appointed Assistant Medical Superintendent to the Counties Asylum, Carlisle.

HAVELOCK, J. G., M.B., C.M.Edin., reappointed Senior Assistant Medical Officer to the Royal Asylum, Montrose.

MORTON, W. B., M.B.Lond., M.R.C.S., L.R.C.P., appointed Medical Officer at Wonford House Asylum.

NORGATE, R. H., M.R.C.S., L.R.C.P., appointed Second Assistant Medical Officer to the Kent County Asylum, Barming Heath.

SMITH, J. G., M.B., C.M., appointed Clinical Assistant, Dundee Royal Asylum.

TAWFS, G. W. H., M.B., C.M.Aberd., appointed Junior Assistant Medical Officer to the Counties Asylum, Carlisle.

ALIENIST MAGISTRATE.—We are glad to observe that the Lord Chancellor has appointed Dr. Howden, the Medical Superintendent of the Montrose Royal Asylum, to be a Justice of the Peace.

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