MEDICAL PARIS OF TO-DAY.

NOTES MADE IN DECEMBER, 1888.

By ERNEST HART.

V.

The Laboratories and Departments at La Salpêtrière; the Consulting-room and its Gallery of Illustrations; the Staff of Laboratory Superintendents; the Laboratories of Physiology and of Pathological Anatomy; Suspension Treatment of Ataxy; the Photographic Service; the Museum; the Electro-therapeutic Service; the Hydro-therapeutic Service; the Lecture Theatre; the "Leçons du Mardi;" the Friday Lectures; the Artistic Studio of M. Paul Richer; Human Morphology in Health and Disease.

In order to appreciate the important work accomplished by Charcot in creating at La Salpêtrière a great centre of research in neuropathology, and perhaps the most famous school for nervous diseases in Europe, it is necessary to remember that when first he began his labours the Salpêtrière was little more than a vast asylum for the infirm and aged poor, who came there to end their days; for chronic lunatics; and for imbecile children. Such infirmaries exist, although not on so large a scale, in our own great cities, and it may afford—among other purposes—a useful lesson in the direction of the utilisation of the resources of some of our poor-law asylums to give a rapid bird's-eye view of the organisation which he has created, and the methods by which it is adapted for the benefit of patients and for the advancement of knowledge.

On entering the gates of this huge series of buildings, and after passing through a succession of courts and open spaces surrounded by ancient buildings in quadrangles, one arrives at the waiting-room, which opens into the physician's cabinet. In the waiting-room the artistic note which characterises the studies of Charcot and his school at once vibrates; for the walls are lined with coloured chalk drawings of great artistic interest and merit by M. Paul Richer representing various phases of hystero-epileptic attacks. These are the cartoons from which the illustrations in Richer's volume on the subject are taken. The walls of the physician's study are equally covered with engravings and pictures reproducing famous masterpieces scattered throughout the galleries of Europe, in which artists of past days have depicted under the guise of persons suffering from demoniacal possession many phases of hystero-epilepsy in characteristic forms. Passing from these rooms, where a pleasant and instructive hour may be spent, one enters the laboratory of pathological anatomy. This forms the first of a series of laboratories and departments created by M. Charcot and his pupils, and presided over by a numerous staff. The present *chef de clinique* is M. le Dr. Gilles de la Tourette, to whose kindly assistance in securing the material for these notes I have been much indebted. With him are an *interne*, M. Huet, and eight *externes* charged with superintending the immediate medical work of the wards, preparing the notes, and carrying out the medical directions. The chief director of the laboratory is Dr. Paul Richer; the chief of the anatomical studies is M. C. W. P. Murie; the chief of the chemical and photographic studies is M. A. Londe; the chief of the electro-therapeutic service, M. A. Vigouroux; of the ophthalmological service, Dr. Parinaud; of the otological department, Dr. Gellé; and of the laryngological and rhinological department, Dr. Cartaz.

The laboratory of pathological anatomy is mounted simply, but in a workmanlike style. It is the seat of great activity; room is provided for ten workers. The laboratory of physiology is also adequately provided with the necessary apparatus, and among other things which I noticed as interesting on this occasion was a suspension apparatus for treating tabes by the method of Kotchurkowsky. This apparatus resembles very much the suspension apparatus of Sayre. For therapeutic purposes, in the treatment of ataxy, the suspension of persons usually lasts from half a minute to three minutes. The results thus far obtained have been of a promising character. M. Charcot delivered a lecture on the subject on January 14th, which is reported in the *Progrès Médical*, and is worthy of the attention of physicians. One of the pupils was good enough to suspend himself (for the apparatus is automatic) before me, and the proceeding was neither difficult nor distressing.

Not the least interesting of these annexed departments of M. Charcot's *clinique* is the photographic service under the direction of M. A. Londe. The object of this laboratory is to reproduce the phases and general aspect of the numerous patients who pass through the Salpêtrière, and are affected with various neuroses. M. Londe occupies himself especially and most successfully with devising methods and apparatus calculated to render special services to medical photographers. As it is impossible to expect from the vaguely irresponsible subjects of mental and nervous disease, or from patients suffering from all the curious varieties of motor affections illustrated in these wards, the immobility necessary for ordinary methods of photographic reproduction, the use of instantaneous processes is a matter of daily habit, and many of these have been brought to a high development by M. Londe. He has recently constructed an ingenious and effective apparatus, which consists of two photographic cameras in juxtaposition, provided with two objectives rigorously identical. The one serves to focus the patient, and the other for instantaneously photographing him at a given moment. By this device, whatever may be the sudden vagaries of movement of the patient, the operator is able to follow him, and to seize the desired attitude or position. If further it is necessary to decompose the most rapid kinds of movement, to analyse the mechanism of the various forms of chorea or of agitated mobility in attacks of hysteria or of epilepsy, M. Londe employs a photo-electrical apparatus, which gives him a series of successive images taken in the fleeting passage of fractions of a second. These studies are analogous to those of Professor Marey on physiological motion, but with this difference, that these morbid movements, being of so irregular a character, and often taking place on one spot, M. Londe has not been able to employ the highly ingenious apparatus of Professor Marey, but has had to construct special machines. Prints from all the plates obtained are preserved in an album, or are transferred to glass so as to serve for illustrations by projection with the aid of the oxy-hydrogen lantern for the purpose of demonstration to the auditors of M. Charcot's clinical lectures. Many of the most interesting, accompanied with the original studies of the principles or observations involved, are published in the *Nouvelle Iconographie de la Salpêtrière; Clinique des Maladies du Système Nerveux*, which is edited by MM. Richer, Tourette, and Londe.

Passing through the chemical laboratory, which has its own place obviously marked in this hive of scientific industry, we reach the museum, containing a large number of highly interesting pathological preparations collected at the Salpêtrière, some of them unique. It possesses, among other things, a particularly fine series of bones illustrative of changes in ataxic arthropathy, etc., which have been the subject of one of the minor, but perhaps one of the most widely-known, studies of M. Charcot. This museum was founded in 1878.

We next reach the electro-therapeutic service. This is extensive, completely-mounted, and well-furnished. Obviously electro-therapeutic treatment plays a large part in the curative efforts directed to the amelioration of paralysis, tremor, spasm, and other morbid symptoms and results of nerve disease. There are fourteen stools arranged for the application to patients of static electricity. The apparatus for generating and applying all forms of electricity are not only on a great scale, but include the latest and most refined varieties of instrument. The dynamos and actuating machines are worked by a small steam engine which is in an adjoining apartment.

Adjoining is the hydro-therapeutic department, which has been mounted recently, with the energetic aid of Dr. Bourneville, the editor of the *Progrès Médical*, now physician at the Bicêtre, and one of Dr. Charcot's most able former pupils and most valuable and devoted supporters. M. Bourneville's assistance has been of great use in aiding M. Charcot to develop some of these departments, his position in the Municipal Council—which largely controls the hospitals of Paris—and the Chamber of Deputies giving him influence which has been energetically employed in this and in many other cases to secure amelioration in the construction and installation of various hospitals. The bath-rooms and hydro-therapeutic apparatus are on a considerable scale, and include many varieties of douche, needle bath, vapour bath, and, indeed, most of the ingenious forms of hydro-therapeutic apparatus, of which the types are now pretty well known to most physicians, but which are here multiplied in number, and ingeniously arranged for the accommodation of an abundance of patients. They are open alike to in-patients and out-patients. M. Charcot, sitting in his

consulting-room, needs only to prescribe the form of electrical or hydro-therapeutic application, or of other physical treatment which he considers appropriate, in order to ensure that the latest resources of science will be duly directed to the treatment of each individual patient. He is of opinion that this application of hydro-therapeutical treatment still stands in need of further careful and exact practical study, and that in the precise dosing, of the force, duration of application, and temperature of the water jet and of the douche, and in the scientific differentiation of the methods to be employed and the course of treatment to be followed, there lies a useful field of study for the physician who will devote himself to it in the thorough scientific and exact spirit in which other departments of therapeutics have been studied.

We arrive finally at the last of this great series of accessory departments—the lecture theatre—which has been the scene for so many years of M. Charcot's conferences. It is spacious, but plain. The walls are adorned with a fine picture of Pinel, one of the great celebrities of the Salpêtrière, striking off the chains of the lunatics (from which he was the first to free them) in one of the courtyards of the Salpêtrière. At the further end is a platform, from which the Professor, surrounded by the patients selected for the purpose, delivers his clinical lectures. The theatre seats 300 persons. It is often crowded to excess, not only by the students of Paris, but by physicians from every part of the world. The present teaching of M. Charcot may perhaps best be illustrated by reference to the remarkable volume entitled *Leçons du Mardi à la Salpêtrière Polyclinique, 1887-8*, published at the offices of the *Progrès Médical* from notes by MM. Blin, Charcot, Joly, and Henri Colin, students in the service. This teaching has, as is pointed out in the preface, undergone of late years some modification of practical interest. His clinical lectures are now divided, as it were, into two distinct categories, to each of which one day a week is consecrated—Tuesday and Friday. In his Friday lectures M. Charcot discusses special subjects, treated in magisterial fashion with the utmost completeness, illustrated by drawings, specimens, and projections from the magic lantern, by models, and by the exhibition of series of patients: they constitute each year a veritable body of new information, which never fails to add to progress in the particular department of study followed up in successive series. In these Friday lectures, to use the words of his pupils, he presents to his audiences patients whom he has previously studied with the greatest care, and on whose cases he has, for the most part, meditated at length. The object which he proposes to himself is not exclusively to show subjects whose clinical history has been well elucidated, or in whom a diagnosis may be established with certainty; he endeavours especially to put his auditors in possession of his most recent researches, and thus make known the result of his new studies. In this way during the last three years his auditors have been able to assist at that renovation (to use an expression which I have already employed, and which, in the mouth of his pupils, can certainly not be held to be exaggerated) which their master has effected by his important labours on hysteria and neuropathology. On Friday the students see "science as it exists and science in the making."

The Tuesday lessons differ from those of the Friday. They are organised in such a fashion as to give especially the image of the clinical daily practice, "*imaginem belli*," with all its surprises and its complexity. The patients are taken from the out-patients arriving for consultation. They are unknown to the professor, who seeks to establish on the spot the diagnosis, prognosis, and treatment of the affection. The auditors are thus enabled to assist at the work which he goes through in order to elucidate these divers questions. They can see how in one case the simple aspect of a patient—his gesture, his words, his walk—suffice to put the physician in possession of the condition; how, in another case, a rigorous analysis is necessary of the symptoms and of the progress of the affection, in order to arrive at a diagnosis; and finally, how sometimes, in spite of the most minute examination, it is impossible to pronounce an immediate judgment. The auditors can thus learn the method which the best equipped physician must follow in the examination of his patients, and, thanks to the enormous wealth of material which offers itself here, he will, in the course of a certain number of months, see defile before his eyes specimens, not only of all the ordinary diseases of the nervous system, but of the rarest.

The teaching of M. Charcot is solid, but full of new suggestions; nor can any more fruitful opportunity for studying be found than

in following this course of lectures, and studying at the same time in the wards of the Salpêtrière. For this reason I have allowed myself to dwell upon the organisation of the vast hospital service at more length than I should otherwise have felt justified in devoting to it.

A special note is due to the work which is being carried on in the artistic *atelier* of the Salpêtrière, by M. Paul Richer. M. Richer has the instinct and the executive capacity of an accomplished artist. To these he unites the exactness, the laborious methods, and the accuracy of an anatomist. Without his assistance and the opportunity of iconographic illustration which his enthusiasm and devotion have afforded, the studies of M. Charcot on many subjects, such as those of hysteria, hypnotism, chorea, and clonic spasm, would have lacked that rich and ample illustration which has given them added value. Among the best known products of many years of labour is Dr. Paul Richer's book, entitled, *Études Cliniques sur la Grande Hystérie en Hystéro-Epilepsie*; that which gives to this work its classic position is especially the profit which the author has known how to derive from the combination of two great descriptive methods which were at his disposal—the pen and the pencil. The text and the figures proceeding from the same hand are animated by the same spirit, one being evidently made for the other. From this there results great unity in the whole book; the written document and the figured document mutually support each other, and concur in attaining the same end. In this book is a chapter entitled *Hysteria in Art*, in which may be found a critical study of a certain number of the pictures of great masters: P. Breughel, Andrea del Sarto, Raphael, Domenichino, Rubens, Jordaens, etc., who have painted hysterical epileptics; that is to say, demoniacs of the Middle Ages. These studies in scientific æsthetics have been taken up by Charcot and Richer in a special volume, entitled *Les Démoniaques dans l'Art*, of which an account will shortly be given. A double lesson may be drawn from them; from the point of view of science, in the secular existence of hysteria major; and from the point of view of art, in the conscientious exactness which certain great artists have shown in copying their models from Nature. MM. Charcot and Paul Richer have extended further this kind of research. They have not limited themselves to works of art devoted to demoniacs. Having brought together all the examples of art which are capable of interesting science; they are about shortly to publish them in a new work, more considerable than the first. I have seen a number of the proofs which are in preparation, and in this work will be found chapters devoted to celebrated pictures by great masters, containing illustrations of dwarfs, of grotesque beings, idiots, buffoons, the blind, the leprous, plague-stricken, the syphilitic, and the dead.

I have already spoken of the periodical publication entitled *Nouvelle Iconographie de la Salpêtrière*, which was commenced last year by Dr. Paul Richer with the assistance of M. Gilles de la Tourette and Albert Londe, in which, as its name indicates, figures, designs, or photographs hold the chief place. No memoir is published in this serial without illustration, and the endeavour of the founders has been to endow neuropathology with a collection in which art may render to science all the service of which it is capable. All the drawings in this publication are made by Dr. Paul Richer.

M. Richer's *atelier* at the Salpêtrière is filled not only with drawings but with models and sculptures. For many years he has assiduously laboured at a work on the anatomy of the forms of the human body, of which he executes all the drawings, which will be very numerous. His object is to put into the hands of artists a work which may be read almost entirely by simple inspection of the drawings. The text, however, to judge from the examples which I have seen, although as brief as possible, will none the less be complete. He does not limit himself, like many who have written on this subject, to preparing a summary of descriptive anatomy in more or less literary form, and interspersed with some occasional morphological data; he consecrates the principal part of his work to the study of form itself, and he studies morphologically the external forms of the human subject (1) in the immobile attitude—the conventional attitude chosen by artists; (2) in the partial movements of each part of the body; (3) in general movements; and (4) in expressive movements. This work, although chiefly dedicated to artists, is equally capable of rendering services to physicians and surgeons, who have a considerable interest in recognising the forms of the healthy man for the purpose of the accurate diagnosis of deformities caused by disease. In No. 1 of the *Nouvelle Iconographie de la Salpêtrière*,

Dr. Richer has published a note "On the Morphological Anatomy of the Lumbar Region," with reference to, and with a drawing of, a patient in whom a normal conformation of the vertebral column had been taken for a pathological deformity by his physician, who had applied to him in consequence four large cauterisations. In this note are some interesting reflections on the utility of human morphological studies in medicine.

Richer is also a sculptor. At the recent exhibitions at the Salon many of his works have been shown, one of which, "The Gymnast," is a conscientious morphological study. He has executed for the museum of the Salpêtrière a bust in terra-cotta of a patient under the care of M. Charcot attacked with labio-glossomorphological paralysis, which is of high scientific value.

This brief summary will perhaps indicate some of the chief features of interest in the Salpêtrière as a highly-developed school for the scientific and practical study of nervous affections. Of course it is far from exhausting the outlines of a study which requires and repays months of attention; but with these lines I must take my leave of an institution in which I have at various times during past years spent many hours, filled with impressions of profound and durable interest, and which I found on my recent visit to be still in course of progress and development. No one can well begin to study "Medical Paris of to-day" without paying an early pilgrimage to the Salpêtrière.

ELECTROPATHIC AND ZANDER INSTITUTE.

THE Medical Battery Co. Limited, of which Mr. C. B. Harness is Managing Director, has, through its solicitor, expressed to the solicitor of the Association its great regret that the advertisement of the names of the medical gentlemen which appeared in the *Daily Telegraph* of January 8th under the above heading should have given unintentional offence to those gentlemen. An assurance has also been given on behalf of Mr. Harness that the advertisement will not be repeated.

ROYAL COLLEGE OF PHYSICIANS.

ORDINARY MEETING OF THE COLLEGE,
JANUARY 31st, 1889.

ABSTRACT OF PROCEEDINGS.

I. The minutes were confirmed.

II. The President made a statement on behalf of the Censors' Board, informing the College that the attention of the President and Censors having been directed to a book published by Sir Morell Mackenzie, they had carefully considered the character and tendency of the work, and that they were prepared, if the College so desired, to report thereon.

It was moved, seconded, and adopted:

"That the judgment of the Censors' Board in the matter of the book by Sir Morell Mackenzie, entitled *The Fatal Illness of Frederick the Noble*, be received and adopted by the College, and communicated to Sir Morell Mackenzie."

The judgment of the Censors' Board was as follows:—

"The attention of the Censors' Board having been directed to a publication by Sir Morell Mackenzie, entitled *The Fatal Illness of Frederick the Noble*, the Censors' Board, although unable to deal judicially with the various matters brought into dispute therein, feels called upon to express to the College its grave disapproval of the general character of the book, and its profound regret that one, whilst a Member of this College, should have given, in any circumstances whatever, publicity to statements concerning his patient, and charges against his colleagues, injurious to the interests of the public, destructive of the confidence necessary between persons co-operating in the discharge of a great responsibility, and contrary to the traditions of the medical profession throughout the civilised world."

III. The following were admitted Members of the College:

Charles Frederic Bailey, M.D.Lond., Exminster; William Lee Dickinson, L.R.C.P., 9, Chesterfield Street, W.; James Galloway, M.B.Aber., 42, New Street, E.; Otto Jackson Kauffmann, M.D.Lond., Seamen's Hospital, S.E.; John Fletcher Little, M.B.Camb., 60, Welbeck Street, W.; John Wychenford Wash-

bourn, M.D.Lond., 24, Maze Pond, S.E.; Walter Essex Wynter, M.D.Lond., 34, Welbeck Street, W.

The Senior Censor announced the award of the Swiney Prize to Dr. C. Meymott Tidy.

THE DEATH OF THE AUSTRIAN CROWN PRINCE.

THE following are the conclusions arrived at by the Medical Commission entrusted with the *post-mortem* examination of the body of Prince Rudolph. The details of the necropsy have not been published.

1. His Imperial and Royal Highness the Illustrious Crown Prince succumbed owing to destruction of the skull and the anterior parts of the brain.

2. This destruction was caused by a shot discharged quite close to the right anterior temporal region.

3. A shot from a pistol of medium bore was capable of producing the above-described lesion.

4. The bullet was not found, as it had passed out through an aperture above the left ear.

5. There is no doubt that His Imperial and Royal Highness shot himself, and that death occurred immediately.

6. The premature union of the coronal and sagittal sutures of the skull, the remarkable depth of the cranial fossa, and the "impressionses digitatæ" on the internal surface of the cranial bones, the distinct flatness of the cerebral convolutions, and the dilatation of the cerebral ventricles were pathological conditions which, according to general experience, are combined with abnormal mental conditions, and thus justified the supposition that the fatal deed was committed in a state of mental alienation.

(Signed)

Hofrath Dr. E. HOFMANN, m. p., Professor of Medical Jurisprudence.

Professor Dr. KUNDRAT, m. p., Director of the Pathologico-Anatomical Institution.

Professor Dr. HERMANN WIDERHOFER, m. p., Physician in Ordinary to the Imperial and Royal Court.

ASSOCIATION INTELLIGENCE.

REPLY OF PROFESSOR VON BERGMANN TO COMMUNICATION OF COUNCIL.

THE President of Council has received the following reply from Professor von Bergmann, in acknowledgment of letter, with copy of resolution passed at special meeting of the Council, November 28th last, which was published by order of the Council; see JOURNAL, January 19th, 1889, page 153.

Alexander-Ufer 1, Portal II.

SIR,

31, 1, 89.

I have the honour to acknowledge with thanks the receipt of your letter of January 16th, 1889, enclosing a copy of a resolution passed at a special meeting of the Council of the British Medical Association, on Wednesday, the 28th of November last.

I am, your obedient servant,

E. VON BERGMANN,
Professor of Surgery, University of Berlin.