

Cerebral-localization &c

CEREBRAL-LOCALIZATION

AND

BRAIN-SURGERY.

BACTERIO-MANIA,
ASIATIC - CHOLERA,

AND

HYDROPHOBIA.

1885-6.



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“Humanity to Animals is a duty reposing on the same foundations as the claims of Man to humanity.”

BENTHAM.

(From "THE TIMES" of Tuesday, December 16, 1884.)

BRAIN SURGERY.

To the Editor of THE TIMES.

SIR,—While the Bishop of Oxford and Professor Ruskin were, on somewhat intangible grounds, denouncing Vivisection at Oxford last Tuesday afternoon, there sat at one of the windows of the Hospital for Epilepsy and Paralysis, in Regent's Park, in an invalid chair, propped up with pillows, pale and careworn, but with a hopeful smile on his face, a man who could have spoken a really pertinent word upon the subject, and told the right rev. prelate and the great art critic that he owed his life, and his wife and children their rescue from bereavement and penury, to some of these experiments on living animals which they so roundly condemned. The case of this man has been watched with intense interest by the medical profession, for it is of an unique description, and inaugurates a new era in cerebral surgery; and now that it has been brought to a successful issue, it seems desirable that a brief outline of it should be placed before the general public, because it illustrates vividly the benefits that physiological explorations may confer on mankind, shows how speedily useful fruit may be gathered from researches undertaken in the pursuit of knowledge, and with no immediate practical aim, and reveals impressively the precision and veracity of modern medical science.

This case, then—this impressive and illustrative case—is that of a man who, when admitted to the Hospital for Epilepsy and Paralysis, presented a group of symptoms which pointed to tumour of the brain—a distressing and hitherto necessarily fatal malady, for the diagnosis or recognition of which we are indebted to bed-side experience and *post-mortem* examination. But while clinical and pathological observations have supplied us with knowledge which enables us to detect the existence of tumours of the brain, they have not afforded us any clue to the situation of these morbid growths in the brain-mass, and it was not until Professor Ferrier had, by his experiments on animals, demonstrated the localization of sensory and motor functions in the cerebral hemispheres that the position of any diseased process by which they might be invaded could be definitely determined. By the light of these experiments it is now possible in many instances to map out the seat of certain pathological changes in these hemispheres with as much nicety and certainty as if the skull and its coverings and linings had become transparent, so that the surface of the brain was exposed to direct inspection. And thus in the case to which I am referring, Dr. Hughes Bennett, under whose care the patient was, guided by Ferrier's experiments, skilfully interpreted the palsies and convulsive move-

ments which the man exhibited, and deduced from them that a small tumour was lodged at one particular point in his "dome of thought," and was silently and relentlessly eating its way into surrounding textures. Not more surely do the fidgettings of the electric needle intimate their origin and convey a meaning to the telegraph clerk than did the twitchings of this man's muscles announce to Dr. Hughes Bennett that a tumour of limited dimensions was ensconced at a particular point of a particular fold or convolution of the brain—the ascending frontal convolution on the right side.

Very brilliant diagnosis this, it may be remarked, and nothing more. A conclusion has been arrived at which, should it prove correct, will gratify professional pride; but as it cannot be confirmed or refuted until the poor patient is no longer interested in the matter, and cannot be made the basis of any active interference, no great advance has been made after all, and vivisection has yielded only some barren knowledge. Until quite recently criticism of this kind would have been justifiable in a sense, but now it is happily no longer possible, for another series of experiments on living animals, undertaken by Professors Ferrier and Yeo, have proved that through our power of localizing brain lesions we may open a gateway for their removal or relief. The old notion that the brain is an inviolable organ with *noli me tangere* for its motto—a mysterious and secluded oracle of God that simply falls down and dies when its fane is desecrated by intrusion—has been dissipated by these experiments; and we now know that under punctilious antiseptic precautions the brain, in the lower animals at any rate, may be submitted to various operative procedures without risk to life or fear of permanent injury. Emboldened by this knowledge, Dr. Hughes Bennett devised a way of helping his patient whose disease he had diagnosed with such remarkable exactitude, and gave him one chance, if he had the courage to embrace it, of saving his life and recovering his health.

The patient had the position in which he stood faithfully explained to him. He was told that he laboured under a malady which medicines were powerless to touch, and that if left unassisted he must die in a few months at latest, after prolonged sufferings similar to those which had already brought him to the verge of exhaustion, and which could only be partially alleviated by drugs; but that one outlet of escape, narrow and dangerous, but still an outlet, was open to him in an operation of a formidable nature, and never before performed on a human being, under which he might, perhaps, sink and die, but from which he might, perhaps, obtain complete relief. The man, who had faith in his doctor, and no fine-spun scruples about availing himself of the results of vivisectional discoveries, eagerly chose the operation. On the 25th ultimo accordingly, Mr. Godlee, surgeon to University College Hospital, in the midst of an earnest and anxious band of medical men, made an opening in the scalp, skull, and brain membranes of this man at the point where Dr. Hughes Bennett had placed his divining finger, the point corresponding with the convolution where he declared the peccant body to be, and where sure enough it was discovered. In the substance

of the brain, exactly where Dr. Hughes Bennett had predicted, a tumour the size of a walnut was found—a tumour which Mr. Godlee removed without difficulty. The man is now convalescent, having never had a bad symptom, and full of gratitude for the relief afforded him. He has been snatched from the grave and from much suffering, and there is a good prospect that he will be restored to a life of comfort and usefulness. In that case he will be a living monument of the value of vivisection. The medical profession will declare with one voice that he owes his life to Ferrier's experiments, without which it would have been impossible to localize his malady, or attempt its removal, and that his case opens up new and far-reaching vistas of hopefulness in brain-surgery. Many men and women will henceforth, there is reason to anticipate, be saved from prolonged torture and death by a kind of treatment that has been made practicable by the sacrifice, under anaesthetics, of a few rabbits and monkeys.

I am, Sir, your obedient servant,

London, Dec. 11.

F.R.S.

To controvert the specious, fallacious, and misleading statements contained in the foregoing *anonymous* letter, which was published in "The Times" newspaper of the 16th December, 1884, the following advertisements were inserted by the Society for the Abolition of Vivisection in "The Times" and "Standard" every week from the 21st January, 1885, till the 14th January, 1886.

CEREBRAL LOCALIZATION.

From the "LANCET," November 10, 1883.

"But it must be confessed that the aid 'Localization' has afforded to treatment has been small and practically confined to cases of surgical interference. Even of these cases there are very few—scarcely more than could be counted on the fingers of one hand—in which the power of localizing cerebral disease can be said to have been the means of saving a life that would have been lost without it. Nor is any clear indication to be seen that such cases are likely to be more frequent. Very few will share Dr. Ferrier's confident anticipation that the history of abdominal surgery is likely to find a parallel in surgical achievements within the cranial cavity, in spite of the authority with which he cites his experience with the lower animals. The differences between the abdomen and the skull are more than even antiseptic surgery can annihilate. If Dr. Ferrier's suggestions meet with much practical response, it is to be feared that Cerebral Localization will soon have more deaths to answer for than lives to boast of."

(In "The Times," 21 January, 1885.)

EXPERIMENTAL PHYSIOLOGY.

From the "EDINBURGH MEDICAL AND SURGICAL JOURNAL."

"But Experimental Physiology is not the only guide to truth, fortunately; for, so far as the nervous system is concerned, it has proved a veritable Will-o'-the-wisp to many of its most ardent followers, and has led some of them into uncertainties as bewildering to the physician as the quagmires of Spunkie to the wandering traveller. Works . . . containing the experience of a lifetime, enlightened and corrected by sound pathological knowledge, are of priceless value, even though devoid of that pretentious precision born of the scalpel. They give us pictures of diseases as they occur in real life, and not mere histories of artificial lesions, and they show how a sound and honest physician should endeavour to relieve, if he cannot altogether remove, the sufferings of his patients, without degrading his art to a Mystery or himself to a Showman."

(*In "The Times," 28 January, 1885.*)

EXPERIMENTAL PHYSIOLOGY.

"OBSERVATIONS ON THE LOCALIZATION OF MOVEMENTS IN THE CEREBRAL HEMISPHERES, AS REVEALED BY CASES OF CONVULSION, CHOREA, AND 'APHASIA.'"

By J. HUGHLINGS JACKSON, M.D., F.R.C.P.*

"The results of the recent researches of Ferrier. . . . To me they are interesting, especially because they demonstrate in a novel and very striking way the truth of what I have long urged, viz., that discharges of convulsions develop movements, notwithstanding that destruction of limited parts of the brain produces no obvious loss of movements. The discharges I have studied have been those causing epileptiform seizures *in Man*. . . . For some years I have studied cases of diseases of the brain, not only for directly clinical, but for anatomical and physiological purposes. Cases of paralysis and convulsion may be looked upon as the results of experiments made by disease on particular parts of the nervous system of Man. . . . I have, indeed, written on Convulsions, beginning unilaterally, innumerable times during the last ten years. . . . There is no other way of ascertaining the localization of movements in the cerebral hemisphere of Man than by the study of his convulsive seizures. . . . Why should not the effects of an experiment which a clot makes on the corpus striatum of Man be recorded in works on Physiology, as well as the effects of intentional experimental injury to the corpus striatum of a Rabbit? . . . Do I not know as well as an ignorant man that a Whale is very unlike a Bat, although I steadily insist that in fundamental characters they are far more alike than a Whale and a Fish?"

(*In "The Times," 4 February, 1885.*)

* NOTE.—See "The West Riding Lunatic Asylum Medical Reports," 1873.

"London Hospital Reports," 1864, 1865.

"Medical Times and Gazette," 1861, 1862, 1865, 1866, &c.

"Lancet," 1866.

"Edinburgh Medical Journal," 1868.

CEREBRAL LOCALIZATION.

“THE INVESTIGATION OF EPILEPSIES.” By J. HUGHLINGS JACKSON, M.D., F.R.C.P.

“I shall speak of the localization of lesions in epilepsies scarcely more than is necessary to illustrate the second—that is, the physiological—part of the investigation. The reason is, that on the simplest ‘epilepsies,’ which have to be first studied for principles of localization, I have already written very many times. . . . The mode of onset is the most important matter in the anatomical investigation of any case of epilepsy. . . . The Law is seen in details. When the fit begins in the hand, the index-finger and thumb are usually the digits first seized; when in the face, the side of the cheek is first in spasm; when in the foot, almost invariably the great-toe. The fits begin, it will be observed, in those parts which suffer most in the common form of hemiplegia.

“It is very interesting to me to find that Ferrier’s independent researches confirm the general principle above stated, so far as experiments on lower Animals can be supposed to be comparable with the experiments disease makes on Man.”*

(In “*The Times*,” 11 February, 1885.)

CEREBRAL LOCALIZATION.

“EXPERIMENTAL INVESTIGATIONS INTO THE FUNCTIONS OF THE BRAIN.” By W. B. CARPENTER, M.D., LL.D., F.R.S.

“This view of the origin of those forms of Epilepsy which commence with convulsive spasm of the muscles ordinarily put in action voluntarily, as distinguished from those which primarily affect the muscles of Respiration whose centre of action is the Medulla Oblongata, is due to the Clinical sagacity of Dr. Hughlings Jackson.

“And I am inclined, with Dr. Ferrier, to accept the conclusion drawn by Dr. Broadbent from Clinical observation, that the movements which are most independent on the two sides are those which are most completely paralysed by injury to one side of the Cerebrum.”

(In “*The Times*,” 18 February, 1885.)

CEREBRAL LOCALIZATION.

“ON PARALYSIS FROM BRAIN DISEASE.” By H. CHARLTON BASTIAN, M.A., M.D., F.R.S., London, 1875.

“As Dr. Russell Reynolds pointed out twenty years ago, we must first endeavour to ascertain the ‘locality’ of the lesion, and then inquire as to its ‘nature.’ No one has worked more steadfastly in this

* NOTE.—Dr. Hughlings Jackson correctly predicted Tumour of the Frontal Convulsions before Hitzig’s and Ferrier’s experiments were made. See “*Lancet*,” and “*British Medical Journal*,” 16 May, 1885.

direction than Dr. Hughlings Jackson, and both the principle and the practice are now being very generally recognized and adopted."

"Clinical experience, however, suffices to show the very great frequency with which convulsions occur in association with lesions of the surface of the hemispheres, as compared with their frequency when injuries exist in other encephalic regions. An extensive study of the literature of the subject suffices to confirm this view, which was definitely announced by Dr. Wilks, in 1865, and which has of late, moreover, been still further strengthened by the admirably worked-out conclusions of Dr. Hughlings Jackson as to the almost invariable association of epileptiform attacks, cephalagia, and double optic neuritis in cases where tumours or new growths implicate the cortical substance of the hemispheres." *(In "The Times," 25 February, 1885.)*

CEREBRAL LOCALIZATION.

"CHOREA." By C. B. RADCLIFFE, M.D., F.R.C.P.

"Neither do the teachings of Experimental Physiology help much towards exactly localizing the particular mischief which operates in the exceptional cases of chorea. These teachings show that movements of a rotatory character may originate in various parts of the nervous system—in the thalami optici, corpora quadrigemina, crura cerebri, pons Varolii, crura cerebelli, in certain parts of the medulla oblongata, and also in the upper portion of the spinal cord; that choreic agitation may be caused by slicing away the cerebellum, and by puncturing one of the corpora quadrigemina; that the removal of the encephalon in front of the thalami optici may result in an impulse to go forwards; and that a deep wound in the cerebellum may be attended by an impulse to go backward."

"... There is no lack of instances to show that any part of the nervous system may act on any other part, and the exact localization of many disorders of the system is a difficult if not hopeless task, for the simple reason that any given lesion in any part may be attended by a wide range of symptoms depending upon sympathetic disorder set up in other parts."

"Pathology.—During the last two years Drs. Hughlings Jackson, Broadbent, Tuckwell, Ogle, Barnes, and others, have done much to elucidate the pathology of chorea; the investigations of Dr. Kirkes, made four or five years previously, serving as the starting point to these new inquiries." *(In "The Times," 4 March, 1885.)*

CEREBRAL LOCALIZATION.

"LECTURES ON DISEASES OF THE NERVOUS SYSTEM."

By SAMUEL WILKS, M.D., F.R.S., London, 1883.

"I have always endeavoured to remember the name of any observer who has added a new fact to the general stock. In saying this I cannot but feel how indebted we all are to such men as Hughlings

Jackson, who are always pouring out their best thoughts before the profession, and who therefore assist us in a greater measure than we ourselves are aware of in forming our opinions."

"I should point to the general view I took (ten years ago) of Cerebral Physiology and Pathology, the truth of which all observations and experiments have since tended to confirm." . . . "Whilst controversies were still warm as to the interpretation of a double brain, and the text-books of Physiology were throwing no light upon it, I taught that the two hemispheres were necessary complements to the separate ganglia with which they were associated," &c.

(In "*The Times*," 11 March, 1885.)

CEREBRAL LOCALIZATION.

"LECTURES ON DISEASES OF THE NERVOUS SYSTEM."

By SAMUEL WILKS, M.D., F.R.S., London, 1883.

"These experiments of Ferrier have more fully confirmed the doctrine which I have for many years taught at this School relating to the interpretation of the double nature of the brain. You know that Physiologists and Metaphysicians have puzzled over the question," &c.

"THE LOCALIZATION OF CEREBRAL AND SPINAL DISEASES." By J. M. CHARCOT, Professor to the Faculty of Medicine of Paris, Physician to La Salpêtrière, &c., 1882.

"It has long been known* that the motor disorders which are produced in the majority of Animals by methodical destruction of the various parts of the encephalon, particularly of the cerebrum, as a rule, differ considerably from those observed in Man, in consequence of lesions occasioned in the corresponding parts by disease."

(In "*The Times*," 18 March, 1885.)

CEREBRAL LOCALIZATION.

"ÉTUDE CRITIQUE ET CLINIQUE DE LA DOCTRINE DES LOCALISATIONS MOTRICES DANS L'ÉCORCE DES HÉMISPÈRES CÉRÉBRAUX DE L'HOMME." Par MM. J.-M. CHARCOT, Professeur de Clinique des Maladies Nerveuses à la Faculté de Médecine de Paris; et A. PITRES, Professeur de Clinique Médicale à la Faculté de Médecine de Bordeaux. Paris, 1883.

"INTRODUCTION.

"Dès le début de nos recherches sur les localisations corticales motrices, nous nous sommes efforcés de préciser exactement les termes du problème dont nous poursuivions la solution. Dégagés de toute

* On this subject, see LONGET, "*Traité de Physiologie*," t. III, p. 431; and VULPIAN, "*Leçons sur la Physiologie Générale*," &c., p. 676.

idée préconçue, négligeant à dessein les données fournies par l'expérimentation chez les Animaux, nous avons demandé à la méthode anatomo-clinique la réponse à cette question : Les lésions des circonvolutions cérébrales peuvent-elles produire, chez l'Homme, des troubles du mouvement, et, si oui, existe-t-il un rapport constant entre le siège des lésions corticales et la distribution des phénomènes paralytiques ou convulsifs qui en sont la conséquence ? ”

(In “ *The Times*,” 25 March, 1885.)

CEREBRAL LOCALIZATION.

“ ÉTUDE CRITIQUE ET CLINIQUE DE LA DOCTRINE DES LOCALISATIONS MOTRICES,” &c. Par MM. J.-M. CHARCOT et A. PITRES, Paris, 1883.

“ Posée en ces termes, la question ne pouvait être résolue que par la comparaison attentive, dans un grand nombre de cas, des symptômes observés pendant la vie des malades et des lésions rencontrées après leur mort. Nous sommes entrés résolument dans cette voie.” . . . “ Analysant alors cinquante-six observations nouvelles, publiées en France ou à l'étranger et entourées pour la plupart des garanties de précision qui sont indispensables à l'étude actuelle de la pathologie cérébrale, nous avons eu la satisfaction de constater que presque toutes confirmaient les opinions que nous avions soutenues.”

(In “ *The Times*,” 1 April, 1885.)

CEREBRAL LOCALIZATION.

“ ÉTUDE CRITIQUE ET CLINIQUE DE LA DOCTRINE DES LOCALISATIONS MOTRICES DANS L'ÉCORCE DES HÉMISPÈRES CÉRÉBRAUX DE L'HOMME.” Par MM. J.-M. CHARCOT et A. PITRES, Paris, 1883.

“ L'expérimentation physiologique a rendu d'immenses services, mais elle a son domaine, au-delà duquel elle ne saurait parler en souveraine. Elle peut fournir, et elle a déjà fourni, des renseignements précieux sur les fonctions du cerveau chez le Singe, le Chien, le Lapin, le Cobaye, etc., mais elle est incapable de donner la moindre notion définitive sur les fonctions du cerveau de l'Homme.”

(In “ *The Times*,” 8 April, 1885.)

CEREBRAL LOCALIZATION.

“ ÉTUDE CRITIQUE ET CLINIQUE DE LA DOCTRINE DES LOCALISATIONS MOTRICES DANS L'ÉCORCE DES HÉMISPÈRES CÉRÉBRAUX DE L'HOMME.” Par MM. J.-M. CHARCOT et A. PITRES, Paris, 1883.

“ Tout le monde sait comment Flourens et Majendie ont été induits en erreur pour avoir étendu à tous les Animaux supérieurs les résultats d'expériences pratiquées sur des Pigeons, des Poules ou des Lapins. Les

fautes du passé doivent servir à l'enseignement de l'avenir, et, dans le cas actuel, elles doivent nous mettre en garde contre les prétentions de certains Physiologistes qui ne tendraient à rien moins qu'à refuser toute autonomie aux recherches cliniques. C'est là une tendance fâcheuse, contre laquelle on ne saurait protester avec trop d'énergie."

(In "The Times," 15 April, 1885.)

CEREBRAL LOCALIZATION.

"ÉTUDE CRITIQUE ET CLINIQUE DE LA DOCTRINE DES LOCALISATIONS MOTRICES DANS L'ÉCORCE DES HÉMISPÈRES CÉRÉBRAUX DE L'HOMME." Par MM. J.-M. CHARCOT et A. PITRES, Paris, 1883.

"Les études Pathologiques bien dirigées ont une valeur scientifique tout aussi grande que les études expérimentales. Elles n'ont pas besoin d'être tenues en tutelle. Elles doivent seules intervenir dans la discussion et la solution de certains problèmes, et, particulièrement dans le cas qui nous occupe, elles peuvent seules fournir des données précises pour la détermination de la topographie fonctionnelle du cerveau de l'Homme."

(In "The Times," 22 April, 1885.)

CEREBRAL LOCALIZATION.

"ÉTUDE CRITIQUE ET CLINIQUE DE LA DOCTRINE DES LOCALISATIONS MOTRICES DANS L'ÉCORCE DES HÉMISPÈRES CÉRÉBRAUX DE L'HOMME." Par MM. J.-M. CHARCOT et A. PITRES, Paris, 1883.

"Si la doctrine des localisations corticales ne compte qu'un nombre relativement restreint de contradicteurs, il est juste de reconnaître que beaucoup de personnes restent encore incertaines, hésitantes, attendant pour prendre un parti que la vérité s'impose par le fait seul de la multiplicité et de la concordance des observations confirmatives. Le travail qu'on va lire a surtout pour but de dissiper les derniers scrupules de ces hésitants. Il est basé sur l'analyse de près de deux cents observations de lésions corticales recueillies chez l'Homme et publiées dans le cours de ces quatre dernières années (du commencement de 1879 à la fin de 1882)."

(In "The Times," 29 April, 1885.)

CEREBRAL LOCALIZATION.

"ÉTUDE CRITIQUE ET CLINIQUE DE LA DOCTRINE DES LOCALISATIONS MOTRICES DANS L'ÉCORCE DES HÉMISPÈRES CÉRÉBRAUX DE L'HOMME." Par MM. J.-M. CHARCOT et A. PITRES, Paris, 1883.

"L'histoire des monoplégies d'origine corticale est certainement un des points les plus intéressants de l'étude des localisations motrices dans l'écorce du cerveau. Les faits sur lesquels repose cette histoire ont la valeur de véritables expériences pratiquées sur l'Homme."

“L’histoire des localisations motrices chez l’Homme est fondée actuellement sur la comparaison de plusieurs centaines d’observations concordantes, régulièrement recueillies et entourées pour la plupart de toutes les garanties désirables.”

“L’Épilepsie Jacksonienne.” “Le type Jacksonien.” “Épilepsie partielle, Jacksonienne ou corticale.” (In “*The Times*,” 6 May, 1885.)

CEREBRAL LOCALIZATION.

“DE LA LOCALISATION DANS LES MALADIES CÉRÉBRALES.” Par le Dr. R. LÉPINE, ex-Chef de Clinique de la Faculté, Médecin du Bureau Central des Hôpitaux, Paris, 1875.

“Ce n’est donc pas sans opposition que M. Broca put établir l’exactitude de sa découverte (une fonction, celle du langage articulé, siégeant dans une circonvolution particulière). Aujourd’hui que de nouveaux centres moteurs ont été découverts dans l’écorce grise, l’existence d’un centre pour l’articulation des mots ne saurait étonner.

“La découverte expérimentale de ces centres est due à MM. Fritsch et Hitzig. Ils furent, je crois, conduits à l’idée de leur recherche par le fait singulier qu’un courant galvanique traversant chez l’Homme la partie postérieure de la tête, d’une apophyse mastoïde à l’autre, provoque des mouvements des yeux. . . . MM. Fritsch et Hitzig ont donc les premiers démontré que nous pouvons exciter expérimentalement la substance grise, mais ils ne sont pas les premiers qui aient appelé l’attention sur l’existence probable de centres moteurs des membres dans la substance de l’écorce. A ce point de vue, ils ont été devancés par un médecin d’une grande originalité, le Dr. H. Jackson, de Londres.” (In “*The Times*,” 13 May, 1885.)

CEREBRAL LOCALIZATION.

“DE LA LOCALISATION DANS LES MALADIES CÉRÉBRALES.” Par le Dr. R. LÉPINE, ex-Chef de Clinique de la Faculté, Médecin du Bureau Central des Hôpitaux, Paris, 1875.

“Il y a bien loin de cette simple vue de l’esprit aux efforts persévérants que fit M. Jackson, à maintes reprises, depuis plusieurs années, pour essayer de donner une preuve clinique de l’excitabilité pathologique de l’écorce.”

“Épilepsie.—On pensait jusqu’à ces derniers temps que l’épilepsie était sous la dépendance d’un état morbide du bulbe. On doit à M. Jackson d’avoir apporté des preuves sérieuses en faveur de l’origine corticale de certaines épilepsies partielles, sinon de toutes.”

“J. Hughlings Jackson.—Le Dr. Jackson, depuis quinze ans (‘*Medical Times and Gazette*,’ 1861–62, and seq.) a entrepris, à l’aide d’observations minutieusement recueillies, de localiser les centres moteurs des groupes musculaires des membres dans certains points des hémisphères cérébraux, et bien avant Fritsch et Hitzig, dès 1865 (London Hospital Reports), dans les circonvolutions cérébrales.”

(In “*The Times*,” 20 May, 1885.)

CEREBRAL LOCALIZATION.

“HUMAN PHYSIOLOGY.” By JOHN ELLIOTSON, M.D. Cantab., F.R.S., &c. Fifth edition. London, 1840.

“Attempts to mutilate artificially are not calculated to afford much information.” “Hence the contradictory and strange observations and inferences of most experimenters on the brain of living brutes.” “These mutilations by Nature are conclusive, and render all vivisections on the points unnecessary.” “A girl lived to the age of eleven years, with the use of her senses, and with voluntary motion, weak it is true, but sufficient for her wants, and even for progression.” “After death no cerebellum nor mesocephalon could be found.” “Here was one of Nature’s own mutilations, without mechanical injury or disturbance of other parts; and, with patience till it occurred, a multitude of innocent animals would have escaped cruel and disgusting vivisections.”

(In “*The Times*,” 27 May, 1885.)

CEREBRAL LOCALIZATION.

“BRAIN SURGERY.” By JAMES WHITSON, M.D., &c., Glasgow, 1884.

“While Dr. Yeo was engaged in performing operations upon the brains of Monkeys in London with the view of finding out whether these could be effected with immunity from suppuration, Dr. Macewen had already settled the question in Glasgow with regard to the Human being.”

(In “*The Times*,” 3 June, 1885.)

CEREBRAL LOCALIZATION.

“EXCISION OF CEREBRAL TUMOURS.”

The “LANCET,” May 16, 1885.

“Dr. Ferrier and Mr. Horsley, from their experience with Monkeys, believe that a permanent closure of the wound at the end of the operation is the right course to adopt. Mr. Godlee, Dr. Macewen, and Mr. Davy appear to hold the opposite view.”

CEREBRAL TUMOUR.

The “BRITISH MEDICAL JOURNAL,” May 16, 1885.

“Professor Ferrier’s and Mr. Horsley’s experience furnished an ‘Argumentum ad Simiam,’ but he (Mr. Godlee) could not feel justified in admitting that it applied exactly to Man.”

(In “*The Times*,” 10 June, 1885.)

CEREBRAL LOCALIZATION.

"ARTHUR SCHOPENHAUER."—At the fair held in Frankfurt in 1857 a live Orang-outang* (then a rarity in Europe) was exhibited. "Schopenhauer went almost daily to see 'the probable ancestor of our race,' regretting that he had been forced to defer making his personal acquaintance so long. He urged all his friends not to let this opportunity slip by. He was especially struck with its expression . . . and by the head, whose frontal bone and 'os verticis' were decidedly better formed than those of the lowest human races; neither did it betray the animal in its gestures. He thought the longing of the will after cognition was personified in this strange and melancholy beast, and compared his mien to that of the Prophet gazing over into the Promised Land."
(In "The Times," 17 June, 1855.)

CEREBRAL LOCALIZATION.

"EXPERIMENTAL PRODUCTION OF 'CHOREA.'"

The "LANCET," May 30, 1885.

"Dr. Angel Money stated, 'the experiments were held to prove that in the Cat and Guinea-pig these choreoid movements were the result of nervous discharges originating in the nerve-cells of the spinal cord.'"
 . . . "Dr. Hughlings Jackson argued that in the Cat and other Animals, whose cerebral and muscular structures were very different from those of Man, it was impossible for the varied movements of human chorea to occur, for the reason that these Animals did not possess the mechanism for the production of such movements."
 "It must be confessed"—asserts the editor of the "Lancet"—"that until we have in our possession a series of experimental investigations on the nervous system of such animals as Monkeys, whose nervous system approaches nearest to that of Man, the question must remain unsettled."

The mien of Arthur Schopenhauer's strange and melancholy beast—the Orang-outang—might well be compared by the philosopher "to that of the Prophet gazing over into the Promised Land." "Coming events cast their shadows before." Did "The Argumentum ad Simiam" dawn on his mental vision?—the future fate of his poor relations liberally supplied to the scalpels of the Physiologists; and, when Orangs, Chimpanzees, and the higher Apes become less expensive (or are bred by the Nation), they also subjected to the like fate—by

"Man,—that Tyrant o'er the Weak."—ROBERT BURNS.

(In "The Standard," † 25 June, 1885.)

* NOTE.—The correct orthography is Orang-utan = Wild Man of the Woods. See "The Gardens of the Sun," by F. W. Burbidge. London: John Murray, 1880. In Borneo the name is not only applied to the Ape but to the Aboriginal inhabitants of the interior.

† NOTE.—The above was, also, in "The Athenæum," 27 June, 1885. It was refused insertion by "The Times,"—consequently, The Society Abolition Vivisection transferred its Advertisements to "The Standard."

CEREBRAL LOCALIZATION.

"From the sublime to the ridiculous is but a step," said the Great Napoleon. From the Ape to Man, we are told, is but a link. Shakspeare says that "Man, proud Man! Drest in a little brief authority . . . like an angry Ape, plays such fantastic tricks before high Heaven as make the Angels weep." He compares him to an Ape, and to an "Angry Ape." As Man is so closely akin to the Ape in physical conformation and "fantastic tricks," the Physiologists may well crave for a wilderness of them. "Experiments" were, not very long since, tried even in England on Criminals. Why not so still? Inoculation for the Small-pox was tried on Criminals, and the Fellows of the Royal Society wished to "experiment" upon the Insane in Bethlehem Hospital. Dr. Thomas Allen refused to accede to a proposition which had met with general approbation at the Royal Society (of which he was himself a Fellow), to make the first experiment of the transfusion of blood in this country "upon some Mad person in Bedlam."

(In "The Standard," 2 July, 1885.)

CEREBRAL LOCALIZATION.

Man is an Animal. That is an admitted fact; and "the Missing Link" (so much talked of) may, or may not, exist, or have ever existed. The distinguished surgeon, Mr. John Marshall, examined the brain of a Bushwoman, and described it as presenting an arrangement distinctly intermediate between that which characterizes the cerebrum of an educated stock and that which is presented by the higher Quadrumana. Gratiolet and Huschke established the conformity in structural style of the brain of Apes with that of Man.

But, where can the line be drawn to justify oppression? Oppression is a wrong; and moral law is not subject to, or derived from, physical. Questions of morality are not to be settled by anatomical, physiological, or biological research.

"Assuredly it will come one day to be generally recognized that the number of the legs, the villosity of the skin, or the termination of the os sacrum are reasons insufficient for abandoning a sensitive creature to the caprices of a tormentor."

(In "The Standard," 9 July, 1885.)

CEREBRAL LOCALIZATION.

The attention of the public was ostentatiously directed in "The Times" of the 16th December last to a case of Cerebral Localization in the Regent's Park Hospital. The trump of the Experimenters on Living Animals was loudly and obstreperously sounded in an epistle signed with the significant symbol, "F.R.S." That symbol, it is believed, concealed, not a single, but several individuals. Their modesty or

their caution prevented an open avowal of their names. If the latter, theirs was a prudent secrecy, and a characteristic. The sensational and elaborately-pathetic picture painted of "the case,"—a case vaunted as "unique"—a man "snatched from the grave"—"a living monument of the value of Vivisection," has proved a delusion, and "the case" a failure. "The case" was *not* "unique"—the unfortunate patient was *not* "snatched from the grave"—and even if he had been he would *not* stand "a living monument of the value of Vivisection." In future advertisements we hope to demonstrate by statements which will carry conviction to candid men, that the advances made in Brain Surgery are due to clinical sagacity, observations made upon disease in human patients, thoughtful study of Nature's own mutilations, and skilful examination of the dead.* (In "*The Standard*," 16 July, 1885.)

CEREBRAL LOCALIZATION.

"He will be a living monument of the value of Vivisection. . . . Saved from prolonged torture and death by a kind of treatment that has been made practicable by the sacrifice, under anæsthetics, of a few rabbits and monkeys. . . . Put his finger on the exact position of the tumour . . . guided solely and entirely by the results of Ferrier's experiments. . . . Thanks to Vivisectional researches, it is now possible to localize during life with the utmost precision certain lesions of the brain."

Behold, British People, in the foregoing extracts the positive, definite, and unqualified assertions made in "*The Times*" newspaper of last December, but made by men apparently not possessing the courage of conviction—made, not manfully, and in their own names, but under concealment of the letters "F.R.S." Those anonymous and unfounded assertions are calculated to mislead, calculated to give a false elevation to the Vivisector over the sagacious, learned, skilful, and humane surgeon and physician, and to exalt the "Mystery-man" above the heads of the Sydenhams and Cheseldens of our generation.

The unfortunate patient at the Regent's Park Hospital died—died within seven days after it had been publicly and boastfully trumpeted by the "F.R.S." clique in "*The Times*" that "his case inaugurated a new era in cerebral surgery," and had "been brought to a successful issue." Nevertheless, improvements have been established in cerebral surgery, but those improvements in that branch of the noble art are not due to Vivisection. In demonstration thereof we refer the public to our advertisements on consecutive Wednesdays in "*The Times*" from the 21st of January until the 17th of June last, and, after the latter date, to their

* NOTE.—Relative to the above observations, we received the following testimony from a Physician well acquainted with the question:—

"July 18th, 1885.

"DEAR SIR,—I duly received your two enclosures. They are certainly very severe, but at the same time perfectly just.

"Believe me to be,

"Yours very truly."

* * *

continuation in "The Standard" on Thursdays. Gall,* Bravais, Gratiolet, Dax, Broca, Abercrombie, Laycock, Bright, Hughlings-Jackson, Wilks, Broadbent, Tuckwell, Reynolds, Bastian, MacEwen, Charcot, Pitres, and Lépine are among the able men whose labours have advanced the knowledge of the Brain, Cerebral Disease, and Brain Surgery; yet not one of them received the slightest notice from "F.R.S." in "The Times." One and all were ignored—ignored, although, while Vivisectors were killing Monkeys in London, Surgeons were saving Men in Glasgow.

(In "The Standard," 23 July, 1885.)

CEREBRAL LOCALIZATION.

More than a year ago a Professor (who is understood to be one of those who concealed themselves under the Symbol "F.R.S.") paid Dr. Macewen a visit in the Royal Infirmary at Glasgow, and there received every information regarding the mode of procedure in head cases, and it was some months after this that the Regent's Park Hospital Case was made to figure so conspicuously in "The Times" on the 16th of December last. At the Meeting of the Royal Medical and Chirurgical Society, on the 12th of May, "F.R.S.," it is affirmed, carefully avoided referring to his Glasgow visit, though he was allowed an opportunity of speaking. "F.R.S." went to Glasgow, elicited all the information he could on Cerebral Surgery,† and then returning to London, published his own Case as "unique"—as "inaugurating a New Era in Cerebral Surgery"—as "opening up new and far-reaching vistas of hopefulness in Brain-Surgery"—as "made practicable by the sacrifice, under anæsthetics, of a few rabbits and monkeys"—and, as "guided solely and entirely by the results of Ferrier's experiments." "The Argumentum ad Simiam" was all in all. The great Glasgow Surgeon's instructions were unacknowledged—the man who had saved many lives was totally ignored, that the Vivisector (whose Patient died) might be glorified. Human life and human suffering were not the objects in view—vanity was to be gratified and Vivisection exalted. The egotism of the Vivisector is greater than his love for his neighbour.

(In "The Standard," 30 July, 1885.)

CEREBRAL LOCALIZATION.

The distinguished Surgeon, Sir Philip Crampton, asserted,—that the human mind by being familiarised with scenes of cruelty and horror at length extracted from them a kind of insane gratification,—and, that torturing experiments on Animals exercised a corrupting

* NOTE.—Gall's great work should never be forgotten. Nor his exposures, of the errors as to facts, poverty of argument, and unsatisfactory nature of the experiments of the Vivisectors of the Brain. As to the dull miscreant of miscreants, Magendie, he was considered by Gall as little more than a Canicide.

† NOTE.—Trephining has been performed by Dr. Macewen in Fourteen Cases, and Elevation of the Bones in Three. In these Seventeen Cases only three deaths occurred.

influence. Crampton does not stand alone in the opinion. The moral sense of the Vivisector must, in time, inevitably be dulled if not destroyed. "A man who will starve a dog to death will disregard Truth," said Dr. Lawson Cape. The absence of candour exhibited by the London Physiologist towards the Glasgow Surgeon from whom he sought and received knowledge, is, to all appearance, an instance of impaired moral sense. Another instance is public in regard to the great operation Ovariectomy. "F.R.S." in "The Times" attributes to Vivisectional Research the triumph over difficulties achieved. But the truth is manifest that the man who placed Ovariectomy on a sure foundation in Great Britain is Charles Clay, M.D., who "never practised nor yet countenanced Vivisection." His successor, Mr. T. Spencer Wells,* experimented on guinea pigs, rabbits, and dogs, but, though he possessed the invaluable advantage of Dr. Charles Clay's and other surgeons' example, experience, and improvements, and went to Manchester to see Dr. Charles Clay operate, nevertheless Mr. Wells in his first 250 cases had only 180 recoveries,—while his predecessor and pioneer Dr. Charles Clay, in his first 250 cases had 182 recoveries.†

Sir William Fergusson, than whom was no abler operative surgeon in Europe, recorded his matured opinion of Vivisection in the following words:—"I have thought over it again and again, and have not been able to come to a conclusion in my own mind that there is any single operation in Surgery which has been initiated by the performance of something like it on the lower animals."

(In "The Standard," 6 August, 1885.)

CEREBRAL LOCALIZATION.

The notorious Professor Schiff has given permission to a medical eye-witness (W. R. Huggard, M.D.) to report some of his hitherto unpublished experiments on the functions of the excitable area of the Cerebral Cortex. These "experiments" are reported in "The Lancet" of the 1st instant, and we subjoin a few extracts which may be commended to the attention of the writer of "The Functions of the Brain;" to a Lord Chancellor's Visitor in Lunacy; to a Professor of Physiology in King's College; to the Fraternity for the Advancement of Medicine by—"Research;" and to Officers and Visitors of a Northern Lunatic Asylum, who are of an experimental turn of mind.

"From these facts, and from kindred experiments on Monkeys, it has been inferred that the excitable spots in the cortex are motor centres. The facts on which the inference is based are unimpeachable, but they do not warrant the inference.

"If the so-called motor centres are not really motor centres, why, it may be objected, does stimulation of them give rise to movement?"

* Now Sir T. Spencer Wells, Bart.

† See "Correspondence on Ovariectomy with Sir T. Spencer Wells, Bart." Third Edition. Price One Shilling. Pickering & Co., 65 Haymarket, S.W.

The answer is that excitability, so far from proving them to be motor centres, tends to prove the reverse—to prove that they are sensory.

“One of the greatest difficulties in experimental inquiry is the plurality of causes. This source of error vitiates most of the hitherto recorded researches on the present subject.”

(In “*The Standard*,” 13 August, 1885.)

CEREBRAL LOCALIZATION.

“ARGUMENTUM AD SIMIAM.”—The Editor of “*The Lancet*” stated, in a leading article on Cerebral Localization, which appeared on November 10, 1883:—“If Dr. Ferrier’s suggestions meet with much practical response, it is to be feared that Cerebral Localization will soon have more deaths to answer for than lives to boast of.”

At a Meeting of the Royal Medical and Chirurgical Society, on April 16, 1885, Dr. Ferrier (according to “*The British Medical Journal*” of May 16) expressed himself as follows:—“He cited a case from his patients in King’s College Hospital this year. The man had grave symptoms, gradually increasing to complete paralysis of the left side, pain in the right frontal region, double optic neuritis, and almost complete coma; the right eyeball was rather fuller than the left. The symptoms were attributed to some growth pressing on the sphenoidal fissure,* whether from above or below could not be determined. Sir Joseph agreed to make an exploratory operation. As soon as the dura mater was incised the brain bulged out, and as soon as he put in his finger there was a rush of fluid out of what seemed to be a cyst, but was really a very greatly dilated anterior horn of the ventricle. There was great reduction of pressure and relief of paralysis, but no further operation could be attempted. The left arm gained some power, and for a time the coma lessened; but in a week death ensued, not from surgical complications, but from the tumour, which was found to press upwards on the sphenoidal fissure. It would have been reached if the finger had penetrated half an inch deeper,† but was too large to be removed. The case, however, showed the safety from surgical complications.”

(In “*The Standard*,” 20 August, 1885.)

CEREBRAL LOCALIZATION.

The King’s College Hospital Case proved no more successful than the previous case at Regent’s Park Hospital, so prematurely trumpeted in “*The Times*.” From the foregoing account, published in “*The British Medical Journal*” of the 16th of May last, and also in “*The Lancet*,” it appears that “in a week death ensued”—not, it is said, from the Surgical operation and consequent shock, not from irritation of brain-tissue, not from hernia cerebri, &c., but from the Tumour—

* NOTE.—Sir Joseph Lister trephined at the *Right Frontal Eminence*. See “*The Lancet*” of May 16, 1885.

† NOTE.—Query.

from the Tumour which Sir Joseph Lister (who trephined at the right frontal eminence on the responsibility of the diagnosis) was unable during the patient's life to find. It was thought necessary to inform professional brethren of the Royal Medical and Chirurgical Society that it was not "exploratory" operations—viz., sawing a hole in the Hospital patient's head, incising the dura mater, passing the knife downwards, &c.—that brought him to his end—but Nature!

When the locus of the tumour was, at last, revealed by post-mortem examination, it was discovered in a different part of the brain from that in which the diagnostic finger of the physician, most learned in monkeys, had so confidently prognosticated it would be brought to light. Not very brilliant diagnosis this! Arguing from monkeys to men proved fallacious.

We will now offer for public consideration a few select expressions from the vaunting and sensational, but premature, epistle by "F.R.S.," which was published by "The Times" on December 16, 1884, relative to the other fatal Brain case at the Regent's Park Hospital, where the High Priest of the Mystery was present before, during, and after the operation.

"Guided by Ferrier's Experiments"—"he owes his life to Ferrier's Experiments"—"a new Era in Cerebral Surgery"—"this impressive and illustrative case"—"a kind of treatment that has been made practicable by the sacrifice, under anæsthetics,* of a few† rabbits and monkeys."

So much for the "Argumentum ad Simiam."

(In "The Standard," 27 August, 1885.)

CEREBRAL LOCALIZATION.

"The British Medical Journal" of the 29th August last commits itself to the following admission on "Trephining for Cerebral Abscess":—"Given that Cerebral Abscess CAN be diagnosed—and this is the really difficult question."

* NOTE.—The Anæsthetics (when given) appear to have been administered for convenience's sake. Very doubtful does it seem whether any regard at all was paid to the sufferings of the animals.

† NOTE.—What idea in the mind of "F.R.S." is connected with the word "few," who can say? Dr. Ferrier thanked Dr. Crichton-Browne in these words:—"I have to thank Dr. Crichton-Browne for kindly placing at my disposal the resources of the Pathological Laboratory of the West Riding Asylum, with a liberal supply of pigeons, fowls, guinea-pigs, rabbits, cats, and dogs for the purposes of my research." Dr. Ferrier has also "Experimented" on monkeys, jackals, rats, frogs, toads, and fishes. Thirteen monkeys (macaques) had their brains "stimulated" by him between June 14, 1873, and Sept. 5 of the same year. See "Evidence taken before the Royal Commission on Vivisection," "The Functions of the Brain," "Proceedings of the Royal Society," &c. The above catalogue, however, does not include all the animals which have, according to his own account, been under the hands of Dr. Ferrier. "Further experiments are necessary" were his words after disposing of the thirteen macaques.

"And found no end, in wand'ring mazes lost."

In the King's College Hospital fatal Case in the present year Dr. Ferrier failed in diagnosis. His patient was a man who for two years had suffered from Cerebral symptoms. "He had all the symptoms of Cerebral Tumour." At Dr. Ferrier's instigation, the skull was trephined by Sir Joseph Lister at the RIGHT FRONTAL EMINENCE,—but no tumour could be found. Neither knife nor finger could discover one. The Patient died, and at the autopsy a tumour WAS met with, not in the Frontal Lobe, but pressing upwards on THE SPHENOIDAL FISSURE.*

The foregoing makes good the prediction of the Editor of "The Lancet," which appeared in a Leading Article in that Journal of November 10, 1883. This was the prediction:—"If Dr. Ferrier's suggestions meet with much practical response, it is to be feared that Cerebral Localization will soon have more deaths to answer for than lives to boast of." How many deaths there will be to answer for no man can tell. Successes would be loudly trumpeted abroad, but failures are quietly inurned. The deaths may be ascribed to "complications"—not to errors in diagnosis—the saw, the knife, the "palpating finger"—and the Cases will, no doubt, be said to illustrate important principles, teach valuable physiological and clinical lessons, and suggest practical reflections which may prove useful to future Medicine and Surgery; but we leave the Profession and the Public to judge whether this will be much better than Human Vivisection.†

From Quadrumanal to Bimanal—from Macaque to Man is but a step.

The foregoing, does it not corroborate and confirm the matured opinion of Sir William Fergusson, the great Surgeon?—who stated before the Royal Commission on Vivisection:—"In surgery I am not aware of any of these experiments on the lower animals having led to the mitigation of pain or to improvement as regards surgical details."

(In "The Standard," 3 September, 1885.)

CEREBRAL LOCALIZATION.

It is a matter of intelligent curiosity why Sir Joseph Lister was not present at the meeting of the Royal Medical and Surgical Society on the 28th April last. That eminent surgeon trephined the unfortunate King's College Hospital Patient, and the discussion on the surgical treatment of Cerebral Tumour must necessarily have possessed much interest for him. There was a large gathering of Fellows, and Dr. Macewen and Mr. Godlee, his distinguished pro-

* NOTE.—See "The Lancet" of May 16, 1885. "F.R.S.'s" famous comparison of "The Telegraph Clerk," rather failed as to Dr. Ferrier.

† NOTE.—"The Medical Times" of May 16, 1885, coolly says: "It is pleasant to know that, although the Patient ultimately died, it was not in consequence either of his tumour or his operation, but as the result of an unfortunate complication—hernia cerebri" (!!).

"The British Medical Journal," on the contrary, states—"Death ensued, not from Surgical complications, but from the Tumour."

Mark the above contradictions, oh ye credulous British Public!

fessional brethren, spoke at the meeting; but Sir Joseph (as we are informed) was conspicuous by his absence, and is not likely to operate again for Cerebral Tumour unless he has reliable evidence to guide him—evidence more reliable, and principles of diagnosis more conclusive, than the “ARGUMENTUM AD SIMIAM.”

Cerebral Localization Experiments on a multitude of miserable, mutilated animals of many species have led to little of practical help for Therapeutic purposes; and, as to Surgery “The Lancet” itself allows that “it must be confessed that the aid ‘Localization’ has afforded to treatment has been small, and practically confined to cases of Surgical interference. Even of these cases there are very few—scarcely more than could be counted on the fingers of one hand—in which the power of localizing cerebral disease can be said to have been the means of saving a life that would have been lost without it. Nor is any clear indication to be seen that such cases are likely to be more frequent.”*
(In “The Standard,” 10 September, 1885.)

CEREBRAL LOCALIZATION.

Dr. Hughlings Jackson diagnosed correctly Tumour of the Frontal Convolutions before Ferrier’s “Experiments” were made. The Clinical, Pathological, and Post-mortem Observations and sagacious deductions of Dr. Hughlings Jackson, and other Physicians, had already determined the interpretation of the double nature of the Brain—and, that in Man discharges of convolutions develop movements. This had been proved naturally in Man. To attempt to prove it artificially afterwards by Trephine, Curette, Red-Hot-wire, Electrical irritation, &c., on Monkeys, Jackals, Rats, and “a liberal supply” of Dogs and Cats—Rabbits and Guinea Pigs—Pigeons and Fowls, from, not Jamrach and Co.’s, Cross’ Menagerie, or, Leadenhall-market, but the Pathological Laboratory of—a Lunatic Asylum!—was uncalled for. A multitude of innocent animals would have escaped cruel and disgusting Vivisections had sagacious and laborious Clinical and Post-mortem observations on Men and Women been accepted.† What did these Vivisections accomplish?—they “confirmed”—we are told by the Vivisector himself—the views expressed by Dr. Hughlings Jackson. What are the Vivisector’s own words? These: “My conclusions are entirely in harmony with those of Dr. Hughlings Jackson.” How mutilations of the Skulls and destruction of the Brains of Rabbits,

* NOTE.—At the special meeting in London devoted to the Pathological Anatomy of Intracranial Tumours, on the 2nd February, 1886, Dr. Goodhart stated his experience that Cerebral Tumours suitable for Surgical interference were seldom met with. Dr. Saundby observed that most Tumours of the Brain were difficult, and many were impossible, to diagnose. Compare this statement made by Dr. Saundby in 1886, with the sensational comparison as to the “Telegraph Clerk” made by “F.R.S.” in 1884. See “THE LANCET” of 6 February, 1886, pages 251, 252.

† NOTE.—See “Human Physiology,” by John Elliotson, M.D., F.R.S., &c. Fifth Edition, London.

Fowls, and Pigeons can give "important results and conclusions" as to Cerebral Disease in Men and Women, and be in "striking harmony" with clinical observations, only a F.R.S. "fresh from the Surgery Schools of France and of other lands" can, perhaps, clearly see. For what does Charcot affirm? "It has long been known that the motor disorders which are produced in the majority of animals by methodical destruction of the various parts of the encephalon, particularly of the cerebrum, as a rule differ considerably from those observed in man, in consequence of lesions occasioned in the corresponding parts by disease."

Some of the "Phenomena" * in which Professor David Ferrier found "striking harmony," and from which he derived "important results and conclusions," and "demonstration"—that is the word—"demonstration of the accuracy of the views of Dr. Hughlings Jackson" (Q.E.D.)? are described by the Professor as follows:—

"The animal † exhibited signs of pain, screamed, and kicked out with its left hind-leg, at the same time turning its head round, and looking behind in an astonished manner." "The animal bit angrily, and gnawed its own legs." "Long-continued cries as if of rage or pain." "The animal suddenly starts up, throws back its head, opens its eyes widely, lashes its tail, pants, screams and spits as if in furious rage."

"But the Phenomena remained much the same, though the animal ‡ seemed blinded, as it ran against furniture, walls, and jammed its head into impossible corners. It retained the power of opening both eyes, and of howling and barking in a very vigorous manner. Apparently it remained quite conscious, for, when called to, it would struggle to get up, and would sometimes regain its feet, and even succeed in walking a few steps, when it would fall over in a helpless manner. the animal barked energetically, and howled when pinched. Pinching of the tail especially caused the animal to bark. This condition continued for several hours. I was rather inclined to attribute the Phenomena to retention of consciousness and distinct sense of pain. The dog survived for eight hours after the removal of the hemisphere." (In "The Standard," 17 September, 1885.)

CEREBRAL LOCALIZATION.

These and similar scientific achievements of the Medical Philosopher were admired, not only within the walls of a Lunatic Asylum, but in the decorous shades of Burlington House. The notables of Burlington House conferred an honorary distinction on the Medical Philosopher aforesaid. They were impressed by the "Phenomena" which scientific discernment, aided by modern ingenuity, revealed to

* NOTE.—Signs of pain, struggles, screams, howls, cries of rage, convulsions, &c., are, by Vivisectors, euphemistically termed,—"*Phenomena*." Inflicting atrocious cruelties upon Animals, they callously and impiously call,—"*Interrogating Nature*."

† NOTE.—A Cat.

‡ NOTE.—A Dog.

their rapt intelligence. Some years since a Physiologist was black-balled at the Royal Society from the horror excited by an account read just before of experiments on rabbits. But times are altered. A different feeling animates the Association. The Medical Director of that very Asylum (Dr. J. Crichton Browne) wrote in 1875, of "The great and growing TIDE of INSANITY"—"that overwhelms so many." The Mania of Vivisection is one of the signs of that increasing Tide.

To cut open the skulls, mutilate the brains of dogs, pinch their toes and tails for hours,* to see what will happen, is it mental aberration? Or, is it akin to Magendie?—who cut animals here and there to see what would happen—and said, "It is droll to see animals skip and jump about of their own accord, after you have taken out all their brains a little before the optic tubercles."

Dr. J. Crichton Browne stated in "The Times" newspaper that the animals experimented upon by Dr. David Ferrier were unconscious, and the agony of the animals "was not greater than that of a pianoforte when its keys are struck" (!!). "The Times" refused admission to a concise and clear refutation of Dr. J. Crichton Browne's assertions. Dr. David Ferrier's own admissions invalidate some of them, for he himself says (see advertisement in "The Standard" of Thursday last) he "was rather inclined to attribute the phenomena to retention of consciousness, and distinct sense of pain."†

"O Man! tyrannic Lord! how long, how long
Shall prostrate Nature groan beneath your rage,
Awaiting renovation?"

(In "The Standard," 24 September, 1885.)

CEREBRAL LOCALIZATION.

The letter on this subject from Dr. Browne, which "The Times" newspaper inserted, was written in the West Riding Lunatic Asylum. The gentleman phrenetically attacked the Society for the Abolition of Vivisection, and under excitement and scientific fanaticism committed himself to assertions equally intemperate and illogical. He said:—"The movements and cries produced by the faradization of the brain were not expressive of suffering, but simply of the stimulation of a motor centre, and the 'intense and protracted agony' of the animals exhibiting these signs of pain was not greater than that of a pianoforte when its keys are struck," &c.

In our reply to the above (which "The Times" meanly refused to insert, but which is printed in the Parliamentary Blue Book), we argued:—"If the creature felt no more than a pianoforte, how was it the animal gave evidence of astonishment, anger, rage, and pain? How was it the creature uttered long-continued cries, screamed and gnawed its own legs, &c.? The last a strong manifestation of agony.

*† NOTE.—See "West Riding Lunatic Asylum Medical Report," Vol. 3. London: Smith, Elder, & Co. Price 8s. 6d.

As the animal expressed sentiments of the MIND, was it not sensible? Can stimulations of a 'motor centre' give rise to emotions of the MIND corresponding therewith? Even, if so, has agony a 'motor centre'? We are told by Dr. Browne these manifestations of agony arose from 'simply the stimulation of a motor centre.' Why, then, when other 'motor centres' were 'stimulated,' did not the Cat evince signs of love and other feelings? * Why did it not purr, show pleasure, and attempt to caress the Professor instead of displaying the most marked indications of astonishment, anger, rage?"

Let Dr. Browne and his supporters refute that reply. The Society for the Abolition of Vivisection challenges them to the attempt.

(In "The Standard," 1 October, 1885.)

CEREBRAL LOCALIZATION.

"A race of men who have practised tortures without pity, and related them without shame, and are yet suffered to erect their heads among human beings."

"Cape saxa manu, cape robora, pastor."

So wrote our greatest moralist—whose sagacity, vigour, and penetration of intellect were allied to a humane, noble, and brave heart. "And he himself" (remarks "The Quarterly Review") "could hardly have anticipated the systematic devilishness of many French and some English Surgeons in our day."

A sad and striking example and illustration of the practices reprobated with abhorrence by Johnson and "The Quarterly Review" appeared in "The Times" newspaper of Tuesday, the 29th ultimo. It is headed "Recent Physiology." It bears no signature. It is anonymous. The mutilations described, were, (judging from the past), practised without pity. But, not related without some dread of shame. The writer conceals himself, and though supported by the Journal which

"Watches the time, and always serves it,"

shrinks from public view. He may well do so, for the unfortunate class of those who love the brute creation, but have not the power to protect them from their oppressors, would execrate his name. The article in question is marked by assumption and assertion, and is as destitute of science and sense as it is barren of humanity. Details are kept out of sight, but the article alludes, with the characteristic callosity of the scientific inquisitor, to a series of "experiments" on monkeys, that is, manglings and mutilations—sawing open the skulls of the creatures, stripping off the dura mater, destroying and scooping out their brains, till "complete and permanent blindness" was caused; or "till hearing was totally abolished." And "a further and more

* Why did it not call for its young?

extended series" of "experiments" resulted in motor paralysis of parts of the whole of the body without loss of sensation.

Moreover, the readers of the newspaper above mentioned are informed that "the animals operated upon, after recovery from the injury" (whatever meaning that may be intended to convey), "showed some mental deterioration, characterised by general apathetic indifference or purposeless unrest." Which, it appears, demonstrates that when monkeys are trepanned, and the frontal regions of their brains destroyed, the creatures lose their intelligence, become spiritless and melancholy, or are in constant misery. The scientific gentleman who kindly obliges the public with these brilliant discoveries in animal suffering regrets that the creatures whose brains he destroyed, and who showed some "mental deterioration," &c., "could not be subjected to questioning." This, indeed, is "a gem of purest ray serene," emanating from the bright and humane intelligence of the Vivisectioning Philosopher! He regrets that he cannot cross-question a monkey—with his brains out!

Unhappy Philosopher! He lays hands on his victims—he mutilates them—he blinds them—he destroys their hearing—he paralyses their bodies—he renders their minds idiotic—he makes their existence miserable—but—oh! the chagrin—the bitter disappointment!—he cannot interrogate them—and—they die. Die, and make no sign. The prisoners rest together, they hear not the voice of the oppressor. They longed for death. They rejoiced exceedingly when they found the grave.*

How earthlier happy were the Inquisitors of old than the Vivisectioners of our times! Thomas de Torquemada and his brethren of the Holy Office could question their victims, exhort them to reveal—before, during, and after—Torture. "For the Faith—all things are lawful."

(In "The Standard," 8 October, 1885.)

CEREBRAL LOCALIZATION.

The anonymous Savant who concocted the article "Recent Physiology" in "The Times" newspaper of the 29th ult., says that the Monkeys were "in all cases thoroughly narcotized with chloroform, and kept in a state of complete anæsthesia during the whole of the operative procedure." This may have been, for it was "*convenient*."† But the

* NOTE.—Professor W. Ballantyne Hodgson (a Subscriber to the Society Abolition Vivisection), speaking of a brother Professor, stated that, "He once heard him sing an Italian song, the chorus of which was, 'Let me Die.' I could not," said Hodgson, "help thinking of his dogs. No; they were not allowed to die,—they were kept alive as long as possible."

† NOTE.—Alexander James Sinclair, M.D., said before the Royal Commission on Vivisection, he had "Performed Vivisection with and without anæsthetics; but more frequently with anæsthetics, as *finding it more convenient*."

Emanuel Klein, M.D., before the same Commission, when asked,—“Do you not sometimes find an inconvenient interruption from the cries of the animal?”—replied,—“Only then I do use chloroform, that is what I said; *I use anæsthetics for convenience sake.*”

gentleman also asserts that in numerous instances the animals passed "months of comfortable life" (!) after being violently outraged, wounded, mutilated, and mangled. This statement is made in apparent forgetfulness of a previous sentence that the animals, after being mangled, showed mental deterioration, apathy, or purposeless unrest. The saw and scalpel philosopher may, perhaps, believe that the victims did not suffer—nay, he may think that they were "comfortable"—but the circumstances he mentions do not enable the public to realise the idea. Signs of suffering the Vivisectors term "phenomena." They become habituated to such "phenomena," ultimately agreeably entertained by them. A Vivisector Philosopher (with many capital letters appended to his name, and who is noted for his futile operations on hundreds of cats) amused an Edinburgh audience by jesting on the behaviour of mutilated monkeys after a portion of their skulls was removed and a red-hot wire introduced through the hole to destroy part of their brains. The High Priest of "Cerebral Localization" himself also made some of his hearers (in London) laugh by his jokes and humour over the grim behaviour of his unfortunate victims, who, he said, "appeared" to be in intense suffering. The demoralising effects of Vivisection were truly stated before the Royal Commission by Dr. Henry Wentworth Acland, Regius Professor of Medicine in the University of Oxford, when he said, "Many persons have got to deal with these wonderful and beautiful organisms just as they deal with physical bodies that have no feeling and no consciousness." Were the Romans who turned their thumbs downward as the signal of death in the Combats of the Gladiators as mentally degraded as some 19th Century Savants and their audiences? What is the practical outcome of all the suffering which has been perpetrated in Cerebral Localization? At Dr. David Ferrier's instigation the skull of an unfortunate hospital patient was trephined by Sir Joseph Lister *at the right frontal eminence*—but no tumour could be found. Neither knife nor finger could discover one. The patient died, and at the autopsy a tumour was met with, *not in the frontal lobe*, but pressing upwards on the *sphenoidal fissure*. The leading medical journal ("The Lancet") allows "It must be confessed that the aid 'Localization' has afforded to treatment has been small," and "if Dr. Ferrier's suggestions meet with much practical response, it is to be feared that Cerebral Localization will soon have more deaths to answer for than lives to boast of."

(In "The Standard," 15 October, 1885.)

CEREBRAL LOCALIZATION.

The Saw and Scalpel Savant winds up this account of feats in "Scientific" mutilation with these remarkable sentences:—

"Of course"—(mark that)—"it must not be imagined that these results"—(destroying the Animals' Brains, and making them in consequence blind, deaf, and miserable)—"mark anything like the attain-

ment of finality. Whenever a portion of the brain is injured, it is, to say the least, doubtful how far the loss of that part influences the function of another region." * * * "It is still open to question how far we can argue from results obtained on Monkeys to the higher organisation of Man."

The above admission is the old, old story.

"And found no end—in wandering mazes lost."

What a confession of impotency! Of what quality, or in what condition must this man's "thinking mechanism" be? "Then is an Ape a Doctor to such a Man"?

We will now bring forward the opinion expressed, of such practices as the foregoing, by the late Professor Augustus De Morgan, of the University of London, who combined with the attainments of a Mathematician those of a Philosopher, Logician, and Psychologist. His opinion was, that "no imaginary end could justify means which were opposed to a positive law of humanity." When some of Majendie's atrocities (since equalled by those of English and Scotch Physiologists) had been described to him by a Surgeon, Professor De Morgan said, "Don't talk of it. They will learn nothing by it. It's all of a piece. There is no God in their Philosophy."

The Vivisectors, it is said, like the maddened French Revolutionists, have abolished God, and regard Death "but as an Eternal Sleep." Well for the Cruel if it prove so. The Materialist—who puts Protoplasm in the place of an Omniscient, Omnipotent, and Merciful Creator and Supporter of the Universe—has he not a mean mind?

"Who, mouldering earthward, 'reft of every trust,
In joyless union wedded to the dust,
A friendless slave, a child without a sire,
Whose mortal life, and momentary fire,
Light to the grave his chance-created form."

Into what a slough of debased sentiment have the Animal Manglers and their worshippers sunk! One of the Sect quoted to the British Association (at Belfast) of which he was President, a passage from Francis Bacon. We commend to his attention and to that of his species the following quotation on the same subject from the same author:—"I had rather believe all the fables in the Legend, and the Talmud, and the Alcoran, than that this universal frame is without a mind."
(In "The Standard," 22 October, 1885.)

CEREBRAL LOCALIZATION.

Science can no longer cast a stone at Religion on the score of Cruelty. The Devil has for ever Set his brand on the name of Physiologist. The Scientific Atheists can no longer jeer the Priesthood because the "Saints" strove to propagate a Religion of Mercy by

the Dungeon, the Rack, the Faggot, and the Wheel. The atrocities of "Science" equal those once perpetrated in the outraged name of Religion. "Priests of all Religions are the same." The Priests of Science are not a jot behind the Bigots of old.

MAJENDIE=TORQUEMADA.

A Moral Equation. Was it Diderot who wished that the last King might be strangled with the bowels of the last Priest?

Was Christ Crucified that Black Men might be scourged? asked Byron. And we ask, Are animals to be tortured to death in attempts to discover cures for the Diseases which Man himself creates by his own Vices? Of all the progeny that Hell has vomited upon this polluted Earth nothing surpasses in barbarity the cruelties perpetrated upon innocent and defenceless Animals. For Sport,—for Luxury,—for "Science," what have they not suffered! And from Man,—"that Tyrant o'er the weak." Whose history,—written by Himself,—not by his enemies, but by Himself,—has been too justly branded as a "Chronicle of Crimes." "Even the most grovelling wretch must have something to domineer and tyrannize over." The Soul of the humane sickens when it contemplates the barbarities incessantly inflicted upon the miserable Animals. JUSTICE EXTENDS TO THE BRUTE CREATION, but that Truth is not yet generally acknowledged. Nor is it matter for astonishment, for we know what the Furies of Religious Bigotry have perpetrated on their fellow men.

"Christians have burnt each other, quite persuaded
That all the Apostles would have done as they did."

(In "The Standard," 29 October, 1885.)

CEREBRAL LOCALIZATION.

"When Man HAS Pity 'tis for himself, or Son."

Man has, during ages (except in a few Nations), looked down with an eye of arrogance upon his dumb and defenceless fellow-creatures, regarding them as beings who have no Rights. Consistent with his treatment of the poor Indian and Negro, and other weaker races of his own immediate family and species, his conduct towards what he is pleased to term "the Animal World" has been indelibly marked by brutality and injustice, or by utter indifference to their sufferings whenever he himself sought selfish pleasure or unholy gain, or to escape the natural penalties of his own vices. It was very recently asserted, even by "The Times" Newspaper, that the treatment of certain Aborigines by Englishmen, "is one long record of deceit, cruel treachery, deliberate kidnapping, and cold-blooded murder."

As Man's History (written by himself) down to this present age testifies to the enormous amount of hideous crimes he has ruthlessly perpetrated upon Man, it is palpable that he probably does as bad or

worse to creatures still weaker and more unprotected than the weakest races of his own species.* If "the poor Indian whose untutored mind sees GOD in clouds, and hears Him in the wind"—has been kidnapped, torn from his home, enslaved, manacled, tasked, lashed, and toiled to death by "Christians,"—what is, consistently, likely to be the bitterness and anguish of the fate of the "Jungle-Admee," the "Ape-Man," the "Dumb-Man," and all other "Brutes" when THEY fall into the merciless, pitiless, not to say cruel hands of the narrow-minded and Godless Savant? When the "Dumb-Man" is sacrificed on the Altar of Science by the High Priest of Cerebral Localization, his sufferings may be ridiculed, jested at, and possibly be published, without shame, as "PHILOSOPHICAL TRANSACTIONS" by the Society known by the title of "ROYAL."
(In "The Standard," 5 November, 1885.)

CEREBRAL LOCALIZATION.

"The PROCEEDINGS" and "PHILOSOPHICAL TRANSACTIONS of the ROYAL SOCIETY" contain elaborate Papers (by Fellows, and by aspirants longing to be labelled "F.R.S.," and thereby ticketed Men of Science), as to "experiments" on living Animals, which "experiments," for dulness of intelligence,† demoralization of mind, and barbarity of heart are an eternal shame to civilization and an everlasting stigma on Christianity. Two of the greatest of English Surgeons have affirmed of "The Royal Society"—"Their old and favourite experiment" "of blowing up the lungs of a Dog, and then compressing them, is good for nothing." Their "experiments" on Generation are filthy. It has been said of them—"Decency and humanity alike forbid the exposure." . . . "Surely to sit calmly and to watch with an impure, inhuman, and unhallowed curiosity the progress of the desires, and the extinction of the natural passions in devoted Animals, after such mutilations and experiments, is a practice useless, wicked, foolish, degrading, and barbarous. There is no

* NOTE.—When pious Bristol gave up, or lost, "The Slave Trade," the traffic in Human flesh was taken up by Liverpool, and Liverpool fattened on it, and attempted to murder Clarkson, the Abolitionist. But Liverpool had the truth told to its face one day—not by a Bishop, but by an Actor. Cooke, an able but somewhat intemperate man, was performing at Liverpool, and came on to the stage partially intoxicated. The audience in the Theatre, observing his condition, called out, "Apologise"—"Apologise"—"Apologise." This sobered Cooke; he strode forwards to the foot-lights, looked at his critics with ineffable contempt in Pit, Boxes, and Gallery, and after a pause and general silence, emphatically, and with the utmost scorn, exclaimed, "Apologise—to YOU! Why there's not a Brick in your whole Town that isn't cemented with the Blood of a Slave."

† NOTE.—See "THE LANCET" of November 21, 1885, containing an article on "Proceedings calculated to impede the free progress of a Scientific Knowledge of Facts in Nature." By T. Wharton Jones, F.R.C.S., F.R.S., who comments *con amore* on the "blunderings" "hailed as New Discoveries";—and how the Name and authority of the Royal Society had thus been degraded in giving credit and currency to nonsense"—by their "PHILOSOPHICAL TRANSACTIONS."

justification of such a practice to be offered. The mystery itself is not to be disclosed to man; but it seems we will know everything: yet I wish that we would also recollect that we must account for our knowledge." . . . "To make such experiments as these is to offer an insult to the Most High. For my own part, I would extend the famous speech of the Barons in the age of Henry the Third: I would thunder in the ears of the President, and of the whole Royal Society, as a body, 'Nolumus Leges NATURÆ mutari.'"

(In "*The Standard*," 12 November, 1885.

CEREBRAL LOCALIZATION.

The Society for the Abolition of Vivisection is not alone in holding the opinion that torturing our Fellow-creatures with the object of obtaining knowledge to cure diseases created by our own Follies and Vices is a practice opposed to Religion and Philosophy. Behold the testimony of a Member of the Royal College of Surgeons, and Lecturer in a London Hospital.

"What little has been proved by experiments on the lower Animals is only calculated to throw doubt on the nature of the prevailing doctrine. I do not allude to the atrocious cruelties practised by such fiends as Majendie on poor dumb creatures, whose helplessness should have given them some claim to protection, but with some performed with all due care and consideration for the poor brutes on which the trials were made. The reader may consider this strong language about the 'hellish Majendie,' as Beckford most justly called him; I certainly mean it to be strong, for I consider him a monster only fit to be hanged, and hanged he would have been if I had had my way. And when we reflect that these shocking experiments never saved one human life, never soothed one pang of suffering, never solved one useful question, the indignant conviction forces itself upon the mind that the learned Societies who gave such men medals, prizes, and honours, or rather who did not expel them with ignominy and shun them, and the journals which lent them at least tacit support, are in this respect a disgrace to the age."

The so-termed "great Discoveries" made by painful Experiments on Living Animals ultimately prove to be Fallacies. The last out,—the cause of Asiatic Cholera,—Dr. Robert Koch's "Bacillus," proved a CROOKED stick, and, finally, a BROKEN one. Even the Physiologists on the Committee convened by the Secretary of State are forced to admit that "Sanitary measures in their true Sense, and Sanitary measures alone, are the only trustworthy means to prevent outbreaks of the disease (Cholera), and to restrain its spread and mitigate its severity when it is prevalent."

So,—British People, look to your Slums, your fouled Rivers,—“with Heaven reflected in their wave no more,” your adulterated Foods, your poisoned Drinks, your imported Rags and Hair, your Municipal stupidity, selfishness, and neglect, &c.—for Baal cannot

save you. "The Great Discovery," is a fallacy; the Bacillus, a broken Reed; "the New Light" on the "Scientific" Path, the Will o' the Wisp once more. The Cat, Dog, and Monkey Physiologists have, like the Wise Men of the West, been labouring in vain to rake the Moon out of their Pond.

(In "The Standard," 19 November, 1885.)

CEREBRAL LOCALIZATION.

Judging from the Official Report recently made by the Cholera Commission, Dr. Robert Koch was bewildered, and ultimately as profoundly bogged in the Quagmire of the Scientific Spunkie when wandering in search of the Bacillus of Asiatic Cholera, as his brother Physiologist, Dr. David Ferrier, (F.R.S., of course), was in Cerebral Localization when he vainly groped for the Tumour he had diagnosed in the right Frontal-eminence, but which, by Post-mortem examination, was found to press upwards on the Sphenoidal-fissure.

"Cool it with a BABOON'S blood,
Then the charm is firm and good,"

thought Dr. Ferrier, but the Baboon's blood did not succeed any better than the "toe of a frog" and "tongue of dog," &c.

Sir William Gull is reported to have made the following observations at the second meeting of the Cholera Commission convened by the Secretary of State for India:—"It was," he said, "becoming more and more probable that Sanitary measures might destroy the conditions upon which the existence and spread of the cholera-poison depended.

. . . In other words, we may, in fact, be able to defend ourselves against the invasions of cholera before Science has discovered the essential cause of the disease."

If barbarous, loathsome, filthy, and unnatural "Experiments on Animals" could have led to success, success would have been obtained by the multitudinous cruelties perpetrated by "Savants" in search of the Bacillus. Virchow says he injected putrid matter into the blood of living Dogs. Koch and his coadjutors "fed"—yes, "fed" is the word—Fed Monkeys, Cats, Mice, Rats, and Rabbits, Fowls, and Dogs with all kinds of Choleraic material; that is, with the vomits, excrements, and contents of the intestinal canal of Corpses, some in the fresh state, others after having been kept for longer or shorter periods. The Animals were also inoculated, and injected, but all was failure, they did not die of Cholera, not of the Bacillus, Comma-bacillus, or Vibrio, or whatever the "organism" may be, but of mangling or blood-poisoning. The Society Abolition Vivisection published some of these inhuman and useless practices in "The Standard" of November 2nd, 9th, and 16th, 1883, also in the "Athenæum," and the Public has now apparent proof of the worthlessness of the cruelties.

(In "The Standard," 26 November, 1885.)

BACTERIO-MANIA.

The multitude are led by the nose by people who talk Science. They are credulous of "the dogmatic assertions of misguided enthusiasts." Some of these Savants (though writing a number of Capital Letters after their names) seem to have muddled their heads by constantly mangling Animals, forcing them to swallow ordure, &c., and by peering through microscopes at objects "bordering on the invisible." These Philosophers have become affected with BACTERIO-MANIA. A Subscriber to the Society Abolition Vivisection, who is also a Fellow of the Royal Society, says of some of them, "The public are under the false impression that these gentlemen have benevolent and scientific aims, but they are dreaming blunderers, and carve away in the vain hope that something new will turn up for them to shine about. They are groping. And have nothing to show for a result," &c. Even a man of real scientific attainments such as Professor Tyndall displays symptoms of Bacterio-Mania. At the opening of the Parkes Museum, in May 1883, he dogmatized as follows:—"The Physician and the Sanitarian have no longer to fight against Phantoms (*sic*), requiring only the fortuitous (*sic*) concurrence of atoms to bring them into existence. Their enemy is revealed; and their business is to thwart him; to intercept him; and to slay him. It is not noxious gases, but organized germs, which, sown in the body and multiplying there indefinitely at the body's expense, produce the most terrible diseases by which humanity has been scourged. Contagia are living things. Men and women have died by the million that bacteria and bacilli might live. . . . These virulent organisms, these ferments of disease, hang about the walls, the furniture, and clothes of the sick room."

So spake the Natural Philosopher of the Royal Institution. But let us now hear Dr. Edward Tibbits, Physician to the Bradford Infirmary and Fever Hospital, and formerly House Physician to University College Hospital. He asserts in a work published last year,* "that such visible organisms have anything whatever to do with disease is pure hypothesis." Dr. Lionel S. Beale, F.R.S., Professor of the Principles and Practice of Medicine in King's College, London, says, in his work on "Slight Ailments: 2nd Edition, 1882," "There is probably not a part of the body of any one of us of a quarter of an inch in diameter where bacteria-germs are not present. Certainly every time we eat myriads are carried into our alimentary canal: and every time we breathe, except in the very purest atmosphere, multitudes pass into the air passages." . . . "And yet the public is taught that there is some intimate connection between bacteria, and dust, and morbid phenomena. Erroneous notions are spread far and wide by Sensation Lectures, under such a title as "Dust and Disease."

Who is the author of "Dust and Disease?" Is he not Professor

* NOTE.—"Medical Fashions in the Nineteenth Century." By Edward T. Tibbits, M.D., Lond. H. K. Lewis, 136 Gower Street, W.C. 1884.

Tyndall? who also gave birth, it is understood, to the Cotton Wool Respiratory Theory, how to thwart and intercept Germs, and convey air of highest Alps into the dwellings of the poor! The Grand Academy of Lagado is recalled to mind.*

(In "*The Standard*," 3 December, 1885.)

BACTERIO-MANIA.

Yes. The Professors of Lagado,—their self-confidence—vanity—chimeras—spurious science—and something more which shall be nameless, are recalled to mind by the Vivisectors of the present age. Refer to Jonathan Swift, ye credulous Public who ignorantly believe in the grandiloquent boastings of the Animal-mangling Savants and their "prôneurs" of our day, and see with what hatred and scorn he ridicules the pseudo-scientific projectors of his own time.

In October and November 1881, the Society Abolition Vivisection commented upon some of the so-called discoveries of Monsieur Pasteur, and the balderdash trumpeted by "*The Times*," leading articles. The Society exposed the foolish theory of the Earth-worm and Anthrax—and the imbecile idea of "*The Times*" that Man will in future be inoculated with the Bacteria of all Contagious Diseases under the Sun,—(Syphilis included), and Children made receptacles of Monsieur Pasteur's cultivated Parasites, and Cesspools of Diseases in order to preserve them in health! Can the Grand Academy of Lagado out-top that for folly?

Let us quote a Vivisector against a Vivisector. Dr. Klein, in opposition to Monsieur Pasteur on the Earth-worm and Anthrax theory. In the Twelfth Annual Report of the Local Government Board, 1882-3, London: Hansard & Son; Eyre & Spottiswoode, &c. Price Three Shillings,—at page 212 is the following:—

"From all this, it is quite clear that there is no reason to attribute any correctness to the statement of M. Pasteur, viz., that in animals dead of Anthrax and buried, the Bacillus Anthracis retains infective power for a long time (several years); that probably this prolonged infective power is due to the Bacilli forming spores, and that these are brought up to the surface by Earth-worms, and that hereby such fields become permanent localities of infection, and animals grazing here are liable to be infected with Anthrax."

At the International Medical Congress in London, 1881, Monsieur Pasteur was the fashion of the week, and spoke as if he were the only person entitled to credence. According to Monsieur Pasteur, Fokker, Büchner, Greenfield, Béchamp, and Bastian were all wrong. Everybody was wrong who did not believe in Germs and the infallibility of Monsieur Pasteur! He delivered an Address before the Assembly,

* NOTE.—"I will venture to predict that, before many years roll away, we shall look back on the whole thing with regret and wonder at our folly." See William Dale, M.D., on "*The Tubercle Bacillus*."—"*The Lancet*," 16 January, 1886.

and that Address was reprinted and circulated by the Local Government Board.

“ Unhappy mortals! ever blind to Fate,
Too soon dejected, and too soon elate.”

Pasteur is now contradicted by Klein. Klein asserts: “ Having thus tested the efficacy of the Vaccin charbonneux, and having found it altogether different from what it was represented to be by M. Pasteur in his Address to the International Medical Congress,” &c. “ These Experiments sufficiently satisfied me that M. Pasteur’s assertion, to the effect that a Vaccin charbonneux gives again origin to a crop of the mitigated and modified Bacillus Anthracis, and that animals thus treated are protected against further attack by Bacillus Anthracis, is not borne out by actual observation.”

(In “ *The Standard*,” 11 December, 1885.)

BACTERIO-MANIA.

The criticisms of Dr. Emanuel Klein and his coadjutor on the “ Conclusions ” of Dr. Robert Koch relative to the “ Etiology ” of Asiatic Cholera would be entertaining reading were it not for the barbarous “ experiments ” perpetrated upon Animals.

These Gentlemen wind up their Report with the following sentence: “ It is quite clear from all this that the statement of Koch and his adherents as to the importance of the Comma-Bacilli in the Water in producing Cholera is in direct opposition to the above facts.

“ E. KLEIN.

“ HENEAGE GIBBES.”

Drs. Klein and Gibbes also adjudicate as follows on Dr. Robert Koch’s “ scientific ” proceedings in Egypt, India, France, and Germany: “ From these statements of Koch we must differ most decidedly,” p. 5. “ Now, our observations are in direct opposition to those statements of Koch,” p. 8. “ It appears a little too sanguine on the part of Koch,” p. 11. “ It happens that Koch is wrong,” p. 15. “ This of course does also away with Koch’s statement of the diagnostic value of the comma-bacilli for cholera,” p. 15. “ When in Egypt and Calcutta, Koch performed a large number of experiments by feeding, subcutaneous and intravenous injection as well as injection into the duodenum with rice-water stools, and with pure cultivations of comma-bacilli, on rodents, carnivorous animals, and monkeys, and obtained no result,” p. 19. “ It must seem most astounding to all who have followed his statements to find that Koch suddenly (‘ *Deutsche Medic.*,’ Koch, No. 45, 1884) asserts that he has been able to convince himself that cholera is transmissible to animals,” p. 21. “ The two statements of Koch, viz., the first in his full Report, and the second recently made, as to the production of cholera by comma-bacilli in animals are in direct opposition, and it is quite impossible to reconcile them.

There seems, however, one way to explain this remarkable change of Koch's, and it seems this,—v. Pettenkofer challenged Koch to supply him with pure cultivation of the comma-bacilli, as he (PETTENKOFER), WITH OTHER MEDICAL MEN IN MUNICH, ARE QUITE READY TO SWALLOW ANY QUANTITY OF THEM," p. 21.*
(In "The Standard," 18 December, 1885.)

BACTERIO-MANIA.

"Even granting, for the sake of argument, that Koch's statements with regard to the distribution of the Commabacilli are correct, (statements which have been shown previously to be in flagrant opposition to the facts observed by us), his inferences that the Commabacillus is the cause of Cholera cannot be true." (p. 30). "Even a very experienced observer like Koch sometimes becomes unable to interpret correctly plain facts." (p. 35). Such, British Public, is the Judgment passed upon the Vivisector Koch by Drs. Klein and Gibbes—a Judgment deliberately confirmed by a Committee of thirteen Physicians and Surgeons convened by the Secretary of State for India in Council. In it Behold Another proof of the uselessness of torturing Animals in order to discover remedies for the Diseases which man creates by his own follies and vices. The cause of Cholera yet remains unknown. These pseudo-scientific barbarities, and the Bacterio-Mania do harm. They tend to unsettle the Art of Physic, and the old modes of Medical Treatment. The Poppy, Mercury, Cinchona, &c., are superseded. According to the Sensational Lecturer of the Royal Institution,† the Medical Profession has yet to learn its business in respect to "the most terrible diseases." Hunting, Trapping, and Slaying Bacteria and Bacilli is its office now! But even if these and other "micro-organisms"—(their names to all appearance will soon be Legion)—ultimately do prove to be the cause and not the consequence of disease, they will be stumbling blocks in the path. There is a marked resemblance, so far as form goes, between many microbes known to be different. Moreover, it seems now that in the lowest depth a lower

* NOTE.—So much for Vivisector's "Science"! Poor Dr. Koch, it seems, had not the courage of his Convictions, or he would gladly and promptly have laid hold of this offer and golden opportunity for experimenting upon HOMO,—the only perfectly reliable test. But perhaps Pettenkofer and the Medical Men of Munich were not willing to become Martyrs for Science by "going the whole Animal" and submitting to ALL the "Experiments" Koch had practised on the Monkeys, &c. The "injections into the duodenum,"—"feeding with Rice-water Stools," "vomits," and "contents of the intestinal canal of Corpses," &c., were perhaps demurred at. Possibly, these gentlemen only went in for the "pure cultivations of Comma-Bacilli,"—consequently, Dr. Koch considered their offer would not lead to anything "conclusive." Still, "half-a-loaf is better than no Bread."

† NOTE.—There was, it was stated, "A FROGGERY" at the Royal Institution. Perhaps this has been supplemented by "A DOGGERY." The noble and illustrious Faraday, an honour to Human Nature and true Science, said he estimated a Dog as superior to many a Christian. Neither Faraday nor Newton would have "Mangled the living Dog" on any Scientific or other pretext whatever. But, times are altered.

deep opens. It is not the bacilli "but a chemical ferment" that must be dealt with! In fact, this casting out of Devils by the Prince of Devils, is a mania. Human selfishness culminating in mental derangement.
(In "The Standard," 24 December, 1885.)

BACTERIO-MANIA.

The gross mistakes, stupid, ridiculous blunders made by the Vivisectionists in their purblind gropings in the bodies of living Animals would be laughable were the practices of those men otherwise than a shame and degradation to the character of the Human Race. Listen to Emanuel Klein, M.D., F.R.S., of The Brown Institution in the Wandsworth Road (who admitted before the Royal Commission on Vivisection that "he disregarded entirely the question of the suffering of the Animal in performing a painful experiment"). He says, in the "Inquiry into the Etiology of Asiatic Cholera, 1885," "Various Experimenters have tried to communicate Cholera to the lower Animals, but without success. Thiersch, Sanderson,* and others thought to have succeeded in white mice by feeding them on bits of paper steeped in choleraic evacuations, but it was pointed out by Ranke that similar results are obtainable by feeding them on paper that had NOT been so steeped"!! p. 20. Again, on the same page Dr. Klein observes,— "A very curious illustration of how easily Investigators are led into error is furnished by the description given by Nicati and Rietsch . . . of Experiments on Dogs, in whom the chief bile duct has been ligatured."

It appears to be the opinion of a Member of the Committee convened by the Secretary of State for India to consider the Report of Drs. Klein and Gibbes, that, if Experiments as to Cholera ARE to be of any practical value, they must be tried on Men. This Member, Dr. Norman Chevers, "for Fifteen Years held charge of a Cholera Ward in the largest Hospital in India,"—and he asserts (No. 111, p. 22), "To maintain this position, its supporters must introduce the Cholera Bacillus into the stomachs, say of CRIMINALS, under various conditions of health, of fasting, and of digestion. These experiments should always be made, first, during a Cholera outbreak, and then in localities which are, at the time, free from Cholera." "The Lancet" of October 25, 1884, contained a paragraph headed "Cholera Experiments in the Human Subject," and stating that a suggestion had been made in Bombay to try the infectiveness of the Cholera Microbe on CONVICTS sentenced to death. Criminals have already been Experimented upon in England. Inoculation for the Small-pox was

* NOTE.—Probably Dr. J. Burdon-Sanderson, Editor of "The Handbook for the Physiological Laboratory,"—and formerly Superintendent of the Brown Institution in the Wandsworth Road. He has been translated to Oxford, to train up our young men. John Ruskin, consequently, resigned his Professorship in the University, and has publicly said that "These scientific pursuits were now defiantly, provokingly, and insultingly separated from Religion, and carried on in defiance of what had hitherto been held to be compassion and pity."

very slowly adopted in England until it had been Practised on Six Criminals. The Royal Society endeavoured to have Experiments on the transfusion of Blood made upon THE INSANE in Bethlehem Hospital. Experiments of a very painful and dangerous nature have recently been made upon HOSPITAL PATIENTS in London, and some Medical Men openly assert that it is justifiable to use the Poor as "Clinical Material."

Animals, Criminals, Madmen, Hospital Patients ! *

EXCELSIOR !!

(In "The Standard," 31 December, 1885.)

CIVILIZATION, VIVISECTION, AND THE PROPAGATION OF THE GOSPEL.

The Millbank Penitentiary for the Reformation of Criminals witnessed cruel Experiments upon these unfortunate wretches. The Committee (what will not a Committee descend to ?) began a scheme of economy by putting the prisoners on a soup diet. This experiment was soon productive of terrible diseases, and death by actual starvation. Another Howard and another Romilly might still find something to reform in our Prisons and Criminal Laws.

Civilization has its horrors as Barbarism has. The Inquisition, the Slave Trade, Solitary Confinement,† and Vivisection may dispute the

* NOTE.—See "Experiments on Patients by London Hospital Physicians." Third Edition, 1885. London: Pickering & Co.

In "The Lancet" of January 30, 1886, is an account of recent Experiments on twenty Hospital Patients in St. Petersburg. The object was to ascertain the effect of hot drinks on the digestion of food. The Patients were fed, and some hours after had their stomachs pumped out. The Patients "made use of" were suffering from fractures, contusions, and such-like affections. The unfortunate creatures were "made use of" during three days in the surgical wards of the Obukhoff Hospital.

John Howard's sympathies were not narrowed to the bounds of his own species, neither did he think that Justice did not extend to the Brute Creation. To the Association which has adopted his honoured name and should tread in his steps, we beg leave to present the foregoing evidence of the desire of English Experimentalists (inoculated by the Continental School of Savants), to institute trial operations upon the unhappy wretches confined in our Prisons for Criminal Offences. Surely "The Howard Association for Promoting the Best Methods of Criminal Treatment" will not fail to strenuously remonstrate against such practices.

† NOTE.—In "The Devil's Walk," by the high-minded and generous-hearted Southey, is the following verse:—

"As he passed through Cold-Bath Fields he look'd
At a Solitary Cell;

And he was well-pleas'd, for it gave him a hint
For improving the Prisons of Hell."

Had Southey lived till the present day he might have added the following lines to "The Devil's Walk":—

"He saw a Doctor mangling his own Dog,
Nailed down to a bloody table;
And the Devil turn'd pale and droop'd his tail,
Quoth he—To do THAT I am NOT able!"

Palm of Cruelty with anything that Savages ever perpetrated. Successfully dispute it, for our atrocities are practised under the Gospel of Peace and Mercy! Even a Prelate—a Bishop of our Church*—recently mounted the platform as a public advocate for scientifically torturing Animals—for “Mangling the living Dog!” We have been “Propagating the Gospel” in Africa by slaughtering thousands upon thousands of brave Patriots on their native ground—felling their Palm Trees—filling up the Wells of the Desert—pouring out the blood of our gallant soldiers upon its Sands, and, crowning ignominy, basely deserting our allies. The name of the Cruel Nazarene will be held in hatred and his Creed in derision in the tents of the Arab, and the huts of Dongola, for generations to come.† Hated and derided, as should be, “Priests and Fanes that Lie.”

* NOTE.—The Right Reverend Lord Bishop of Carlisle. He sweetly discoursed at the Annual Meeting last year of the “Royal Society for the Prevention of Cruelty to Animals” on the sensitive, delicate feelings of the Vivisectors, who, he thought, ought not to be subjected to Inspection, as “wanton interference” might drive the Physiologists out of this Country. The feelings of the miserable and tortured Creatures who are the victims of the Vivisectors the Right Reverend Prelate totally ignored. He terminated his speech with the words,—“God’s blessing.” (!) Not one, not even one, person present, we understand, rose and uttered one single word of protest against such sentiments,—although those sentiments were delivered before the Subscribers of the “Royal Society for the PREVENTION of Cruelty to Animals!” On the contrary, the speech was received with—(CHEERS)!!!

† NOTE.—In proof of this assertion peruse the following statement on

“THE EVACUATION OF DONGOLA.

(From “THE TIMES,” 9 July, 1885.)

“We have received for publication the following extract from a letter from a Staff Officer in Egypt, dated June 23, 1885:—

“I wonder whether the English Nation—taken as a Nation—has any conscience at all. I do not think so. As far as I can see our evacuation of Dongola province has not caused the slightest stir of any sort or kind at home. People have treated it with absolute indifference—12,700 wretched refugees have cleared out of the place, every one of whom is ruined, and the mass of whom will starve; for if you take these people away from their little patch of river frontage, with its sakeeyah and its cow, they have no means of livelihood whatever. Besides these a great many have passed Dongola floating down the river on their own sakeeyah wheels, looking as — says in a letter to me, “inexpressibly melancholy.” Now, when we went up to Dongola last autumn, the whole province was, as things go in this country, well-to-do and prosperous. The result of our occupation has been to ruin it completely. The whole place is desolate, and the town is absolutely deserted. There is not a native in it except such few as may be employed by our rear guard. We have turned all the inhabitants who were fairly thriving before into wanderers and beggars, and many of them, no doubt, will die of hunger; and nobody at home, so far as I can judge, gives all this a thought. I do not believe that any Nation ever committed a more cold-blooded, cowardly, wicked act of selfishness than we have done in our evacuation of Dongola. However, it is done now. These poor wretches must starve as a sop to the philanthropic Liberal, and as the price which the late Government paid for its vote of credit. It bought its £11,000,000 with the misery of some 15,000 poor creatures who had never done it or us any harm.”

“THE REFUGEES FROM DONGOLA.

(From “THE TIMES,” 21 July, 1885.)

“The following is extracted from a private letter from a gentleman holding a high position in one of the Government departments in Egypt:—

“Some 10,000 miserable refugees have followed our army north, and what they’ll

And why has England done all this? For Selfishness, for Trade, and in the sordid interests of speculative Bondholders and avaricious Usurers—Christian or Semitic—

“To cut from Nations’ Hearts their ‘pound of flesh.’”

England, with corrupted conscience, meanwhile looks calmly and sedately on at these foul stains upon her Escutcheon. Scarce a voice is raised throughout the Land to denounce these crimes, and execrate a base policy of injustice, cupidity, violence, and vacillation.* “God,—and my Right”—if we would be consistent, should now be obliterated and erased from the time-honoured, and once noble and chivalrous Coat of England. *(In “The Standard,” 7 January, 1886.)*

CEREBRAL LOCALIZATION AND HYDROPHOBIA.

“The Lancet” of December 26, 1885, in a Review of the Progress of Surgery for the year 1885, states relative to Cerebral Tumour and Localization, and the fatal and notorious Regent’s Park Hospital Case trumpeted by “F.R.S.” so loudly and prematurely in “The Times” of 16 December, 1884, that the attempt to diagnose and excise a tumour of the Brain “has been followed in at least one other instance in London, but UNFORTUNATELY WITH A SIMILAR LACK OF SUCCESS.”

“The British Medical Journal” of December 26, 1885, says relative to the removal of Brain tumour, “No further experience has yet been gained in this branch of Surgery, a fact very probably due to DIAGNOSTIC difficulties.”

So much for the “Argumentum ad Simiam.”

The same Journal states as to Hydrophobia, that “M. Pasteur’s alleged discovery and his pretensions to prevent HYDROPHOBIA by inoculating bitten persons with the dried spinal marrow of rabbits dead of Rabies, constitute, undoubtedly, the sensational part of the year’s pathology. Time will show how much or how little real utility exists in this extraordinary development of the so-called ‘Jennerian theory.’” “Pretensions”—“Sensational”—“Time will show how much or how little real utility,” &c. Con-

do with them I don’t know. I have strongly advised that no attempt should be made to colonize them as one mass, but that as far as possible they should be disseminated and allowed to merge with the people. I advise this, feeling sure that the Egyptian Home Department (which since Mr. Clifford Lloyd’s retirement has been entirely in native hands) has neither the will nor the machinery necessary for the difficult and delicate task of founding all of a sudden a colony of disorganised immigrants. Our Soudan campaign has deprived all these poor creatures of home and livelihood. *Worse still, the fate of those left behind—the Arabs, who were foolish enough to believe in the English promise that if they would help us we should not desert them. We left them, but not before we had taken their camels and donkeys. I don’t like to think of their fate with the Mahdi’s troops. It is all too sad and humiliating.’*”

* NOTE.—“The Nightmare of Blundering and Bloodshed.” Colonel Duncan, M.P., House of Commons, 1 March, 1886.

temptuous criticism this on Monsieur Pasteur, and by the "British Medical Journal," too.*

Bouillaud said to Monsieur Pasteur in October, 1880, at the Académie de Médecine in Paris:—"You ought to think yourself honoured to be able to obtain a hearing in an assembly of Medical men"—"You can see many interesting things through your Microscope, BUT THAT IS NO EARTHLY USE TO US." It was publicly stated that M. Pasteur had betaken himself to Bordeaux to pit himself against "YELLOW JACK," but no news have come as to any success on Pasteur's side. The PHYLLOXERA steadily goes forward on its march of devastation, and its deadly mark may now be seen in the midst of flourishing vineyards. It is only a matter of time when France will have to concede her position as the leading Wine-pro-

* NOTE.—A leading article in "THE LANCET," of March 20, 1886, admits Pasteur's enterprise may end "in a splendid scientific failure,"—and, that it "remains to be seen whether M. Pasteur can establish as an art what appears as a very plausible theory." * * * "The Public and the Profession must be prepared for failures."

If atrocious barbarities perpetrated on the innocent and defenceless can command success, success will be obtained. The Marats and Carriers of "Science" believe "the be-all and the end-all here, and upon this bank and shoal of Time they jump the Life to come."

Those persons who desire to understand Pasteur's Method of treating Hydrophobia will do well to peruse the Address delivered to the Philadelphia County Medical Society, on January 13, 1886, by Charles W. Dulles, M.D., Surgeon to the University of Pennsylvania, &c. New York: Trow's Printing, &c. Co., 201-213 East Twelfth Street.

Samuel Johnson truly said,—"Dishonesty takes the short cut to everything." In the vast and varied amount of writing on Rabies by the Scientific, Medical, and General Public, is never or very rarely observed sentiments of Justice, Mercy, or Humanity,—or any feeling that indicates even a *flavour* of Religion. Scarce a voice is raised to urge that Rabies might in great measure be PREVENTED by wise, just, and humane treatment of the noble and useful, but abused and despised Canine Race. See the following remarks which appeared in the leading Medical Journal:—

(From "THE LANCET," July 5, 1884.)

"RABIES CANINA.

To the Editor of "THE LANCET."

"SIR,—In sequence to your just observations on the annoyance caused by the barking and howling of dogs (in the last issue of *The Lancet*), allow me to make some remarks on the creation of Rabies in dogs. You most justly assert that it is neglect and misery which are the origin of the cries which make 'night hideous.' Such, also, is the fact relative to canine madness. Neglect, misery, unwholesome food, unnatural treatment, are often the root from which that dire disease springs. When a mad dog bites many people he sometimes quits scores for a long arrear of brutalities, insults, and oppression inflicted upon him by the baser or more ignorant portion of the human race. The hard blow, the savage kick, the loud curse, the vile annoyance, the insulting word, the starving meal, the carrion food, the shortened chain, the rotten straw, the dirty kennel (appropriate name!), the bitter winter's night, the parching heat of summer, the dull and dreary years of hopeless imprisonment,—culminate there; and the cup man has poisoned man is forced to drink. In addition to the above, the confining of dogs, and thereby preventing them from having access to their natural medicine, and also from sexual intercourse, is certainly calculated to seriously derange

ducing Country to some more fortunate Land.* VACCIN-CHAR-BONNEUX is scouted by Dr. Emanuel Klein—scouted with his heels—as “most dangerous.” THE EARTH-WORM and BACILLUS-ANTHRACIS theory is exploded. Dr. Koch asserts that “Monsieur Pasteur’s facts lack novelty,” and that “he (Dr. Koch) cannot see that they are especially connected with Hygiene.”†

It is more than time that universal indignation was aroused against the barbarous and fallacious practice of torturing Animals for “Scientific” purposes. But, as the Iron Duke wrote in 1832: ‡ “It is difficult to say what will rouse a country so demoralised as this.” “I wonder,” said a staff officer very recently, “whether the English Nation—taken as a Nation—has any conscience at all. I do not think so.”

GEORGE R. JESSE, Honorary Secretary.

Society Abolition Vivisection.

Henbury, near Macclesfield, Cheshire.

TO THE SUBSCRIBERS AND FRIENDS OF THE SOCIETY ABOLITION VIVISECTION.—The articles on “Cerebral Localization,” “Bacterio-Mania,” &c., which have been inserted in “The Times” and “Standard” every Week since January, 1885, will now be discontinued for a time.

GEORGE R. JESSE, Honorary Secretary.

January 12, 1886.

(In “The Standard,” 14 January, 1886.)

their health. Professor David Low, F.R.S.E., in his able work on ‘The Domesticated Animals of the British Isles,’ makes some sagacious observations on unnatural and ignorant treatment of the canine race.

“The idea of preventing Rabies by tying together the jaws of dogs, or by chaining or incarcerating the animals, is as senseless as issuing a ‘bull’ against a comet.

“I am, Sir, your obedient Servant,

“GEORGE R. JESSE,

“Author of ‘*Researches into the History of the British Dog*,’ &c.

“HENBURY, near MACCLESFIELD, CHESHIRE, July 1st, 1884.”

NOTE.—Professor David Low says:—“It is known that even the gentlest dog may be rendered vicious by being deprived of liberty.” “He becomes sullen, fretful, and savage, with the cruel captivity to which he is doomed.”

“We owe much of the extension of Rabies to those brutal fighting-matches of Dogs which are still pursued.”

* NOTE.—See Report of the American Consul at Bordeaux on the Wine Harvest of 1885.

† NOTE.—See Report on the Geneva International Congress of Hygiene, 1882.

‡ NOTE.—To Lord Roden, on the 26th December.