

News, Notes and Queries

He arrived home on 23 July 1856 after two years of difficulty and frustration and, as so often before and since, the incompetence and muddle of the various civil and military departments had resulted in the broken bodies of the long-suffering British soldier and, as Hall had predicted, the 'teeth', Press, and Parliament all combined to heap the blame on the medical services.

There is no doubt, however, that, in spite of everything, Hall's dogged persistence had built a really efficient medical service and that he had won the respect of our allies and the affection of his junior officers by the spirited defence he always put up on their behalf.

He finally emerged with a K.C.B. (charitably described by Florence Nightingale as 'Knight of Crimean Burial Grounds'), a Legion of Honour and a Reward for Distinguished Conduct. Surely he must have felt that he had been vindicated.

But how wrong he was! Such is the power of propaganda, influence and publicity that today he is almost completely forgotten and the whole credit of cleansing the Crimean Augean Stables goes to Florence Nightingale whose forceful genius for army administration did not come to full fruition until several years later.

The tragic events of the war had not been altogether in vain for they impressed upon the 'teeth' that when an army goes to war it faces two enemies, and that throughout all history disease has always been more destructive than all the most devastating engines of war that the most ruthless enemy has been able to bring against us, and that such questions as transport, rations, clothing and hygiene are as essential to victory as the cannon, the musket and the sword.

So it was that in 1898 medical officers ceased to be merely 'doctors in uniform' and that the unhappy semi-civilian 'tail' with its 'courtesy hyphenated titles' developed into a Corps with a tradition of sixty-four years and two world wars behind it and one which takes its place at the council table when strategic and tactical plans are discussed.

A leader writer in *The Times* of 10 August 1951 put the case in a nutshell: 'Army doctors are members of two professions and unless they have mastered them both they fail in their duty.'

It will be remembered that it was this very newspaper whose voice was loudest in the vitriolic attacks on the medical services in general and on Sir John Hall in particular. In this same article, however, it makes something of an *amende honorable* as it concludes: 'The R.A.M.C. of today, rightly proud of the honourable position it now holds can afford to look back over its shoulder with respect upon the pioneers who did their best with such hardships.'

R. E. BARNSELY

LEBORGNE—IN MEMORIAM

OVER ONE HUNDRED years ago, on 17 April 1861, a patient aged fifty-one, died in Paris who owes great fame to the fact that he could not give his history or even his name. He died of cellulitis of the right leg, which had been paralysed for seven years. One week before his death, and after twenty-one years of residence at the Hospice of Bicêtre, that terminal surgical condition caused his transfer to the Infirmary of the same hospital, and aroused belated but intense interest in his case. The surgeon under whose care he was admitted did not save his life. But he saved his brain, after making some fascinating clinical observations which we would call neurological—in a tradition that that surgeon helped to create. The brain remains uncut. It has evoked many erudite storms.

News, Notes and Queries

The surgeon, then thirty-seven, a brilliant man born in a region of France where vintage claret and Paleolithic finds abound, had already made himself a name in the world by his contributions to pathology and anthropology; he later was the first to describe Cro-Magnon Man. Sainte-Foy-la-Grande, his birthplace on the River Dordogne, near Bordeaux, was also that of a friend, the anatomist and anthropologist Gratiolet, who left his eponym on the optic radiation, and who named some of the cerebral convolutions. 'Much neglected until very lately,' says a German contemporary, '... the convolutions were considered as a bundle without system, and the artists drew them as they might draw any dishful of *macaroni*.' Thanks to these men—with Huxley, Leuret, Arnold, Burdach, Huschke, Bischoff, Rudolf Wagner—it became known that when studied in a simpler arrangement, i.e. in the foetus or primate, each convolution was found to be fixed, constant, and worthy of a name of its own. As to man, his frontal lobes were the most developed—Caucasian Man above all, above the Mongolian and the Ethiopian, under which latter was included the American Indian—Gratiolet held up as an example the skull of a Totonac recently brought from Mexico by Napoleon III's occupying forces. Was not Caucasian Man the most intellectual of them all, and endowed with the subtlest linguistic ability?

Language, articulate speech—well, Gall, at the beginning of the century, though his cranial phrenological bumps were discredited, had nevertheless impressed on the scientific world that speech, together with even more elusive things such as 'order', 'constructiveness', 'ideality', 'wit', 'number', and 'tune' all had their 'organs' in the anterior lobes; 'language' was to be found on the frontal undersurface. And Bouillaud, ever since 1825, had offered 500 francs to the man who would show him intact frontal lobes in a patient with loss of speech. This venerable and powerful Dean of the Medical Faculty was ably aided by Dr. Auburtin, his son-in-law, who patched up missing evidence by postulating that both frontal lobes must be entirely destroyed when lesser lesions turned up in patients without aphasia.

Aphasia—the word has slipped out—an anachronism—and we have been digressing. Leborgne, the patient at the Bicêtre, with cellulitis of the leg, right hemiplegia, called 'Tan' by his co-inmates, for all those years was saying only this one word, except when showing a catastrophic reaction: then he would shut up his tormentors with the *sacré nom de Dieu*, like many a French aphasic. 'Tan' was said to be selfish, vindictive, mean; 'his fellow-patients hated and even accused him of stealing', says Broca, the surgeon in charge. 'These faults may have been largely due to the cerebral lesion. . . .' His hemiplegia, we are told, developed gradually when he was forty years old, and was apparently vascular in origin; the lesion was shown to involve frontal, temporal and temporo-parietal convolutions, the insula, the striatum and the internal capsule, but has never been examined histologically. Before speech left him at the age of thirty, this humble last-maker was subject to epilepsy; in other words his may have been an earlier lesion, possibly even a congenital one.

To Dr. Auburtin's satisfaction, Dr. Paul Broca demonstrated the moribund man's intact muscles of speech and positive evidence of understanding—but absence of any articulate speech. Twenty-four hours after the patient's death, Broca produced Leborgne's brain in the Société d'Anthropologie as an example that articulate speech resided in probably one single convolution, to wit, the left third frontal in its posterior portion, for this showed the greatest and earliest damage. (The subsequently associated sensorimotor hemiplegia he ascribed to the softened corpus striatum.) 'Abolition of speech . . . is a sufficiently important symptom that it seems useful to designate it by a special name,' Broca said. 'I have given it the name Aphemia

News, Notes and Queries

(*alpha* privativum plus *pheme*, “voice”, “I speak”). . . .’ And to the great clinician Trousseau who with rather petty, pedantic primness imposed on posterity his ‘Aphasia, recently described under the improper name of aphemia’, Broca wrote with fairly good humour this open letter in the *Gazette des Hôpitaux* of 1864:

And now allow me, my dear and learned master, to examine the criticism which you raise against the term *aphemia*. A modern Greek has told you that he was shocked by the use of such a dishonourable expression for honest patients. Aphemy, for him, is the synonym of infamy. I do not deny this; it would not be the first time in the evolution or regression of a language that a word has changed its meaning. *Aphemos*, among other things, meant a person of whom one does not talk. For a lady this was no doubt a form of praise, but a man likes to be talked about, and I can well understand that in a country which has upheld the memory of great men the epithet *aphemos* may give offence. Yet if the word *aphemia* survived your criticism, and still somewhat astonished our present-day Athenians, they could be compensated by looking back into the origin of their words, and no great harm done.—Another objection has been directed against the word *aphemia* by one of your students who is an expert on how to be rude. Applying this expertise to the dissection of that word he has discovered *aphemia* to mean a ‘secretion *apo-haima*’, i.e. bloody. This only shows that Greek, like French, may lend itself to punning—provided there be a display of wit, not rude but Gallic.

Thus the unspeaking had almost become the unspeakable. Rest in peace? Honest (more or less) Leborgne, brilliant Broca, you were not allowed to. Some fifty years later, Pierre Marie, re-examining among many others Leborgne’s brain, declared: ‘The third frontal convolution plays no particular part whatever in the function of speech.’ Yet Marie’s pupil Moutier, faithfully summing up his master’s devastating critique of Broca, had this to say: ‘It does not follow from picking holes in certain facts and their interpretations that one wishes to belittle the man who knew how to collect facts and formulate interpretations. . . . Broca’s aphasia has come to stay, and this is supremely right.’

And what is, after one hundred years, our own answer to Broca? The doubt he expressed in 1861 has, alas, a familiar ring:

If all cerebral faculties were as distinct and as clearly circumscribed as this one, we would finally have a definite point from which to attack the controversial question of cerebral localization. . . . In this respect science has so little advanced that it has not even found its base, and what is today in doubt is . . . the principle of localization itself.

FRANCIS SCHILLER

BIBLIOGRAPHY

- BROCA, PAUL, Remarks on the seat of the faculty of articulate language, followed by an observation of aphemia, in *Some Papers on the Cerebral Cortex*, translated and edited by Gerhardt von Bonin, Springfield, Illinois, Charles C. Thomas, 1960, pp. 49–72.
- ECKER, A., *The Cerebral Convulsions of Man*, translated by R. T. Edes, New York, Appleton, 1873, p. 84.
- GOLDSTEIN, K., Pierre Paul Broca, in Haymaker, W. (ed.), *The Founders of Neurology*, Springfield, Illinois, Charles C. Thomas, 1953, pp. 259–62.
- MOUTIER, F., *L’Aphasie de Broca*, Paris, Steinheil, 1908, p. 774.

REOPENING OF THE WELLCOME HISTORICAL MEDICAL LIBRARY

AFTER extensive improvements which have made the Wellcome Library one of the best equipped of its kind in the world, the Library was formally reopened to the public on 25 September 1962, by Lord Brain, D.M., F.R.C.P., before a distinguished gathering