

case to have been the same which appears in ordinary seasons. We have to notice also, that the appearance of the blood when drawn is not alluded to as a good criterion of the propriety and safety of its abstraction. In short the treatment would lead us to suspect that the author considers fever and inflammation as identical, though, from some passages in the work, he denies this opinion.

Although we have thought it necessary to criticise the indiscriminate adoption of bloodletting in all types of fever, without respect to the circumstances which are occasionally observed in particular epidemics, and the occurrences in each individual case, we nevertheless are strong advocates for the occasional and prudent anti-phlogistic treatment of the disease. Bloodletting forms only one item of this mode of treatment, and though imperiously called for in some epidemics, and necessary to subdue particular symptoms, we are satisfied that its indiscriminate employment can only result from an imperfect experience of the principles on which the treatment of fever should be conducted.

Finally, we dissent entirely from the assertion that "the only morbid condition in fever of which we have any knowledge, and over which the medical art possesses any control, is inflammation." Surely Dr. Smith will not deny that we know something of congestion, or that debility sometimes occurs in fever, and he can scarcely contend that over debility we have no control. Again, it does not follow, that because we have no knowledge of the nature of a morbid action, we are therefore not to treat it in the manner which experience, sage though empiric experience, has taught us to be correct. What do we know of the morbid condition of the system in intermittents? Is inflammation the first condition to be combated there? Yet this is fever, and for it we suppose Dr. Smith himself, if he were prescribing in the close lanes of Bermondsey — "cœlum, non animum, mutans" — would desert the lancet and venture on the sulphate of quinine.

But we have allotted space enough already to this treatise, and we shall pursue its exaggerations no further. Before we conclude, however, we have to notice the admission in the eighth chapter of the author's belief in contagion, and as we must again

postpone the notice of Dr. Tweedie's *Clinical Illustrations*, and M. Dance's *Memoir*, we shall defer our concluding notice until another number.

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PRACTICAL OBSERVATIONS ON THE  
PATHOLOGY AND TREATMENT  
OF  
DEAFNESS.

No. II.

By JOHN FOSBROKE, M.D., &c. &c.

IN my first communication on deafness (*LANCET*, Jan. 15), I stated, that the exclusive subdivision of the profession under the denomination of *pure* aurists was absurd and superfluous, as well as useless to the public, except for picking their pockets; that the histories of cures performed by aurists, whether stationary, sham, or vagrant aurists, and whether their cures be printed in catchpenny books, in placards on whipping or other posts, chalked on walls, or advertised in venal country newspapers, are, for the most part, nothing but lies to catch ignorant credulity; I wish to impress on the general practitioner, whose avocations are too numerous and various to admit always of his divided attention to a particular subject, the circumstance that there is nothing relative to the ear to which he is not competent, and I recommend him to avail himself of extracts from the remarks of others and myself, for insertion in the provincial press, as far as its system of abject servility, venality, and interested suppression of truth, will admit, wherever those remarks may serve to expose the pretenders who come across his path as *ear-doctors*. I have tried this plan myself with considerable success, in weeding out several descriptions of quacks; for in the despicable state of the medical institutions and medical legislation of this country, the press (and even that is bound hand and foot by an unprincipled libel law more calculated for the defence of scoundrels than the protection of honest men) is the only means we have, of affording security to the profession and the public, against the successful swarms of these mountebanks. "A caution to the public" in a local journal upon the spot, is to them an excellent lift to general practitioners, a body to which I account it honourable to have belonged seventeen years, and from which I am separated, as far as a degree goes, only in compliance with my particular interests. A simplified discussion, with the views I have stated, may be useful, and if, as on former occasions, some of them can

assist me with the communication of facts, I shall be glad to receive them.

*Symptoms.*—Deafness varies from a diminution of hearing, to an almost total extinction of the sense. A noise *in the ears*, resembling either the roar of the sea, the ebullition of boiling water, or the rustling of the wind among trees, accompanied sometimes with noise *in the head*, exists in *almost every* case of deafness, to whatever cause the deafness may be owing. The patient, if deaf in both ears, may be deafer on one side than the other. The left ear is almost always the least deaf, though the membrane of the tympanum on that side may have been ruptured. If the deafness of both ears be attended with inflammation of the external porches and discharge, the discharge is generally most from the right ear.

From obvious causes, the deaf hear better at some times than others, according to the weather, temperature of the air, the state of their bodily and mental health, and various other circumstances. Some hear better in foggy weather, when the air is most dense, moist, and elastic; on account, perhaps, of the increased force with which the air, in that state, is vibrated by sounds; sudden changes from fine and settled to cold and irregular weather, increase the difficulty of hearing. Analogously, almost all local, and most general diseases, vary from the same impressions. Parts injured or weakened in structure or function being more susceptible, as we all know, than the sound parts of the frame, experience the presentiment of changeable weather with talismanic vivacity. Deafness is generally increased during spring and autumn, through the rapid and extreme changes of the temperature and moisture of the atmosphere at those seasons, which excite peculiar temporary movements of the circulating and nervous systems in man, as of the first of these systems in plants. Indeed it is often brought on at these seasons from the greater susceptibility of the body, which then exists, to diseases in general, and affections about the throat especially. Our climate, in consequence of its variability, is very productive of deafness. M. Itard, the physician to the Deaf and Dumb Institution of Paris, and a writer of a very able work on the diseases of the ear, informed me, that the deafness of the majority of English who apply to him, is caused by polypi in their nostrils, the frequency of which growths he ascribes to their climate. I became myself hard of hearing in one ear, with scantiness and induration of wax, whilst at Trinity Coll. Dublin. A young Englishman, who went over to Dublin, with whom I was acquainted, was affected in the same manner. I know of no other cause of these affections, than the

impression produced by the extreme humidity of the climate of that part of Ireland.

The ear is exquisitely sensible of cold. A deaf man going abroad at dewfall, finds his hearing instantly affected for the worse. The observation generally is, that, as soon as the sole of his shoe is wetted, "he feels the cold fly to his ears." The balance of the circulation being disturbed by a cause applied to one part, the effect may be felt at a more remote and weak part.\*

Hearing is sometimes influenced according to the medium and quality of sound. Some hear better amid a loud and uniform noise than in perfect stillness, because, probably, the torpid nervous system of the ear, and especially the nervous expansions which supply nervous influence to the membrane of the tympanum and its muscles, require being excited generally to a certain pitch to raise their sensibility to the ordinary standard requisite for receiving vocal impressions, and distinguishing one class of sounds from another. Others, who cannot comprehend a strange voice at a bawling pitch, can interpret a voice to which they are used habitually and familiarly, just raised above moderate loudness. This circumstance shows the nicety with which some individuals are able, by constant attention, to recognise particular forms or figures of impression. Others hear only sharp and acute sounds, being much more forcible than long and diffused sounds.

Since morbid impressions of all kinds strike most heavily upon injured parts, almost all incidental deteriorations of health and derangements of other parts of the body produce an aggravation or renewal of this infirmity. Some deaf people find their ears colder and deafer *post coitum*, an effect produced by other causes of general diminution of vigour. Irregular actions of the skin, heat, dryness, and cold sweats, for instance, are, in this respect, unpropitious, and often conjoined with deafness in hypochondriasis, and certain diseased conditions of the mucous membrane of the alimentary tube, which I have described in my observations on the kidneys. Those two important tissues, the skin and mucous membrane, as forming part of the structure of the ear, and as connected and continuous textures, participate with each other in disease. Local affections of every kind go wrong, when either of these tissues is out of order.

The state of the mind, that mighty influence upon health, and the cause, when wrong, of the decay and dismantling of the frame, greatly affects the hearing of the deaf. The depressing passions aggra-

\* For observations on the effect of climate, &c, on the ears, and precautionary information, see M. Rostan on Hygiene.

rate deafness, and sometimes even call it into existence, whilst the exhilarating passions alleviate it, so long as the patient is under their influence. Lady Baghot, who was subject at times to deafness, had always a renewal of it after every cause of mental depression. On one occasion, a letter, merely stating the death of a relation, renewed the difficulty of hearing. The Rev. Jeremiah Lowe, a patient of mine, states, "I find that any trouble or anxiety increases my difficulty of hearing, and that feelings of a different nature improve it. If I take more wine than usual, or if any-thing exhilarates the spirits or braces the frame, I am the better for it." These facts indicate the direct operation of the mind in altering the balance of vascular and nervous action.

The period of the day has sometimes an influence. Some deaf persons hear better in the morning than at night; sometimes the reverse.

Deafness is generally gradual in its progress. The voice is often very much changed, the deaf not being able to regulate it. One patient writes: "From not hearing my voice, it is to strangers difficult to understand me, which considerably aggravates my affliction."

*Exciting Causes.*—These are very difficult to be ascertained. The most universal are, catarrh, exanthematous cases, fever, local affections in neighbouring parts, as abscesses and suppressed eruptions of the scalp, syphilis, abuse of mercury, the action of lead, remote affections especially of the bladder and urethra, and external violence; but the chiefest of all is catarrh.

Catarrh, scarlatina, small-pox, measles, cynanche tonsillaris, excite deafness, not only by simple extension of inflammation from the throat to the eustachian tube, but by striking at the internal ear at once, perhaps by determining an irregular flow of blood to the brain and internal ear. I suspect, in many of these cases, a permanently congested state of the veins of the internal ear.\* At all events, in numerous examples, it has been impossible to trace the continuous and consecutive progress of local diseased action from part to part.

The exposure of the ears to cold, and from neglect of proper apparel about the head, as is now the fashion among routine women at night and in the open air, ear-achs, with which the patient may be affected three or four years previously, the formation of abscesses periodically about

the head and behind the ears, and especially the *improper suppression* of local affections of the scalp by *local treatment* alone, are constantly followed by deafness.

"Among the accidental causes of otitis and inflammation, which very rapidly spread to the interior of the ear, and so often induce caries of the bones, permanent deafness, and fatal affections of the brain itself, cold applied suddenly to the ear through the medium of a stream of air, is one of the most common."—*M. Lallemand sur l'Encephalite.*

The action being suppressed in one part near the ear, is succeeded by another in the ear itself. Sometimes abscesses follow in this manner behind the ears, which penetrate into the meatus externus through a hole in the bone large enough to admit a gold-wire probe; at others, discharges from the meatus externus, with ringing in the ears and hardness of hearing. My case-books are full of facts, which prove the dreadful consequences to the ears and eyes from entrusting cases of the nature thus described to the pernicious treatment of the various descriptions of certain wholly uneducated, or half-educated men, who are permitted to practise in England, especially of that class whom I call *druggist-surgeons*, and to whom, along with others of the St. John-Long school, I shall shortly call public attention, by a full development of their merits.

The permanently debilitating influence of the venereal disease upon many, although that disease may be cured in all its *local* forms, may lead to deafness, by the tendency of reduction of power to increase the susceptibility of the ears to morbid impression; and sometimes, it is said, the disease itself produces deafness by causing venereal action at the anterior orifices of the eustachian tubes. Mercury also, since it debilitates numerous constitutions, when injudiciously administered, and most of all acts upon the more minute and susceptible organs, is similarly injurious.

Deafness, I have reason to think, may follow the incautious use of water impregnated with lead. One of my patients used water brought through lead pipes, for every domestic purpose, in his diet, and washing his head. He was subject to colic, very slow bowels, and stitches in different parts of his body, especially the muscles of his chest, under which he found it difficult to breathe.

Affections of the bladder and urethra appear particularly to bring on deafness, or produce a relapse of it. In two cases of stricture of the urethra, attended with extreme irritability of the part affected, and participation of the whole constitution in the local affection, and in a third case of diseased bladder under my care, deafness took place, but gradually disappear-

\* Catarrh is preceded by headach, determination of blood to the head, unpleasant and restless sensations, and certain feelings of the skin, which are always relieved when the nose begins to run. I regard the catarrh—that is, the increased efflux from the nostrils, not as the disease itself, but as the secondary affection, and a salutary process.

ed with the amendment of the original disease. Mr. F. came to me in 1828 for stricture of the urethra, and spontaneous emission every morning, seemingly from the vesiculæ seminales. The emission ceased after the cure of the stricture, and he was immediately seized with ringing of the ears and deafness. An habitual hæmorrhage from the nose had also ceased. He heard very well when he was swallowing, and I therefore ascribed his deafness to his throat; leeching relieved his head but not his ears. In this case I think the deafness was owing to change of determination consequent on the ceasing of the discharges.

Other causes of deafness are local and mechanical, as in deafness caused by the sudden explosion of cannon, and that by continued noise, as blacksmiths' deafness. The former is ascribed to rupture of the membrane of the tympanum by the force of the vibratory impulse, when the ear being taken by surprise the membrane consequently is not regulated and prepared by its muscles to encounter the shock. I conceive that this accident is most likely to happen, as we know the structure of the ear to be various in that respect, where the meatus is very straight in its course, and the membrane of the tympanum is less oblique than commonly in its position. "Nonnulli statuunt," says the learned Sennert, "membranam hanc et acutissimo et vehementissimo sono, et bombardarum et campanarum ingenti sonitu, sicut et a frigore vehementi, non dolore solum affici, sed et rumpi posse. Alii tamen nimis saltem tendi a talibus vehementibus objectis membranam hanc existimant, atque ita nimis tensam laxiorem reddi, ut sonum amplius edere non possit." Dr. Parry records two cases of deafness from extreme noise; that of Lord Rodney after the eighty broadsides fired from his ship the Formidable, in 1782; a second from the report of a cannon close to the individual at the battle of Copenhagen. The blacksmiths' deafness is a consequence of their employment; it creeps on them gradually, in general at about forty or fifty years of age. At first the patient is insensible of weak impressions of sound; the deafness increases with a ringing and noise in the ears, slight vertigo, and pain in the cranial bones, periodical or otherwise, and often violent. No wax is formed. It has been imputed to a paralytic state of the nerve, occasioned by the noise of forging, by certain modern writers, and by the old writers, to permanent over-tension of the membrane, which they compare to fixed dilatation of the pupil.

Sudeley Place, Cheltenham,  
January 17, 1831.

## CASE OF HYDROCEPHALUS,

IN WHICH THE OPERATION OF TAPPING WAS PERFORMED.

*Treated by W. MARSDEN, Esq., of London,  
M. R. C. S.*

ON the 16th Dec. last, an infant, aged sixteen months, was brought to me, which had been afflicted upwards of a year. Her appearance and symptoms were, tumid abdomen; flesh flabby and spare; skin colourless, soft, and relaxed; eyes full and bright; pupils greatly dilated, and the retina insensible to light. Nausea, with occasional vomiting, had existed for a considerable period; the alvine evacuations were pale, watery, and frequent; urine scanty and high-coloured; tongue dry and dark; respiration and pulse both very quick and feeble, and for several months the child was generally in a comatose state. It had short intervals of screeching, with occasional convulsive fits, but neither of these symptoms was violent; had taken the breast and other food freely till within the last three weeks; and during the last two days had rejected every thing, except a little barley-water given in a teaspoon. The extremities were cold; the skin was damp, and, to all appearances, life was fast drawing to a close. I had no doubt respecting the nature of the case, nor any with regard to the impropriety of relying solely on medicinal treatment. I therefore concluded that it was a proper case for the operation of tapping, although by no means a favourable one for recovery,—other visceral disease existing, and the vital power being already too much enfeebled by the long continuance of pressure on the brain.

Having stated my opinion to the child's parents, they consented to any plan I might think proper to adopt: I therefore at once proceeded to the operation of tapping, assisted by my friend Mr. Greville Jones. The child being placed on a table in a supine position, its head half inclined to the left resting on a pillow, with a common hydrocele trocar, a perforation of the membranes was made at the left coronal suture, midway between the fontanella and the temporal bone (the suture at this part being open); and having introduced the instrument one inch and a half into the brain, the stiletto was withdrawn, when about sixteen ounces of transparent colourless fluid were gradually drawn off, after which the canula was withdrawn, and the wound left open. A bandage was applied to the child's head, but the sutures being generally closed, this was of little or no utility. The operation was performed within the space of five minutes, and not a drop of blood was spilled. The child was then placed in the cradle, in a