have been natural to him; for when his speech was restored, he spoke with his original American accent.

His lessons were, as I have shown, few and short. But so soon as he had realised the fact that he had organs capable of evolving articulate sounds, he supplemented my instruction by the most zealous practice. Thus the vowel and consonantal sounds which he uttered imperfectly during a lesson were learned accurately by my next visit; and as soon as he had begun to combine sounds, he practised them in various combinations with great industry, being assisted by the sister of the ward, the nurses, and especially by two or three intelligent patients, who, being interested in his progress, gave him constant assistance. Before he could articulate at all, and in the earlier period of his recovery, he often wrote, "There is a sort of difficulty I cannot explain which prevents me from speaking"; and always during his earlier attempts, he complained of pain at the back of the right side of the head and neck attending them—pain of the same kind and in the same place as that which had formerly attended the act of mastication. This disappeared before long. Whilst the recovery of his speech was in progress, he gradually regained the use of his left arm. There was no improvement, however, in the condition of the leg up to the end of December. About that time, treatment by faradism was commenced, and continued with great success. He could walk without a stick in about a week; and he left the hospital, apparently well, on January 18th, 1869.

Where the lesion was situated which caused the interesting combination of phenomena presented in this case is of course only a matter of inference; but all the early incidents of the case, and many of the later ones, point distinctly to implication of the region lying between the floor of the fourth ventricle and the surface of the pons Varolii. That the lesion effected little permanent damage is evident; but it must have occupied such a position as for a time to have obstructed completely the usual route along which the co-ordinated impulses for the movements of articulation find their way. The affection of speech here was a simple and uncomplicated one, and one that may be readily explained by an interruption of the fibres anywhere between the supreme centre for the movements of spoken language and the specific groups of nerve nuclei whence the several nerves concerned in speech emerge. I have only once since had a case under my care in which I have endeavoured to instruct the patient in articulation. The failure to articulate, however, which was incomplete, was associated with other aphasic phenomena, so that my success was only partial, and not permanent.

[To be continued.]

IDIOSYNCRATIC SUSCEPTIBILITY TO HENBANE.

THE following is a brief record of a case which came under my notice a few days ago.

A. G., a strong healthy man, fifty years of age, sent to my house for some aperient pills, and I gave his messenger some of the colocynth and henbane pills of the *Pharmacopœia*. On seeing my patient a few days afterwards, he told me that the pills had not "suited him"; and, in explanation, said that, half an hour after taking two, he began to feel very ill—so ill that he was compelled to cry out to his wife that he had been poisoned. His mouth felt as if drawn together like a purse, as he graphically described it. His throat was dry and painful, so that he could not swallow his spittle. There was a feeling of numbness over the right side of the body and down the right arm. On standing, he was compelled to grasp the mantelpiece, or he would have fallen; he was giddy and weak, and almost blind. He lay down on a sofa; but the faintness and general powerlessness continued, though in a less degree, for about four hours. At the end of that time, his bowels moved, and all alarming feelings passed off; leaving behind, however, dryness of the mouth and soreness of the throat, which continued for twenty-four hours after the other symptoms had disappeared.

In this case we have all the well known symptoms of poisoning by henbane; and the case is all the more unusual, that the symptoms appeared so early and with such gravity after the administration of a dose of henbane which is far from being large. Garrod states the ordinary dose of extract of hyoscyamus to be from five to ten grains. But my patient had no more than three grains and one-third, the proportion of henbane to compound colocynth pill in the combined pill being as one to three; the two pills taken weighing exactly ten grains.

On cross-questioning my patient, I elicited the fact that several months ago he had experienced the same symptoms, though to a less marked degree, after taking one colocynth and hyoscyamus pill; so that in that instance one grain and two-thirds of the extract had produced its physiological effects.

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REMARKS

ON THE

PRODUCTION OF CYSTITIS BY CONTAGION, THROUGH THE USE OF INSTRUMENTS.

By SIR HENRY THOMPSON, F.R.C.S., etc.,

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I HAVE long suspected that cystitis is capable of being propagated by the direct transference of inflammatory products from the bladder of one patient to that of another. All are sufficiently familiar with the fact that purulent matter from the vagina, and probably from the uterus also, produces inflammation of the male urethra, and that conjunctivitis may be caused by contact with pus from either source; and I believe it is quite unnecessary to imagine that any specific quality attaches to purulent matter produced in these localities, rendering it more than ordinarily virulent and contagious. Certainly no proof can be adduced that such quality exists; a decision on this point, however, does not necessarily affect the question whether cystitis may be originated or not by contagion.

Every one knows that the operation of sounding the bladder—it may be for stone or for tumour, etc.—is sometimes, although rarely, followed by an attack of inflammation more or less severe. Such an occurrence is, in some circumstances, not unnatural. A delicate organ is mechanically disturbed, and, if force be employed in the process, some inflammation of the mucous membrane is a not improbable result. Hence the extreme importance of adopting a method and instruments which shall accomplish the object in view with the smallest degree of distension and movement; and also of forbearing to make such an exploration, except in circumstances which manifestly indicate its necessity. In my experience of such cases of this kind as have fallen under my observation during many years, I have remarked that the inflammatory attacks which follow sounding occur in two modes, distinct from each other. Thus, in some instances, the patient has a shiver, occurring within three to four hours of the time of the examination; soon afterwards, the urine is passed too frequently and with pain, becomes cloudy, and some general fever sets in. In such, the cause of inflammation is clearly a mechanical one, and, if the patient be healthy, it soon subsides with rest and treatment. But, in a few other instances, no disturbance occurs until the lapse of forty to fifty hours, or thereabout, after the sounding. The subject of the examination has been in all respects well since the sounding took place, and felt, if anything, only slight soreness during the first few hours following the operation. After the interval named, he experiences a little undue frequency of micturition, loses appetite, is chilly or has a shiver; and by degrees symptoms of cystitis appear, and continue a marked course for a few days, with varying persistence according to circumstances. Usually, the patient attributes his condition "to some cold he must have caught the day after the examination", and by no means attributes his troubles to the instrument, as he infallibly does in the circumstances first described.

Why, in certain circumstances, these phenomena should occur so long after the provocation which must have given rise to them, has, as I have already intimated, frequently afforded me an interesting subject of speculation. But a case has recently occurred, which I have been enabled to watch closely, and which seems to throw light on the nature of these examples of the second kind. I shall give the chief particulars in detail.

A medical man, under sixty years of age, having had occasion, as he thought, to pass for himself a silver catheter (No. 10) daily, had a new one made; there was a peculiarity in its construction, the lower or curved portion, about two inches and a half in length, being separate and attached by a screw to the shaft. Such catheters were frequently made formerly for the purpose of packing in a surgical pocket-case. He passed this daily with great ease during some weeks, on no occasion producing irritation. One day, and this was the only occasion on which he used the catheter for another person, he introduced it into the bladder of a patient whose urine was highly muco-purulent, and who was indeed suffering with severe cystitis. He believes that, immediately after using the catheter, he washed it in the ordinary way. Subsequently, on that day, he employed it as usual for himself; and it is somewhat curious that he did not use it the next day—not because he felt any irritation, but, on the contrary, because he was arriving at the conclusion that the instrument was no longer necessary. The next day but one after his

last employment of the catheter, about forty-four hours after, he felt chilly, and micturition was slightly painful. Next day, he had some fever, no rigor, but increase of temperature; his urine was cloudy and passed frequently. The day after, he was confined to bed; the temperature varied between 102 deg. and 103 deg. for a few days, and the urine was loaded with muco-purulent jelly-like deposit during one or two days. After more than a week's confinement to his room, he gradually improved and soon perfectly recovered, having in his urine now no trace of the attack; he empties his bladder perfectly, and, in relation to the urinary system, has nothing whatever to complain of.

The circumstances of this case will go far, I think, to suggest the strong probability that this attack of cystitis was caused by the transference of infectious matter, by means of the catheter, from the patient for whom it was once used to the subject of our case. I can scarcely doubt that the exceptional formation of the instrument, the screw-attachment, which on examination, moreover, appeared to be a little loose, offered a chink, in which matter lodged, especially as this lower part was not detached for cleaning—the eyes of the catheter serving that purpose, as in the ordinary instrument.

It may very naturally be urged: If inflammation be so easily produced through contagion by passing instruments not scrupulously rendered clean, so numerous and varied as these are, and so frequently used, how is it that cystitis is not a very frequent result—for this it certainly is not—of ordinary catheterism?

I think the reason is not far distant, and that it may be found in the action of the catheter itself. The moment the instrument reaches the bladder, the urine rushes through the orifice, and carries off in its current any minute particles which may be adherent to its extremity. In bougies, no opening for the lodgment of adventitious matters exists, and any risk of contagion by their use must be considerably less. Besides, the action of the urethra itself, clinging to the instrument and sweeping off, almost at the external meatus, as it does by that action, most of the lubricating material, is a sort of defence to the internal passages from danger. On the other hand, in examining a bladder, the sound is rarely used as a catheter, and although it has often an eye in its extremity, the handle is closed, and urine seldom passes through it. The various movements of a sound in searching the bladder are calculated to detach, within its cavity, foreign particles, if any such exist, in or about the eye.

The practical question, how to prevent any transference of matter to the bladder and urethra, in employing instruments of any and every kind, presses for solution. It is one of extreme importance to all concerned, and the occurrence of an accident of the kind described, however rare it may be, is one the bare possibility of which cannot be contemplated without extreme repugnance.

After some consideration and some experimental trials, I think the following recommendations will render contagion by instruments impossible.

Firstly: All metal instruments—catheters, sounds, and lithotrites—after use, at any rate in cases of muco-purulent urine, should be plunged for a minute or two into boiling water, to which either a little common soda or a little carbolic acid has been added. If the boiling point of water be not considered absolutely sufficient, a strong solution of chloride of zinc in water may be used. At the strength of twelve per cent. solution, the boiling-point is 220 deg. Fahr., or eight above that of boiling water. For some years past, as advised in the last edition of my lectures, I have always placed all gum and other catheters and bougies in a bath of weak carbolic acid immediately after use.

Secondly: I have more recently—that is, since the occurrence described—added a solution of carbolic acid to the oil used for the lubrication of instruments. Oil being the remedial agent for the caustic effects of carbolic acid, there is no danger in applying to the urethra a comparatively strong solution of the acid in oil, since no irritating effect whatever is produced, and the disinfectant influence is unimpaired.

For the last two months, I have used the following formula, and can, therefore, guarantee that it is absolutely unirritating: *R* Acidi carbolici med. gr. xii; olei olivæ 3i.

A free use of this as a lubricant to all instruments before using will, I believe, ensure, at all events in combination with the modes of cleaning just described, safety from the occurrence of any contagion by means of instrumental treatment.

CHARD RURAL.—In this district, 769 births and 462 deaths were registered in 1878, against 868 and 476 registered in 1877. Of the deaths, 92 occurred in children under one year, 52 between one and five, and the large number of 186 in persons aged sixty and upwards. The death-rate is calculated by Mr. Stephens at 19 per 1000. Measles caused 5 deaths, diphtheria 1, croup 1, fevers 7 (4 being typhoid), and diarrhoea 12. The amount of sickness during the year was unusually light, and the district generally appears to be in a healthy state.

ABSTRACT REPORT OF LECTURES ON THE COMPARATIVE ANATOMY OF MAN.

Delivered at the Royal College of Surgeons of England.

By W. H. FLOWER, LL.D., F.R.S.,

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LECTURE VI.—THE INHABITANTS OF INDIA.

By their physical characters, the various populations which inhabit the great continent of Asia attach themselves more or less to one or other of two very distinct types: 1. The *Mongolian*; and 2. That which for want of a better name must still be distinguished by the title applied to it by Blumenbach, the *Caucasian*. This word has often been objected to as badly chosen; but it is here retained upon the principle well laid down by Professor Huxley, that "it is better for science to accept a faulty name which has the merit of existence, than to burden it with a faultless newly invented one".

Roughly speaking, a line striking northward from the head of the Bay of Bengal to the Himalayas, then turning westward and skirting the southern flanks of that great mountain chain, passing north of Cashmere and in a westward direction to the Sea of Aral, the Caspian and the Ural mountains, divides the area occupied by people of each type; those to the east and north of this line being mainly Mongolians, and those to the south and west mainly Caucasians. It must, however, be fully understood that numerous circumstances have occurred, such as national migrations, campaigns, or friendly intercommunications, which have broken down the barriers between the races; and that not only on the frontiers of the line indicated above, but far into the interior of the territory inhabited by each, are mixed races, and even isolated communities quite distinct from those by which they are surrounded.

The characteristics of the Mongolian or yellow races will be spoken of in the succeeding lectures; the present one will be devoted to the people of India proper, who, except in the extreme north and north-east, belong mainly to the Caucasian division. It has been thought that other races have contributed a share to the composition of the present population of the peninsula, having been the earliest inhabitants of the land, and forming, as it were, a substratum of the existing population. These are: 1. Negritos, allied to the Andaman Islanders; 2. Australoids, allied to the modern Australians. The search for evidence for or against the existence of either or both of these elements in the population of India, especially of the southern parts, excites much interest amongst ethnologists at the present time. It must naturally be sought for among the tribes which retain more or less of their barbarous condition still to be found in the mountainous and forest districts of the centre and south of the peninsula.

With these must be classed the Veddahs of Ceylon. They are probably descendants of the people who inhabited the island before its occupation by the modern Cingalese, who are not distinguishable physically from the people of the southern part of the Indian peninsula, whence they came some centuries before our era. The Veddahs are now only found in some mountainous districts in the south and south-eastern parts of the island. Many have become civilised, and are gradually becoming absorbed into the rest of the population. The wild or "Rock Veddahs" live in a most primitive state of social culture, without clothing, agriculture, or fixed dwellings, subsisting chiefly upon the produce of the chase (bows and arrows being their principal weapons) and on the wild fruits and roots of the woods. They are a dwarfish stunted race, of blackish complexion, and with straight though generally unkempt and shaggy hair. The condition of their bones and other physical characters give the impression of their being a race degenerated and enfeebled by generations of privation and other circumstances adverse to full development. They are very different, therefore, from the Andamanese, who, though equally short of stature, are strong, active, and have their osseous system fully developed. There are no Veddah skeletons in the College Museum, but as many as seven crania; one of them, that of a woman, is the smallest adult skull in the whole collection; its cerebral capacity measures but 960 cubic centimetres, or 58.6 cubic inches, which would give a brain-weight of thirty-five ounces. They are all dolichocephalic; the average latitudinal index being 71.1, which agrees very closely with the average index of ten skulls of the same race in the collection of Dr. Barnard Davis. Every one is considerably higher than it is broad; the average altitudinal index is 86.1.