can tell when it is present from the boy's appearance alone.

Another case which I have now under my care, and in respect of which I have grave anxiety as to the future, arose in the following way. The boy was returning to school for the summer term, and as it *was to be* the summer term, he could not want, and thus removed, his flannel vest before starting, leaving his overcoat, which he had worn through the vacation, at home also. This happened in winter weather, although May was the actual month. He took cold on the journey; and although this occurred last May (1890), his urine is now for days together loaded with albumen; it is then absent for a day or two, then persistent all day, and so on.

At the present moment I have under my care a young lady suffering from this characteristic albuminuria. Her history is, that she had not been well since she attended two balls on consecutive nights during the cold weather some three weeks since, when she probably became overheated and was insufficiently clad, she having removed her under-vest. Her aspect had become muddy, she had lost her spirits, and she complained of always feeling tired. I found her pulse hard, and her eyelids oedematous in the morning. I at once diagnosed albuminuria, and found the albumen persistent throughout the day. It disappeared altogether during continuous decubitus, and is now not present in any urine except that passed after breakfast—that is, in the first urine passed after she has been up for an hour.

In another case which I watched for several years (1886 to 1890), and which was one of the most troublesome, I gradually elicited the following remarkable fact, which I have never found before or since, and the meaning of which I have not yet satisfactorily interpreted. Whenever the urine was free from albumen he felt ill; whenever it was present he felt well. He used to tell me beforehand whether I should find albumen or not. Whenever he looked ill and miserable, and felt ill, he was right,—no albumen was present. But whenever he felt quite well he would laugh and say that I should find, in consequence, a quantity that morning. The albumen was still present a year or two after he left school. Since then I have again examined it, and there was not even a trace. But this condition of kidneys does not exclusively occur in adolescents, for last year a chemist, forty-five years of age, consulted me with albuminuria, which was intermittent for several weeks. The case behaved exactly like an ordinary case of early albuminuria as to feeding and decubitus, and he subsequently quite recovered. Its origin dated from a drive on a cool summer evening, when the patient, unaccustomed to driving, omitted to wear an overcoat. Moreover, he had had a similar attack a year or two previously, and recovered.

An old Rugby boy consulted me not many weeks ago, stating that he was said to be suffering from overwork, and that he was greatly perplexed as to the course to pursue. He had intended to present himself at one of the universities for a scholarship, but he could not read for even a few moments consecutively without becoming dazed and suffering from intense headache. His condition, together with his disappointment at the blighting of his prospects, caused him considerable distress, and he came to ask my advice, as I had known him for some years while at school. As he unravelled his story, without any comment from me, my impression was that he was suffering from hypermetropia; but when I put my fingers on his pulse, I felt convinced, owing to the marked arterial tension, that his cerebral symptoms were toxæmic, and that the case was simply one of early albuminuria. Certainly, no overworked brain ever possessed such a pulse. However, I made a complete examination, and found the characteristic heaving heart's action, as well as the rigid arteries, and could discover no other fault until I examined his urine, when the source of his trouble disclosed itself. His sight was normal. With weekly doses of blue-pill, and daily doses of sulphate of soda and bicarbonate of potash, his symptoms soon disappeared, and he could resume work as he desired without discomfort. He obtained his scholarship, and is now at the university. On subsequently referring to my records, I found, what I had forgotten at the time, that he was one of my old cases of albuminuria when at school.

Judging from past experience, and as I pointed out many years ago (1883²), I am persuaded that many cases of

assumed overwork should be classed under the same category as this case, and that, in their treatment, a dose of blue-pill is far more efficacious for their cure than cessation from work.

The following points present themselves as the result of this consideration of the subject:—1. It is not safe to make a diagnosis in any patient without an examination of the urine. 2. Are not all cases of early albuminuria, in their early stage, identical with the class of cases I have described? 3. If so, it is perfectly clear that these cases of early albuminuria, which are so common in the young, constitute the early stage of what eventually may become developed into the chronic disorganisation of the kidney which is termed Bright's disease. 4. Would it not be well to come to some understanding as to its nomenclature, so that a uniform and appropriate name may be assigned to this disease, and that it may cease to be termed "functional"?

The gist of the whole matter seems to be this: That where the hyperæmia of the kidneys is severe the albuminuria is persistent, in whatever position the body may be placed, whether at rest or not, and whatever diet may be partaken; while if the hyperæmia be slight, from the cause having been trivial, or from a severe attack which is passing away, then the albuminuria only shows itself when the body assumes the vertical position, or under exertion, or after a full meal; but if the hyperæmia be prolonged, however slight in degree, the albuminuria gradually becomes persistent, owing to the permanent dilatation of the blood-vessels, and tends to destruction of the kidneys. As in the eye the inflammation may be so severe that the eyelids cannot even be opened, or may be so slight that there is no indication of any hyperæmia except under work; so here the inflammation of the kidneys may be so severe as to cease to work, as in acute nephritis, or so slightly hyperæmic that it is only elicited under a stress of its circulation, such as arises in assuming the vertical position, undergoing active exertion, or partaking freely of food, which is a pathological condition.

Rugby.

EXCISION OF THE CONDYLE AND NECK OF THE INFERIOR MAXILLA FOR OSSEOUS ANKYLOSIS OF THE RIGHT TEMPORO-MAXILLARY ARTICULATION.

By DAVID M. GREIG, M.B., F.R.C.S. ED.

THE rarity of osseous ankylosis of the temporo-maxillary articulation makes it desirable that all cases of this condition should be placed on record, especially where operative measures have been adopted for its relief. In few text-books of surgery is the deformity even referred to, while in fewer still is any operation described.

J. C—, male, aged twelve years, came under my care in February, 1890, complaining of stiffness of the jaw and inability to open his mouth. The following history was elicited. Apart from anything bearing upon his present condition, he has always enjoyed good health. In 1885 he had scarlet fever. This was accompanied by right suppurative parotitis, which was followed by gradually increasing impairment of movement at the right temporo-maxillary articulation. In 1887 he was able to separate the teeth for a quarter of an inch, and this was increased to one inch by forcing the jaws open, under chloroform, by means of a wooden wedge. Although this treatment was afterwards continued, the jaws were soon approximated more firmly than formerly, until the teeth could not be separated at all.

In February, 1890, his condition was as follows:—He was well-nourished, and presented nothing noteworthy, except in connexion with the condition of the right temporo-maxillary articulation. A hard swelling, indicative of former inflammatory mischief or periostitis, extended from this articulation to the angle of the jaw, and produced undue prominence of the right cheek. The skin near the angle of the jaw was marked by cicatrices. The incisor teeth were directed forwards, leaving a space one-eighth of an inch wide between them. Through this opening the patient had

² The Book of Health.

to force all solid food after crushing it with his fingers, and the displacement of the incisor teeth had evidently been caused by the periodic pressure thus exercised upon them. The margin of the lower incisor teeth was posterior to that of the upper. The appearance he presented is shown in Fig. 1.

FIG. 1.

Having again, under chloroform, attempted unsuccessfully to separate the jaws by the use of wedges, I decided to excise the condyle and neck of the jaw on the affected side. The bone was exposed by a vertical incision extending from the zygoma above to the level of the tragus below. On pushing aside the periosteum the ankylosis was found to be osseous, and the bone much thickened. The osseous mass was snipped through with bone forceps below at the level of the neck of the jaw, and above at the level of the articulation, and the piece of bone thus separated was levered out. As my bone forceps were rather large, the incision had to be prolonged slightly downwards, to gain sufficient room to work in. Though the teeth could now be separated slightly, it was not until the coronoid process had been divided that they could be separated for a satisfactory distance. There was no hæmorrhage of importance, only the transverse facial artery requiring ligature. The wound healed by second intention in about three weeks. His appearance twenty months after the operation is shown in Fig. 2. He has perfectly useful,

FIG. 2.

though one-sided, masticatory movement, and is able to separate the jaws about one inch. In extending the incision downwards, some branches of the facial nerve had been divided, as the operation was followed by partial paralysis of the orbicularis palpebrarum (which has since almost entirely passed off), and of the levator labii superioris,

levator anguli oris, and zygomatici muscles. The function of the last-named muscles is taken by the facial fibres of the platysma myoides. The parotid duct may have been divided, and, if so, no inconvenience has resulted therefrom, possibly from the former parotitis having more or less disorganised the gland.

Remarks.—Osseous ankylosis of the temporo-maxillary articulation is caused by any inflammation involving the joint. Gout and rheumatism, especially chronic rheumatoid arthritis, are probably the most common causes in the adult,¹ while suppuration connected with the exanthemata is the most common cause in children. Extension of inflammation of the middle ear through the Glaserian fissure has been recorded as a cause,² and it also occasionally follows cancrum oris and mercurial salivation.³ Injury is a rare cause; but Mr. Harrigan has reported⁴ a noteworthy case of this in which the movements of the jaws were not permanently interfered with until twenty months after receipt of the injury. The operations devised for the relief of osseous ankylosis of the temporo-maxillary articulation are mainly three—viz., Rizzoli's, Esmarch's, and Humphry's. Rizzoli's method consists in simple division of the jaw in front of the cicatrix from within, but the great tendency to reunion of the bones renders this operation somewhat uncertain in its results. Esmarch's operation consists in removal of a wedge shaped piece of bone at the junction of the ascending and horizontal rami, the incision being made along the lower border of the horizontal ramus. Mason⁵ and others have recorded cases of this operation which have yielded very satisfactory results. Sir George Humphry⁶ was the first to excise the condyle of the lower jaw for osseous ankylosis, and several successful cases of this operation have since been recorded. Mr. Page⁷ has described and figured such a case in which partial facial paralysis similar to that occurring in my case followed the operation. Occasionally, when bilateral ankylosis exists, one of the above operations requires to be performed on both sides; and Mr. W. H. Bennett⁸ has recorded a remarkable case of this kind, in which after repeated operations he excised the ascending rami on both sides, with a result which was wonderfully satisfactory.

Dundee.

TRAUMATIC HYDRONEPHROSIS.

By J. J. KNOX, M.A., M.B., B.C. CANTAB., M.R.C.S.

CASES of traumatic hydronephrosis appear to me to be of sufficient variety to warrant the publication of the following example of the disease, in which drainage of the cyst resulted in a complete cure. On referring to the files of THE LANCET I can only find mention of the subject on three occasions since the year 1880. In the issue of Jan. 22nd, 1881, there is the case of Mr. Croft, in which repeated aspiration ultimately effected a cure. On April 10th, 1886, there is the account of a paper read by Dr. Lowe before the Medical Society, and here several cases are mentioned, the means adopted for their cure being tapping or massage. The third account is that of the discussion opened by Dr. Goodhart before the Clinical Society, and published in THE LANCET of Dec. 6th, 1890. Here cases are narrated in which a cure resulted after having been allowed to take their own course, while there were other measures advocated, such as aspiration and nephrectomy. The case which I am about to record seems to me to be especially interesting owing to the large size to which the tumour attained in the course of a few weeks. It is as follows.

G. B—, aged forty-two years, a horse-driver on the Midland Railway, was engaged in his occupation on the afternoon of Aug. 29th, 1890, when he was injured by being crushed about the lower part of his abdomen. The injury was caused by the chain by which his horse was attached to a waggon striking him over the front of the abdomen and

¹ Ashhurst: International Encyclopædia of Surgery, vol. v.

² C. Heath: Injuries and Diseases of the Jaws, 2nd edition.

³ Noble Smith: The Surgery of Deformities.

⁴ Omaha Clinic, September, 1889.

⁵ F. Mason: The Surgery of the Face, 1878.

⁶ Assoc. Med. Jour., 1856.

⁷ Brit. Med. Jour., March, 1889.

⁸ Clinical Society's Transactions, vol. xxii.