urine and sugar steadily decreased, while his weight increased, so that in six months he had regained his usual weight of 13½ st. The sugar at the same time disappeared from his urine, and he had acquired his usual health and spirits. He has continued in this favourable condition for the last two years, and in addition to the milk (heated) which still forms his staple article of diet, he is able to take some toasted bread and potatoes, and in addition a glass or two of wine at dinner. In fact, he lives like any other temperate man, and, being a very intelligent person, he has formed his theory in regard to the treatment, as already mentioned. Briefly expressed in his own words, it is this:—“Hitherto the attempt has been made to prevent production of sugar by giving a non-saccharine diet. This is no doubt perfectly correct, but in addition to this the treatment I adopted was intended to promote the consumption of sugar produced. This design of consuming sugar by breathing through the nostrils in warm weather or by means of a respirator, is that when the proper quantity of sugar has been consumed, the abnormal production will then cease. The aim of this treatment is to raise the blood-heat to its proper temperature, and to restore to the lungs their partially lost combustive power, and so enable them to consume as much secreted sugar as will maintain the blood at its proper temperature. When that purpose is accomplished the organs will regain their proper function, and the patient recover.”

As previously observed, two cases of diabetes were in my wards in the Royal Infirmary, and I resolved to try the treatment mentioned upon them. The patients were informed of the object in view, and aided our efforts in every way.

CASE 1.—Patient, a single man, aged twenty-eight, was admitted passing 260 oz. of urine on the 14th of June. His disease had lasted twelve months, and various modes of treatment had been put in force and abandoned. The specific gravity of his urine in the morning was found to be 1035, and in the evening 1038, his weight being 10st. 3 lb. In accordance with the principle mentioned in the foregoing case, he was ordered to wear a respirator during the day, and at night to cover the respirator and the nostrils with a knitted woollen cloth. The following was the dietary in this and the succeeding case:—Breakfast: Eggs, fish, one pint of tea, and biscuits. Dinner: Steak, biscuits, and cabbages. Supper: Tea, biscuits, and milk. Three pints of sweet milk were also taken during the day. The biscuits were prepared at my suggestion by Mr. Walker, biscuit manufacturer, of this city, who, after repeated trials, made a biscuit palatable to the taste, and possessing no, or at least only a very small quantity of, starch in its composition. On the 18th of June, 1875, the patient stated that he perspired freely, and that, on awaking, his mouth was not parched but moist. The quantity of urine passed, which was carefully ascertained every day, was as follows on the dates mentioned.

	Total amount in ounces.	Specific gravity, 10 A.M.	Specific gravity, 10 P.M.	Weight.
June 18th	248 ...	1040 ...	1033 ...	—
„ 22nd	236 ...	1037 ...	1031 ...	10st. 0lb.
„ 26th	230 ...	1035 ...	1030 ...	—
„ 30th	218 ...	1033 ...	1029 ...	9st. 9lb.
June 3rd	212 ...	1039 ...	1030 ...	9st. 11lb.
„ 7th	200 ...	1033 ...	1030 ...	—
„ 11th	168 ...	1037 ...	1034 ...	9st. 10lb.
„ 18th	150 ...	1037 ...	1034 ...	—
„ 22nd	120 ...	1032 ...	1032 ...	10st. 0lb.
„ 26th	100 ...	1034 ...	1033 ...	—

After this, he went to the Seaside Home at Dunoon, and subsequently resumed his occupation in a distant part of the county, and was able satisfactorily to do so according to the account of his friends.

CASE 2.—The patient was a married man of healthy parents, and employed as a railway pointsman in a country district. He observed that he was passing more than an average amount of urine twelve months ago, but thought nothing of it until he found his sexual powers entirely gone. His urine was tested, and gave abundant evidence of its saccharine properties. On admission the quantity passed in twenty-four hours was 330 ounces. The patient complained of great thirst, gradually increasing weakness, pain in his loins, and a numbness affecting especially his fingers

and toes. With every anxiety to do what he was told, he found it extremely difficult to refrain from drinking water or any other liquid. A similar course of treatment as in the other case was adopted with the following results:—

Date.	Urine in ounces.	Sp. gr.	Sugar per ounce.	Sugar per diem.	Weight.
April 25th	... 330 ...	1034 ...	34 ...	11·220 ...	9st. 5lb.
May 17th	... 180 ...	1038 ...	34 ...	6·120	
„ 18th	... 190 ...	1035 ...	35 ...	6·650	
„ 19th	... 200 ...	1040 ...	40 ...	8·000	
„ 20th	... 200 ...	1036 ...	30 ...	6·000 ...	10st. 2lb.
„ 22nd	... 200 ...	1036 ...	34 ...	6·800*	
„ 24th	... 170 ...	1032 ...	30 ...	5·100	
„ 26th	... 130 ...	1032 ...	32 ...	4·800 ...	9st. 12lb.
„ 28th†	... 140 ...	1033 ...	32 ...	4·480	
June 1st	... 135 ...	1032 ...	32 ...	4·320	
„ 3rd	... 130 ...	1031 ...	31 ...	4·030	
„ 4th	... 130 ...	1040 ...	37·53 ...	4·880‡	
„ 7th	... 125 ...	1032 ...	31 ...	3·875§	
„ 9th	... 120 ...	1033 ...	31·5 ...	3·780	
„ 12th	... 120 ...	1027 ...	28 ...	3·360	
„ 15th	... 100 ...	1036 ...	32 ...	3·200	
„ 17th	... 100 ...	1031 ...	30 ...	3·000	
„ 19th	... 100 ...	1036 ...	33 ...	3·630	

* Urates 1·05 per cent. † Went home for three days.
‡ Estimated by Dr. Milne. § Urates ·95 per cent.

I saw the patient again on 23rd Sept. He was employed as a railway porter. His weight was 11st. The specific gravity of the urine was 1032, and the quantity voided in the twenty-four hours was 120 ounces. The usual tests indicate the presence of sugar.

Remarks.—I have not hesitated to give the details of these cases to the profession. The mode of treatment is simple, and in its originator’s hands has been attended with the most beneficial results. In the two cases I had good also accrued, though not to the same extent. The publication of the cases will, I trust, stimulate others to give it a fair trial and record the results. It has one advantage—it cannot possibly do harm.

Glasgow.

NOTES OF FIVE CASES OF ARROW-WOUNDS (RECEIVED IN THE SOUTH SEA ISLANDS), TWO FOLLOWED BY TETANUS AND DEATH.

By SURGEON ALFRED CORRIE, R.N.

(Continued from p. 620.)

CASE 2.—Edward R—, aged eighteen, seaman. This man, when on shore at Santa Cruz Island, received a punctured wound of left arm, about the insertion of the deltoid muscle, from an arrow (supposed to be poisoned, as before named), at a distance of some seven or eight yards. A little hæmorrhage took place at the time. The wound was at once sucked by a man near.

Fifteen minutes after the accident the man was seen by the medical officers on board. The wound was enlarged and washed, carbolic acid and glycerine were injected, and a stimulant in the form of brandy-and-water administered. The patient received the injury at 3.30 P.M. on August 12th, 1875. At 8 P.M. he complained of some pain about the part, a little headache, but nothing more. The wound was dressed.

Aug. 13th.—Slept but little during the night; no sickness, chills, or headache; some pain, swelling, and inflammation in the neighbourhood of the wound; tongue clean; bowels regular. Temperature 99·8°; pulse 80. Ordered linseed-meal poultice.—8 P.M.: Vomited twice after meals; more pain and swelling at the seat of wound. Continue poultice. Temperature 99·8°; pulse 88.

14th.—Passed a good night; slept well; felt rather faint when he awoke this morning; nasty taste in mouth; less pain about wound; no vomiting or headache; tongue clean. Temperature 99·4°; pulse 100.—8 P.M.: Taken food well;

wound still very painful; continue poultice. Temperature 98.4°; pulse 80.

15th.—Slept well; wound not looking so healthy; no sickness, headache, or rigors; taking food tolerably well; continue poultice. Temperature 98.4°; pulse 84.—8 P.M.: No change perceived in patient. Temperature 98.4°; pulse 72.

16th.—Passed a good night; some discharge from wound; bowels regular; continue poultice. Temperature 98.4°; pulse 80.—8 P.M.: Complains of more pain about wound; some swelling above and below, with inflammation around; not taken food very well to-day. Temperature 98.4°; pulse 68.

17th.—Slept well; wound painful; pain shooting up and down arm; no enlargement of glands in axilla; wound was laid open to let out some pus; tongue clean; continue poultice. Temperature 98.8°; pulse 80.—8 P.M.: During the day suffered from a severe rigor; some headache, thirst, anorexia, and general constitutional disturbance. Temperature 102°; pulse 112. Forty-five minims of solution of hydrochlorate of morphia ordered at bedtime.

18th.—Slept but little during the night; the least noise awoke him and made his arm jerk, an unhealthy discharge coming from the wound; part very painful, much swelling and hardness about it; skin hot, face flushed, thirst, no inclination for food, bowels confined, headache, and general feverishness. Put under chloroform, and a free incision made; much unhealthy pus let out; at the bottom of the wound, which was found to be very deep, nearly to the bone, a small piece of rough bone was discovered belonging to the tip of the arrow. It was removed, and the wound dressed. Temperature 100°; pulse 88. An enema of turpentine given; beef-tea, four ounces of wine, &c.—8 P.M.: Very restless during the day, unable to sleep in spite of hypodermic injections of morphia; the least noise or movement caused much spasm of the arm; taken but little food, drank much, vomited several times during the day; bowels not opened by enema; tongue coated with a white fur; headache. Temperature 100.6°; pulse 100. Ordered an injection of morphia.

19th.—Very restless during the night; if he fell off to sleep he was awoke with spasms in his arm. Complains of stiffness about the jaws and neck, unable to open mouth widely or protrude tongue freely, which is thickly coated with a brownish fur; unable to swallow solids, and some difficulty in taking fluids; pain about dorsal and cervical regions; slight spasmodic action of muscles of lower extremities. Temperature 99.4°; pulse 100. Suffers much from thirst; bowels constipated; passing water freely; occasional vomiting. The wound is not very painful; much stiffness and thickening about it; an unhealthy discharge, but not much of it. Redressed; enema of beef-tea, port wine, &c., given, and injections of morphia every five or six hours.—8 P.M.: Temperature 104°; pulse 120. Has slept but little during the day; suffered much from constant spasms in the arm; breathing short and hurried; difficulty in getting his breath at times; much distress in swallowing; able to take a little nourishment in small quantities; convulsions becoming more frequent and severe. Large doses of chloral hydrate were given per enema, but failed to promote sleep.

Between 12.30 and 3.30 A.M. of the 20th he suffered from two or three violent spasms. At 3.30 the first one came on, of the following nature:—Jaws firmly fixed; head and neck thrown back by the violent contraction of the muscles; body bent backwards to form almost a complete arch (opisthotonos); muscles rigid, felt like a piece of hard board; respiration hurried and laborious; pulse rapid, irregular, and fluttering at first, gradually getting smaller and smaller; countenance pale, anxious, and greatly disfigured, presenting a most pitiable appearance. The spasm lasted but a few minutes, when the patient fell back breathless and pulseless, and death closed the scene.

He suffered from slight delirium only a few hours before death; before that all his mental faculties were perfectly clear. He never lost control over bowels and bladder. The great absence of sleep was very marked in this case in spite of constant and large doses of chloral and morphia.

He died on the eighth day of the accident and some forty to forty-five hours after tetanus set in. Death appeared to take place from suffocation, in conjunction with extreme exhaustion.

(To be concluded.)

ON THE RAPID RELIEF OF NEURALGIC PAIN.

By SPENCER THOMSON, M.D.

AMIDST the various improved methods of treatment which have become established in the practice of medicine during the last twenty years none are more strikingly beneficial than those which enable us to subdue, with tolerable certainty and celerity, the agony of neuralgic pain, or of what, for want of a better word, or perhaps deeper knowledge, we call neuralgia. It needs not but to refer to works on Practice of Medicine, published not so long since, to see how little comparatively in the way of relief could be afforded during the paroxysm. For this external applications were chiefly trusted to, in the hope, often vain, that they might in some degree palliate the suffering, until the disease itself had been conquered after a longer or shorter interval by the not always certain quinine, carbonate of iron, arsenic, or other antiperiodics. All this is greatly altered, and I think we may now congratulate ourselves that a large number of cases of so-called neuralgia may be quickly, either permanently cured by the relieving remedy, such as phosphorus, or relieved, until such time as specially curative agents, or curative general treatment, have removed the tendency to the recurrence of the pain. As one of the newest of the remedies, I would first allude to one which is much too slowly making its way into the domain of practical therapeutics; I allude to the recently introduced "tincture of Gelsemium sempervirens," or yellow jasmine. In my presidential address delivered before the South-Western Branch of the British Medical Association, in 1874, I alluded to this remedy as having proved very successful in my hands, and in a paper I read this year at the Plymouth meeting I was able to state how fully it had fulfilled my expectations during the twelve months that had elapsed since my former notice of it. Directly or indirectly it had been used by me, or by my authority, in at least forty cases to which it was applicable, and with almost constant success. In using the word "applicable," I do so in accordance with my own experience that the remedial power of the gelsemium seems confined to those branches of the trifacial nerve supplying the upper and lower jaw, more particularly the latter, and more especially when in either jaw the pain is most directly referred to the teeth or alveoli; indeed, I can scarcely recall an instance of the above in which relief was not speedily and thoroughly given. The usual expression of the patient has been, "It acted like a charm." In illustration I give one case.

On Sunday afternoon, June 20th, the housemaid of a friend, a retired medical man, came to me with a note from her master, stating that she had been suffering from agonising pain, of what was thought to be toothache, for six-and-thirty hours. Nothing gave relief, and no dentist could be found to remove the only suspicious tooth. I sent her home with a bottle of gelsemium tincture, which I keep for home use, desiring that she should have twenty minims at once, and twenty more within two hours if not relieved. Her master sent me a note in which he stated that the patient had experienced immediate relief.

The above case was not one of distinct toothache, but rather of pain affecting the alveoli generally of the affected jaw. Still, even in toothache seated in one tooth, the remedy gives relief, provided, of course, abscess is not actually in formation. I have observed above, that, according to my own experience, the beneficial effect of the gelsemium is confined to neuralgic pain of jaws generally, and of teeth and alveoli more particularly; and a short paper, in the *Practitioner* for August 1875, by Dr. Gamgee, of Birmingham, supports the view. In September, 1875, there were published some cases of other neuralgias, even one of sciatica, in which cure was effected, under the care of Dr. A. Jurasz, of Heidelberg. Should the remedy indeed prove generally useful in neuralgia, it will of course give it additional value in our *materia medica*, but at present it has gained no such position, either according to my experience, or, as far as I can learn, that of most others.

In the notices I have met with on the use of the gelsemium, the doses quoted seem all too small. I now al-