the index determinations (see Fleming's paper in *Practitioner* May, 1908). My patient's serum would retain this property for months in succession and then lose it.

The pain in the rib ceased on the second day after the first inoculation, and returned only at rare intervals and in a very transient manner. On the ninth day the nausea was reported as almost nil, occurring only once or twice in a slight degree. The asthenia and depression was still very marked on the fourth day, but on the ninth the notes read, "On the whole, decidedly better." The effects, if any, of a first injection of bacterial vaccine being very important to observe, administration of suprarenal extract was deferred until the above notes were recorded. Fifteen grains daily were then given for a period of three months, and as the tuberculin injections were at first at intervals of ten days or more, it was fairly easy to form a judgement as to their relative effects. At first the suprarenal extract was thought to have some influence in preventing the return of nausea, but at the end of three months, no noticeable result appearing attributable to this remedy, it was discontinued.

The dose of tuberculin was after a time increased to 1000 mg., and this was eventually given weekly for several months. During the first year, at any rate, almost every injection produced some malaise for twenty-four hours; afterwards this effect passed off, and larger doses given at intervals of four days were tolerated well with good results, whilst for the last two months doses up to 1000 mg. have been given every fourth and lately every second day. Slow but sure progress was apparent from the first, and this was sufficient to ensure the patient's return to Bath after two or three home visits of a month each, during which the improvement was scarcely maintained. The asthenic symptoms, and rarely nausea, were still complained of, but about six months ago much more rapid improvement set in, the patient began to say she felt more like her old self, and contemporaneously with this it became apparent that the patches of leucoderma were getting larger and running together, and that fresh areas of clearance were presenting. A photograph was secured last September, and another was taken last week. On comparing them this point will be easily recognized.

The present condition (April, 1909) is that the pain in rib, after becoming less and less frequent, has not been felt for three months; the knee still aches after walking, but long walks are taken without fatigue; the hand grips are normal; there are no attacks of nausea or diarrhoea; the mental depression has within the last six months entirely disappeared; the tremor and staggering disappeared eighteen months ago; there have been no more syncopal attacks; the bodily odour is gone; the catamenial intervals have become normal; and the post-nasal discharge, which used to fill half an egg-cup each morning, is less than half this quantity.

Turning from clinical to economical considerations, the improvement will be more readily credited. The mother having lost one daughter from phthisis after all sorts of treatment, wished this one to remain at home and take her chance under good climatic conditions when she learnt the usual disappointing results of our ordinary therapeutic measures in Addison's disease. At each home visit of the daughter the mother became more willing that the tuberculin treatment should be continued, and now writes me that the patient is "quite her own old noisy self again," and consents to a still further extension of the treatment if I think it necessary. The patient, however, feels quite well enough to resume her old life and home duties, and it is so arranged. She objects to take tuberculin by the mouth or hypodermically without my supervision, and will resume the trial of suprarenal substance. As in a favourable event the case will pass out of my hands, it seems a fitting time to record it. As to prognosis, I am not able to say a word.

Postscript, May 1st, 1911.—At the discussion on the above paper no one questioned the diagnosis. In conversation Mr. Pagan Lowe remarked to me that, whilst thoroughly agreeing with the diagnosis, he would like to know the further history of the case in, say, two years' time. Feeling myself that much of the interest lay in the future, I decided to suspend publication. I now publish the paper as read, and am able to add the following note, having just had an opportunity of examining the patient during a short visit to Bath:

The second trial of suprarenal extract was terminated, like the first, after a couple of months, as it was thought to disagree, and no definite favourable effect was noticed. By September, 1909, the patient was definitely not so well, and returned to Bath for four months, during which she had thirty-four inoculations of 1000 mg. T.R. She returned home very well in January, 1910, and since then has paid only three short visits to Bath—March 28th to April 7th, 1910; November 14th to December 20th, 1910; and April 6th to 25th, 1911; receiving six, twelve, and four inoculations at the several visits. For the past fifteen months, therefore, she has remained in good health and spirits, has taken her full share in somewhat anxious household duties, and her general condition has decidedly improved instead

of showing a tendency to fall back. Present condition (April 25th 1911): Pulse 72, now and then a little irregular; no bruit; blood pressure 108 mm.; no nausea, no tremor; hand grips normal; weight 9 st. 8 lb. Rarely has headaches, and gets about as of old. Has had a trying winter with nursing, etc. There is not much change in the outlines of the lighter areas (that is, a photograph would resemble the second of the two former ones), but there is a noticeable further general lightening of the pigmentation, so that friends tell her the face is much less dark than even a year ago. Palmar pigmentation, and that of the oral and conjunctival mucous surfaces, can no longer be traced.

Postscript, March 7th, 1912.—The patient remains quite well, and little further change has taken place in the details of the pigmentation, which is, however, generally lighter.

The cure has not suffered interruption in spite of the anxious home conditions occasioned by the illness and death of the patient's father.

[Photographs sent by the author show the pigment change, but are not sufficiently strong to give satisfactory reproductions.]

STATISTICS OF A SERIES OF EIGHTY-SIX CASES OF PNEUMONIA, WITH A NOTE ON ALCOHOL IN THE TREATMENT.

By ARTHUR T. JONES, M.R.C.S., L.R.C.P.LOND.,
MOUNTAIN ASH.

It would doubtless be interesting if general practitioners were to record series of cases of the more common ailments occurring in their practices, for I am sure that there are many important factors that may be observed and notified as being useful and helpful from a point of view of diagnosis and treatment as it presents itself to the general practitioner, and to compare them with statistics as given in textbooks, which, as a rule, are statistics of cases seen and treated in hospital practice, and thus it becomes interesting to know whether cases treated in general practice and hospital practice give similar results, or whether they differ very materially, and whether one may deduce any points which would account for the different results obtained, if there are any. With this object in view I beg to record a series of cases of pneumonia which have occurred in my practice. The cases, which were of the lobar type, are 86 in number, and are tabulated as follows:

Eighty-six Cases—54 Males and 32 Females.

Age.	No. of Cases.	No. of Deaths.	Per-centage.
Under 10 years of age ...	10	3	30
Between 10 and 20 years ...	11	1	9
Between 20 and 40 years ...	39	9	23
Between 40 and 60 years ...	21	7	33
Over 60 years of age ...	5	3	60
Total ...	86	23	26

From these facts it will be seen at once that the disease is more common in males than females, and it occurs more frequently between the ages of 20 and 40, and that the mortality-rate increases with each decade, with the exception that the rate of mortality under 10 years of age is high, but the highest being over 60 years of age, it being at that period over 60 per cent. The average mortality-rate in the series is 26 per cent., and this compares favourably with the statistics given by Professor Osler in his *Textbook of Medicine*. Professor Osler says: "Hospital statistics show that the mortality-rate ranges from 20 to 40 per cent. Of 1,012 cases at the Montreal General Hospital the mortality was 20.4 per cent. Of 3,969 cases treated at the Charity Hospital, New Orleans, the death-rate was 38 per cent. Our mortality at Johns Hopkins Hospital was 25 per cent. in the whites and 30 per cent. in the coloured. In 704 cases at the Pennsylvania Hospital the mortality was 29 per cent., and at Boston City Hospital it was 29 per cent. in 1,443 cases. The mortality-rate in private practice varies greatly. R. V. Howard treated

170 cases, with only 6 per cent. of deaths. Fussen has recently reported 134 cases, with a mortality of 17.9 per cent. According to the analysis of 708 cases at St. Thomas's Hospital the mortality progressively increases from the twentieth year, rising from 3.7 per cent. under that age to 22 per cent. in the third decade, 30.8 per cent. in the fourth, 47 per cent. in the fifth, 51 per cent. in the sixth, and 65 per cent. in the seventh decade."

There are one or two points observed in connexion with this series of mine that are of interest, one being the direct infectious nature of pneumonia, there being two well-marked instances occurring in different members of the same family, three members in each case having the disease within a few days of each other; the later ones having been nursing and in attendance upon the earlier ones. In one instance one died and two recovered, and in the other instance the three died. I may say that in this latter instance I have reason to think that the disease was of a septic type, and the subjects were bad ones, being very delicate and of weakly constitution.

The other point I wish to make note of is about the value of alcohol in the treatment of pneumonia. It is held by many medical men that alcohol should form a part of the routine treatment of this disease, and formerly I may say that I held that view, and I prescribed alcohol much more than I have done latterly, and I have divided my series into two parts—those of my former treatment and those of my latter treatment—and on comparing the results I am convinced that it is unwise and unnecessary to prescribe alcohol in every case of pneumonia, for it is possible that it may, and does, do more harm than good in many cases.

The result in each category is as follows:

First Series.—36 cases with 14 deaths, or 38 per cent. mortality.

Second Series.—50 cases with 9 deaths, or 18 per cent. mortality.

The result in the second series will be seen to be much more successful, and if one excluded the three cases above referred to, as being of an exceptionally septic nature, the number of deaths in the second series is reduced to six, and the mortality-rate reduced to 12.7 per cent. It may be argued that this is a mere coincidence, but, in my opinion, it is something more; but, admitting it to be a coincidence, the fact remains that the result is better without the routine treatment by alcohol. I would mention that I have not excluded alcohol entirely, but in cases showing signs of cardiac failure by increase in pulse-rate and weakness thereof, I would prescribe alcohol, but would never rely upon it without other cardiac stimulants—namely, strychnine, digitalis, ammonia, etc., but my observation was this, that cases requiring alcohol generally proved fatal notwithstanding.

Another point of great interest is this. Four of the cases in this series occurred in persons I knew to be heavy drinkers—three men and one woman—and it is held by many if not most medical men that it is dangerous suddenly to withhold alcohol from any one accustomed to taking it, especially if that person is the victim of any disease, such as pneumonia particularly, but the result in these four cases (the number is small, I admit) is sufficient proof that this belief is fallacious, for these were treated without any alcohol at all, and the four cases recovered; whereas I firmly believe that had alcohol been administered, they would in all probability have developed delirium, and the result very likely would have been different to what it was, for it is possible that in cases of delirium accompanying pneumonia, the delirium may be as often caused by the alcohol administered as by the disease.

In conclusion, I would say that having regard to the fact that alcohol is of very little help, if any, in the treatment of pneumonia, and that it is expensive, and inasmuch as many patients and their friends are poor and can ill afford to spend money on an article which is of very doubtful value, to say the least, it behoves us as a profession to be very sparing in prescribing it, and only to do so when absolutely necessary, and when considered likely to be beneficial, at the same time bearing in mind that one has a duty to consider the economic side, and to remember that the money so spent could be turned to better account on other articles of nutriment which would be of greater benefit and help in combating the disease, and in securing the recovery of the patient.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

SWEETS IN CHILDHOOD: SUGAR CANE.

In a previous communication the physiological necessity for sweets (or sugar) in childhood, and also the possible pathological effects arising therefrom have been alluded to. It was then pointed out that it was necessary in order to obviate the lactic fermentation of sugars in the mouth, and especially cane sugar, that they should be combined with a weak organic acid in order to induce reflexly a greater flow of protective saliva, and also to precipitate the mucin which in its viscous form binds the sugar to the teeth.

The example of native children eating large quantities of sugar cane is frequently quoted as evidence that cane sugar cannot be productive of dental caries since such children have for the most part quite healthy teeth. A sample of fresh sugar cane has recently been received from Fiji (in a hermetically sealed case), and has been tested with a view to ascertaining its possible effect on the teeth. The tests applied were those which have previously been used in connexion with a large number of other food-stuffs, and the results of which have recently been published in the author's *Prevention of Dental Caries and Oral Sepsis*.

The following are the observations as regards sugar cane:

1. The juice of the sugar cane is markedly acid.
2. The saliva induced reflexly by the mastication of cane sugar was collected by means of the cannula and segregator from one side of the mouth; it amounted to 3.5 c.cm. per minute or 7 c.cm. for the whole of the glands. The alkalinity of the saliva was 0.94 unit (c.cm. ^NNaOH) per c.cm., or an alkalinity index of 6.58. This is about six times that invoked by bread and butter.
3. The debris remaining in the mouth and on the teeth was collected and incubated for twenty-four hours and at the end of that time showed a mean alkaline reaction of 0.31 units, thus placing it between apple (0.3) and orange (0.5) from a protective point of view.
4. The sugar cane is, of course, very fibrous, and it has been suggested that immunity to caries may be due to this fact. It may be so to a certain extent, but is more likely due to the acid reaction of the juice. For instance, (a) sugar cane was masticated thoroughly, including the fibres, and debris collected and incubated; the alkalinity developed was equal to 0.26 unit; (b) sugar cane was imperfectly masticated, but the juice thoroughly sucked out, and the reaction of the incubated debris again estimated, when it amounted to 0.37 alkalinity unit; whereas a 10 per cent. solution of refined cane sugar (that is, minus its acid) gave rise to an acid formation of 0.1 unit.

It would therefore appear that more protection is afforded from the acid juice than from the fibrous elements, which are distinctly "woody" and devoid of flavour and, therefore, of any reflex stimulating effect upon the salivary glands.

H. P. PICKERILL, M.D., M.D.S.

Dental School, University of Otago,
New Zealand.

A METHOD OF REDUCING DISLOCATION OF THE JAW.

On March 11th a young woman was brought to me for the fourth time with dislocated jaw. On each of the three previous occasions reduction had been accomplished, though with considerable difficulty, in the usual fashion as described in the textbooks and lectures. On trying the same proceeding on this occasion, I hurt both my thumbs considerably, but could make no impression on the dislocation. I therefore tried the following plan, which suggested itself to me: Standing *behind* the patient, with the patient's head against my chest, I placed the right thumb in the mouth far back on the right side, at the same time grasping the chin with the left hand. I found I could then readily depress the jaw with the right hand, and the left guided the right condyle into its socket. Reversing hands, I did the same on the left side without any trouble.

This procedure is so much more easy, direct, and certain than the textbook method that I think it scarcely possible that it has not been used by someone before myself. At all events, I can recommend it confidently.

Harston, Cambridge. W. J. YOUNG, M.R.C.S., L.R.C.P.