

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below.

L'Institut a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

- Coloured covers /
Couverture de couleur
- Covers damaged /
Couverture endommagée
- Covers restored and/or laminated /
Couverture restaurée et/ou pelliculée
- Cover title missing /
Le titre de couverture manque
- Coloured maps /
Cartes géographiques en couleur
- Coloured ink (i.e. other than blue or black) /
Encre de couleur (i.e. autre que bleue ou noire)
- Coloured plates and/or illustrations /
Planches et/ou illustrations en couleur
- Bound with other material /
Relié avec d'autres documents
- Only edition available /
Seule édition disponible
- Tight binding may cause shadows or distortion
along interior margin / La reliure serrée peut
causer de l'ombre ou de la distorsion le long de la
marge intérieure.
- Additional comments /
Commentaires supplémentaires:

Continuous pagination.

- Coloured pages / Pages de couleur
- Pages damaged / Pages endommagées
- Pages restored and/or laminated /
Pages restaurées et/ou pelliculées
- Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées
- Pages detached / Pages détachées
- Showthrough / Transparence
- Quality of print varies /
Qualité inégale de l'impression
- Includes supplementary materials /
Comprend du matériel supplémentaire
- Blank leaves added during restorations may
appear within the text. Whenever possible, these
have been omitted from scanning / Il se peut que
certaines pages blanches ajoutées lors d'une
restauration apparaissent dans le texte, mais,
lorsque cela était possible, ces pages n'ont pas
été numérisées.

Original Communications.

Three Cases of Diphtheria. By FRANCIS WAYLAND CAMPBELL, M.D., L.R.C.P., London; Professor of Physiology, University of Bishop's College.

Read before the Medico-Chirurgical Society of Montreal, January 29th.

MR. PRESIDENT AND GENTLEMEN,

Fortunately for us, diphtheria is a disease of which we have seen but little in the City of Montreal. There never, to my knowledge, has been an epidemic of it in our midst, and the terrible experience of it which at various times has fallen upon St. John, N.B.; Prince Edward Island; London, Ont.; Brooklyn, N. Y., and Boston, has, fortunately, thus far been spared us. The occurrence, however, very recently, of some seven or eight cases, with six deaths, in a fashionable terrace, (Dufferin Place, St. Catherine Street, west,) situated on the very outskirts of the city, and apparently surrounded by all that contributes to salubrity—has startled the city. The almost complete obliteration of one family, and the heavy losses in another, has drawn forth popular sympathy in a marked degree. It has been my sad duty to be in attendance upon three of these cases, and their details I propose to bring before you this evening.

On the evening of Tuesday, the 5th of January, I was sent for to see Herbert B., son of T. B. Warren, Esq., aged four years and a half. (This little patient, I may observe, had only been one week from under my care, having for the previous six weeks been confined to the sofa, for extensive and severe scalds of both feet.) I found him slightly feverish; temperature of $100\frac{1}{2}$; tongue coated with a thin white fur; eyes heavy; pulse 104 . As diphtheria had, about six weeks previously, carried off three children in the second house from them—same terrace—I examined the throat; there was no swelling externally, and I was unable to detect anything from an internal examination. I prescribed a mixture of liquor ammonia acetatis, with Fleming's tincture of aconite.

January 6th, 12 noon. Patient still feverish, although he passed a fair night; temperature has risen to $102\frac{1}{2}$; pulse 120 ; tongue very much like what it is in scarlet-fever; papilla enlarged, and covered with a thick creamy fur; throat is sore; glands much swollen; an internal examination reveals both tonsils congested and swollen; but no

evidence whatever of diphtheritic deposit. An examination of his body revealed a scarlet rash, on the inside of both thighs. I confessed my inability to make a positive diagnosis, but leaned rather to the idea of scarlatina. I directed the mixture ordered the previous evening to be continued; goose oil to be applied hot over the swollen glands, and then covered with flannel, and, if possible, every hour or two to get him to inhale steam. I desired him to be placed in bed, but as his mother said he would not remain in it, a bed was made for him on the sofa in the sitting room. A large dancing party having been arranged for this evening, I directed every precaution should be taken against his being exposed to any draught of cold air, and if any change should occur that I should at once be notified.

January 7th.—Received a message at ten o'clock, to make an early visit, which I did. On reaching the house, was informed that he continued in much the same state as described above, all yesterday afternoon and evening, and that he slept quietly during all the noise of music and dancing. At four, a.m., as his parents were retiring, the last guest having gone, he awoke and spoke in a hoarse whisper;—he continued restless all the rest of the morning, and towards eight o'clock the breathing became involved. I found his condition as follows:—patient greatly altered in appearance; skin of a dark, dusky hue; eyes sunken; Parotid glands greatly swollen; loud croupy cough, with the loud stridulous breathing of a well marked case of croup. On examination of the throat, I found both tonsils covered with large white patches—evidently of very recent formation, for they were milky, and opaline in appearance.

Although I had never previously seen a case, I believed I had to deal with a true case of diphtheritic croup. I informed the parents of the gravity of the case, and asked for assistance in its management. In the meantime, however, I placed him on a mixture of acetate of ammonia, vinum ipecac., and syrup of squills, with cold cloths around the neck, covered with oil silk and changed every hour. To have plenty of steam in the room, which was accomplished by means of large open tin dishes, containing boiling water—frequently renewed. At one p.m., patient seems slightly easier, but the patches on the tonsils are increasing in size; but little air entering the lungs. At 5.30 p.m., Dr. R. P. Howard saw the child in consultation, and by this time the symptoms were all very considerably aggravated. My diagnosis was confirmed, and the following treatment decided upon. Ten drops of the tincture of the muriate of iron, in glycerine, every three hours. The

larynx to be brushed out, by means of a probang, with a solution of nitrate of silver, forty grains of the salt to the ounce of water; lime water spray, one to sixteen of water, to be used by means of a hand atomizer, every few hours; with an emetic of sulphate of copper, as indicated, and *wine and beef tea ad libitum*. Between seven and eight o'clock, I returned, and took the management of the child in my own hands. By this time every fluid attempted to be swallowed was instantly ejected, and the dusky hue of the skin, already spoken of, was more distinctly marked. In fact, there was marked exacerbation of all the symptoms. I applied the solution of nitrate of silver by means of a probang, as decided upon at the consultation. The dyspnoea, which followed its application, was so desperate that, for a few moments, I thought life would terminate. At brief intervals, wine and beef tea were given liberally—but little was retained, however. At nine, p.m., applied to the fauces, by means of a hand atomizer, lime water spray of the strength of one to sixteen of water. It did not produce any gagging; in fact it seemed to be liked by the little patient, as he subsequently twice asked me for its repetition.

11 p.m.—Child tossing about greatly. No cough now whatever; simply the loud whistling respiration. The sulphate of copper emetic was now given, and although copious emesis ensued, no shreds of membrane came up, nor was there any relief afforded.

12 p.m.—Again applied the lime spray. As food is now retained better, I devoted much of my time to giving wine and beef tea.

1 a.m.—No improvement. The dyspnoea is painful to witness; child clutches at his throat, and puts his fingers far into his mouth.

2 a.m.—Pulse, which has kept pretty steady at 150, is now small and slightly irregular. Changed from wine to brandy; this he takes readily and most of it, and other fluids are now retained.

3 a.m.—Respiration worse; pulse rather better since brandy; gave again sulphate of copper, which resulted in copious vomiting, but afforded no relief to the fearful dyspnoea.

6 a.m.—Patient is failing; breathing very whistling; pulse small and feeble. Will not take any medicine, but eagerly takes fluid nourishment in almost any quantity. Gave instructions to give him at least a tablespoonful of brandy every hour, and at 6.30 left for home. Returned at 8.30, and found my patient sinking; is gradually becoming cyanotic. The tonsils and pharynx are now well covered with diphtheritic membrane. Dr. Howard met me in consultation at 10.30, when all hope was abandoned.

The struggles for breath about mid-day were most heart-rending. About 3 p.m. he became unconscious and shortly after passed quietly to his rest.

CASE II.—While attending to the above patient, and sitting by his side at midnight—his little sister, Maple, aged two years and four months, who had gone to bed about seven o'clock, apparently in her usual health, awoke somewhat suddenly, crying bitterly. I was asked to see her, and found her skin hot and dry; pulse 160; glands of the neck swollen, and voice somewhat husky. Skin of thighs covered with an erythematous rash. Examined the throat, and found the tonsils much congested; the examination was conducted with difficulty, but I was unable to detect any evidence of diphtheritic membrane. I was convinced, however, that this was also going to be a case of diphtheria. I accordingly steamed the throat well, and applied hot oil to the swollen glands, after which she fell asleep. At 1 a.m., child awoke screaming, and almost immediately went into a convulsion, which lasted fully five minutes. Put feet in warm water and applied cold to the head. 1.30 a.m.—Just as the child was beginning to appear conscious, another convulsion supervened, and lasted about the same time. When she came out of it, I gave her ʒ ii. of Ol. Ricini. At 2.10, another convulsion, when I put her on a mixture containing bromid of potash, tinct. of ferri and spts. of chloroform. From this till 6.30 had four convulsions, the last being about five o'clock and not very severe. Before leaving the house, which I did at 6.30 a.m., examined the child's throat, but could not distinguish any diphtheritic membrane, although it was much congested.

Returned at 8.30 a.m. During my absence the child had two more convulsions. An examination of the throat now revealed two small patches of white opaline membrane—one on each tonsil. At 10.30 Dr. Howard met me in consultation, and confirmed my diagnosis. Decided to place the child on ten drops of the tincture of muriate of iron, every three hours, with beef tea and milk, and to apply to the membrane, by the means of a camel's hair pencil, the liquor ferri perchloridi, one to three, which I did shortly afterwards.

January 8, 5 p.m.—Dr. Howard, who was to have met me at this hour, having been called to Sherbrooke, was unable to do so. The membrane has extended considerably since my last visit and now covers the tonsils and pharynx. Again applied the liquor ferri perchloridi. Is able to swallow with difficulty—part is ejected; a considerable portion of the

nourishment and medicine taken is retained. Is very restless; no more convulsions. Pulse 160.

9 p.m.—Dr. Kennedy saw the case with me this evening. Membrane has extended slightly. Child has been very restless. The eruption, like that of scarlet fever, is now very well marked on inside of thighs. Applied the liquor ferri perchloridi to throat, in form of spray, by means of the atomizer, and advised hot camomile poultices around the throat, to be changed every hour and a half, and to have half an ounce of brandy, in divided doses, every three hours. To push nourishment regularly during the night. Dr. Kennedy remained in charge all night, and reported in the morning a restless early portion of the night—the after portion more quiet.

I will not further report this case in detail; but will say that the treatment above mentioned, with the addition of a quarter of a grain of quinine to the iron mixture, was faithfully carried out. There was no visible extension of the membrane, and by Sunday the child swallowed well and took food readily. On Monday and Tuesday the tonsillar inflammation seemed abating, and considerable pieces of membrane were thrown off, and discharged. The spirits of the child improved wonderfully, and it would sit up in bed, and asked for its playthings. I was hopeful to a degree of the result. On my visit on Wednesday morning I was told that toward daylight she had got restless, and had coughed several times distinctly croupy. Examination of the throat showed increased congestion of tonsils but no evidence of fresh membrane. The breathing was good, and the air entered the lungs freely. I, however, was anxious, and returned at one, p.m., but found patient in about same condition. Returned again at about five, p.m., when I was informed that she had slept a couple of hours, and had coughed several times, and not so croupy. At eight, p.m., when I made my visit, the change noticeable in my little patient was most decided. The restlessness was marked, cough loudly croupy, and breathing rapidly becoming stridulous. Examination of throat revealed no change from last report. Dr. Kennedy, who had seen the case with me regularly twice a day, and myself, decided to ask for additional advice, and Dr. Howard was sent for, and at nine, p.m., met us in consultation. We agreed as to the extension of the membrane down the larynx and to the desperate character the disease had now assumed. Treatment similar to that adopted in Case No. I, was decided upon, save that no attempt was made to brush over the affected part with solution of nitrate of silver. Dr. Kennedy, who remained all

night, desisted from the emetics after one administration, as the collapse that followed their action was so serious as to threaten life. The symptoms gradually grew worse, till all the symptoms of diphtheritic croup were present, and at eleven, a.m., on Thursday, the patient died.

CASE III.—Mrs. W., mother of the above two children, was a lady twenty-five years of age, of delicate nervous organization, and especially prone to throat and chest affections. Ever since her marriage and arrival in this country, over five years ago, I have been her medical attendant, and have some five or six times had to attend her for mild attacks of tonsillitis, induced upon the slightest exposure—and several times also for bronchial affections. In December last she was confined to her bed for several days with a very mild attack of tonsillitis, from which she recovered rapidly—her general health, however, was not the best. In August last, she crossed the Atlantic, with a view of re-establishing it; but returned to Canada, after two weeks sojourn in England. This hurried trip, with the cares and anxieties of her three young children, who accompanied her, I fear did her little if any good. I mention these facts to shew that the general condition of the *vis medicatrix nature* was not by any means the best. On the evening of Wednesday, January 6th, a large dancing party was given by this lady, and she was dressed with her chest and throat not so well protected as usual; this she herself informed me. When about to retire, at four a.m., on Thursday, the sudden illness, as described in Case I, of her eldest boy, kept her from getting any rest. She remained at his side all Thursday, and nothing would induce her to leave him during Thursday night and Friday morning. Noticing her kissing her child on Thursday evening, I positively commanded her to desist; telling her of the great danger which she was running—but although she promised me faithfully to do so, her maternal instincts would at times overcome her, and she would again tenderly kiss her dying child. Early on Friday morning she said to me her throat had been feeling uncomfortable for several hours. I examined it; but, as in the case of her second child, could observe nothing beyond what I had often before found her suffering from, viz., ordinary tonsillitis. When I returned at 8.30, it was to find her throat greatly worse; both tonsils much more congested than at my previous examination, and both covered with large patches of diphtheritic membrane; tongue coated; slight heat of skin; pulse 140, and small volume. Dr. Howard saw her at 10.30, and confirmed the diagnosis. We decided

to apply the liq. ferri perchloridi, 1 to 3, to the membrane, by means of a camel's hair pencil, and to give 3 ss of the tincture of the muriate of iron in conjunction with spts. of chloroform every three hours. Beer at intervals, and large quantities of potas. chl. (3 iss to Oj) in lemonade.

11.30 a.m.—Returned to apply the liq. ferri perchloridi, and found the membrane has rapidly extended. It has now passed over the left tonsil, and covers the pharynx, and forward as far as the velum.

5 p.m.—Is very restless; throws up everything; glands greatly swollen; no further extension of membrane; pulse 164. Hot poultices of linseed ordered to be applied to the throat and changed every hour and a half.

9 p.m.—As mentioned in the other cases, Dr. Howard having been called out of the city, Dr. Kennedy joined me in attendance on Mrs. W. She is still very restless; but there is but little, if any, extension of the membrane. Pulse is weak and difficult to count; but, as near as I can judge, is about 170; skin is of a dusky hue, and eyes are very heavy; still vomits everything she takes. To have additional water with her iron mixture, and in place of beer, which she cannot take, is to have brandy and water of the strength of two glasses to a tumbler. This quantity may be taken every three hours, with beef tea and broth at intervals. Applied the liq. ferri perchl., 1 to 3, to the throat and fauces, by means of a hand atomizer. Dr. Kennedy remained all night, and reported to me in the morning that she passed a restless night, but that the brandy and water was not rejected by the stomach, and that towards morning the beef tea had been retained.

10.30 a.m.—Patient is very prostrate. Slept about an hour this a.m., which is the longest sleep she has had for three nights; face very dusky; eyes sunk; tongue heavily coated, and is black from the iron; pulse is 170, and decidedly irregular in volume. All nourishment is now retained. Bowels have not moved for three days. To have an enema of warm water. Although no extension of membrane, again applied the iron spray. To have a gargle of chl. of potash and muriatic acid, which she is to use every two hours. Iron mixture as before; it is now retained; other treatment continued; but as she complains of the weight of the linseed poultices, ordered camomile poultices instead.

9 p.m.—Got several hours sleep after the action of the enema; looks the better of the rest; face not so dusky; eyes are brighter; voice husky; no new development of membrane, and a distinct line of demarcation is seen all around it; pulse 168. Has

taken beef tea and chicken broth, also ʒvj of brandy and 3 drachms of chlorate of potash since the morning. Again used the spray, but very slightly.

Sunday, January 10.—Slept but little last night; not more, altogether, than a couple of hours. Has followed (under care of an experienced nurse now in attendance) all the directions given. Experiences much relief from the gargle, and several pieces of membrane of considerable size have become detached; one piece fully an inch long and three-quarters of an inch broad, was kept by the nurse and shown to Dr. Kennedy and myself. Has taken the brandy and beef tea regularly, and in quantities; pulse 164; a slight decrease since yesterday.

9 p.m.—Passed a fair day; says she feels better; large quantities of the membrane have been discharged to-day. Is able to swallow better. Pulse the same as morning. To push nourishment at regular intervals during the night.

January 11.—Slept about four hours; says she is better and looks improved; throat is cleaning, although there is but little change in its congested appearance. Membrane still being discharged in quantity; glands slightly less swollen; pulse 160. Continued as before, with the addition of a grain of quinine to each dose of the iron mixture.

9 p.m.—A good day; slept some; throat about the same. Poultices discontinued and two layers of flannel wrapt around the throat.

January 12, 10 a.m.—Passed a fair night; throat cleaned considerably; pulse 152.

9 p.m.—Asked to have the brandy changed to champagne, which was granted; says she feels better. Pulse is slightly higher, being 158; still keeps bringing up large quantities of membrane.

January 13, 10 a.m.—Nurse informed me that after the champagne did not seem so well; so did not repeat it but returned to brandy. Slept some; but altogether the night was a very restless one; face is again dusky; eyes are sunken; the conjunctiva slightly jaundiced; tongue livid; pulse 138, and very small. Bowels not having moved, ten grains grey powder ordered, to be followed in three hours by ʒss seidlitz with a teaspoonful of sulphate of magnesia in it.

2 p.m.—Bowels moved once; face dark, and lips blue; fingers quite blue up to first phalange; examined lungs, found the respiratory murmur entering freely every portion. Heart's sounds normal; pulse 136.

5 p.m.—Bowels moved twice since last visit, and feels herself better; pulse is 126, and fuller than 2 p.m.

9 p.m.—Dr. Howard, being in the house to see Maple, saw Mrs. W.; examined lungs and heart, and confirmed the opinion given by me at two, p.m., visit; examined throat and coincided with Dr. Kennedy and myself, that it was doing well. Her condition was certainly much better than it was in the morning. So, after consultation, we came to the conclusion that all was doing well. Dr. Kennedy remained all night.

January 14.—At seven this morning, Dr. Kennedy came to me on his way home, and said that he did not at all like her condition. She had been very restless, and complaining of colicky pains in the bowels; and that the jaundice had increased; while the pulse had been falling rapidly, till it stood at 78. I immediately went up, and found a very great change from the previous evening; face very livid; lips blue; eyes sunk; tongue and fauces deep livid color, while tongue was sensibly cold to the touch; with all this there was a fair temperature even of the extremities.

10 a.m.—Dr. Howard met Dr. Kennedy and myself. He at once saw the change from the previous evening, and we came to the conclusion that the poison was acting on the heart and lungs, and that her condition was most serious. Gave special instructions to the nurse with regard to giving nourishment and stimulants frequently, and placed her upon the following mixture: \mathcal{R} quin. sulph. gr. xxxii, acid sulph. arom. ʒ ss, tr. nux vom. ʒ iiss, inf. digitalis ʒ ii, aqua ad viii. A tablespoonful every three hours. To wash out her mouth with warm water.

12 m.—No change apparent, save that the extremities are somewhat warmer, and the pulse has risen to 84, but is very small.

2 p.m.—Has become convinced that her baby is dead, and the event has visibly affected her, as fulfilling a dream, which I will shortly allude to. Is very restless; pulse 84, and irregular in rhythm. Other symptoms as before. Asked whether she would recover, and when told that everything depended how she kept up her spirits and took nourishment; she replied that she would take anything we gave her.

4 p.m.—When Dr. Kennedy and myself entered the room we were struck with the change which had taken place. Patient's countenance altered in appearance; eyes deeply sunk in head, and face very livid; lips almost black; congestion has now extended over the fingers, and embraces the hands; tongue black, even where the coating had disappeared, and cold. Skin is covered with perspiration, which is warm. Respirations are shallow, every eighth or

tenth respiratory act being deep and prolonged, and are 32 per minute. Heart sounds are fairly clear and distinct; if any change, it is in the first sound being slightly softer than natural. Pulse still 84, but irregular about every six beats. There was now no question whatever in my mind that my patient's hours were numbered. Dr. Howard was to return at 9 p.m., but I feared she might not last till then; so leaving Dr. Kennedy in charge, I went to get him, which I did after his lecture, and he returned with me. The result of the consultation was the conclusion that all our efforts had been futile, and that a very few hours would close the scene. We, however, determined to continue nourishment and medicine. From this time, till after eight o'clock, patient was very restless, flinging her arms constantly about her. At a quarter to nine she swallowed some brandy and water, and spoke to the nurse. A few minutes after she was seized with a severe convulsion, which the nurse tells me did not last more than two or three minutes, and in it she died. Thus was a mother and two children cut off in the brief space of one week. I have alluded a few moments ago to the fulfillment of a dream, and the facts are really such that I cannot forbear mentioning them. On Monday morning, the 4th of January, Mrs. Warren awoke herself crying, and at once informed her husband that she had dreamt that two small coffins were being carried out of her house, and that he was walking behind as chief mourner. On the Tuesday, when I saw her little boy for the first time, she told me of it, but I laughed at it. Subsequent events proved its terrible reality.

It becomes an interesting question, as to how diphtheria reached this family, as there was complete non-intercourse between the house in the terrace where the disease first made its appearance. My own idea is that it came to them in the following way. So nervous was the father of this family to have his house thoroughly healthy, that he, towards the end of December, employed a plumber, who connected with the soil pipe in the closet a pipe which he inserted into the chimney, so as to convey away any noxious gas. While this was being done for a portion of a day, the soil pipe was open, and free entrance was afforded to the miasm; for this soil pipe communicated with the drain into which the excrement and expectorated matter of the first three cases was emptied.

Again it is said, that the cook and the housemaid, who are sisters, and whose family reside at Point St. Charles, lost two young members of their family from diphtheria. It is true that two young children

died in their family in December last, it is said of croup; but, although I have attempted to solve the problem, I am unable to say whether it was diphtheritic or not, although the mother assures me there was in neither case swollen glands, a fact which leads me to think it was ordinary membranous croup.

I have not entered at all upon the general subject of diphtheria, as I believe it will come out better in the discussion; besides, my experience has really been nil.

10 Phillips Place, }
Beaver Hall. }

Notes and observations on Malignant Scarlatina, and allied affections. By WILLIAM E. BESSEY, M.D., C.M.

Read before the Medico-Chirurgical Society of Montreal, February 19, 1875.

The occurrence of a number of cases of scarlatina and other diseases of unusual malignancy during the present winter has afforded opportunity for observation, and suggests a few thoughts to my own mind respecting the etiology, pathology and treatment of affections of this character, which I trust may be of interest to the members of this Society.

I use the term malignant in this connection to designate an overwhelming toxæmic impression of the *materies-morbi* present in the system. Although belonging to the general class of zymotic affections, I prefer the word septæmic as a designation which more truly indicates their real character.

The present season has witnessed the presence amongst us of epidemics of the exanthems and other zymotic affections, presenting a number of cases of unusual severity, and marked from the outset by the evidence of a true malignant character. It has been my lot to attend a large number of cases of scarlatina, some of which were of this type.

In general terms I might refer to them as marked by a terrible degree of depression without any tendency to reaction. The eruption at first of a dark crimson color soon changed to a livid, and in some cases, from having apparently receded in spots, a mottled appearance. The usual hyporexia was early followed by lowering of the temperature of the general surface of the body, with coldness of the extremities, changing at times to unusual heat, as in one or two cases. In others the extreme depression with coldness of surface and extremities was continuous, pulse weak and rapid, throat in some instances intensely congested, in others not much affected, while in one case it presented a membranous coating like to that in stomatitis.

The impression to the mind on seeing some of these cases for the first time was, that the great nerve centres were being overwhelmed by some powerful toxæmic influence, capable of depriving them of their wonted energies, and of substituting for the usual vital manifestations a tendency to decomposition, putrescence and death.

So overpowering is the morbid influence in some cases, and so great the vital depression, that children in the bloom and vigor of health succumb in a few hours—the body after death having the appearance of putrid poultry, and in one case the whole body assuming a melanotic appearance some hours before dissolution.

The peculiar appearance, and absence of all rigor mortis, in one case, reminded me of the appearance of a body after death from a stroke of lightning.

Before proceeding to a detailed account of the cases I wish to refer to, I should mention what appeared to me to be a remarkable concurrence of a cough of an aggravated—I might almost say spasmodic-nature. Indeed in one case I hastily pronounced it to be whooping cough—although as the child recovered, this symptom subsided, as it had appeared, with the disease, and I was left to ruminate over the difficulties often attendant upon questions of diagnosis.

The first four cases to which I shall refer were the children of a strumous mother, who died of phthisis at the age of 45. The father still living and robust.

In the other cases there was no evidence of any constitutional depravity. Although in the last fatal case to which I shall refer, the child was said by the mother never to have been strong or vigorous from birth.

As constitutional peculiarities may be one of the chief factors in some cases of more than usual severity and fatality in a given disease, I have thus briefly referred to them.

During the latter part of January I was called upon to visit a family residing in Delisle Village, (a badly drained locality,) in which four children, aged from four to eleven, were taken ill with scarlatina, one of whom had already died.

CASE No. 1.—The first in this family to succumb to this deadly virus was a bright little boy of four years of age. He had been in perfect health apparently up to the onset of the disease, which he survived but 24 hours.

I was informed (not having seen it while living) that in this case the attack had been ushered in by sickness and vomiting. The rash had been slight

but dark in shade, and there was a general coldness of the surface and extremities with lividity. The glands of the throat were swollen. The child was believed to have been sensible up to a short time before dissolution, although during the last 12 hours of its existence convulsions had been frequent. Had learned nothing of the treatment observed. Post mortem appearance of body very melanotic.

CASE 2.—A child in same family was seen by me a few hours before dissolution, but too late to be of any service. It was a fine little girl of 9 years. The brain symptoms in this case were well marked; the patient lay in a semi-comatose condition, pupils large and insensible to light; pulse small, flaccid and too frequent to be counted; general coldness of the surface; a spotted efflorescence of a purplish hue covers body and inside of thighs. Fingers blue, veins in back of hands and arms also blue. Is very restless and crying out; coughing frequent. Head thrown back, teeth clenched; utters plaintive cries on being lifted to give drinks, and manifests a disposition to opisthotonos. Urine at first scant, afterwards freely voided; later is having involuntary motions of bowels.

Treatment: Applied artificial heat to surface of body, and stimulants ad libitum, with hot mustard pediluvia. No reaction could be established in the slightest degree, and complete collapse was soon followed by death.

CASE 3.—The next case that I will trouble you with an account of from its interesting character was that of a little girl of 7 years of age. In this case the disease came on gradually, presenting nothing remarkable at first. There was but slight affection of throat; the efflorescence was well out on the body, but dark in colour and irregularly spotted, cheeks crimsoned deeply, shewing capillary paralysis—general appearance such as to create in my mind a feeling of uneasiness as to the prognosis, when taken in connection with other untoward symptoms; temperature of surface low, pulse flaccid. 138; is cross, fretful and restless, shewing nervous centres to be implicated; is quite rational, takes food, stimulants and medicine well. Treatment—To administer warm milk and beef tea freely; a teaspoonful of spirits ammo. aromat. in water every three hours; a tablespoonful of champagne every hour; dose of quinine and tinct. ferri. every 6 hours, also of a mixture of chlorate of potassa and lemonade frequent spoonful; artificial warmth to body, anointing frequently with warm olive oil; room to be carefully but freely and regularly ventilated; to allay cough with expectorant mixture of ipecac., ext. senega., liq. ammon. acet.

and sol. morph. mur. Patient progressed without any unfavourable symptoms until the 5th day; efflorescence now disappeared, patient has suddenly become much weaker, cheeks more deeply crimsoned, dark spots appearing on surface of body and looks as if bruised; voiding turbid urine freely.

6th day.—Greater prostration, pulse small and quick, and can scarcely be counted. Child seems to have lost the use of the left side of body (arm and leg); no change in features except pupil of left eye is more dilated and less sensitive to light. Constant jactitation of right hand and foot, lies in a partially comatose state, from which is easily roused to give drinks. Does not wish to be disturbed apparently, uttering plaintive cries when moved. Has had three slight convulsions during previous night; lies with head thrown back and chin elevated. Ordered mustard to spine and neck, with ungt belladonnæ to be freely rubbed in. Champagne to be given every half hour; Aromatic Spts. Ammon. every hour, and artificial heat to surface.*

7th day.—Has had two violent convulsions during the night, with marked opisthotonos; is quiet and composed this morning; right side still twitching, left perfectly still; general temperature much improved; is quite rational when roused; relaxation of rigidity in muscles of neck is complete this a. m. Pulse still small and very rapid. Treatment during convulsions has been hot mustard pediluvia, general sponging of surface of body with a mixture of spts. vini. rect. and chloroform iʒ ʒiv. Is perfectly rational except during convulsions.

8th day.—Has had 7 or 8 convulsions during night of same character. Cried or shrieked out as fits were coming on, was perfectly rigid and "bent back," as they expressed it, during these convulsions; enjoyed a season of respite from these violent perturbations of the nervous system before death, and sank away in a state of complete prostration after an illness of eight days.

Owing to the spinal manifestations in this case I sought a post mortem which was declined by the friends.

CASE No. 4.—A little girl of 11 years sickened about same time with last case. Did well.

In this case there was great hyperpyrexia at the outset, the efflorescence was of the same character as the last, with the same tendency to a congested appearance of the cheeks. The spasmodic fits of

*The paralysis or hemiplegia of the body in this case, not affecting the muscles of the face, I attributed to congestion of the spinal cord and its membrane, to my mind an interesting feature in the disease.

coughing became very violent at one period of the attack amounting to absolute whooping cough. The pulse was feeble and rapid, general powers of life depressed, throat symptoms troublesome.

Treatment.—Ordered beef tea, milk, (with small portions of liquid magnesia) ad libitum, champagne in tablespoonful doses every two hours*. Great attention to be paid to temperature and skin. Ordered the following medicines:—A dose every six hours of quinine and tinct. ferri; a mixt. of sodæ hyposulphites ʒ ij, liqr. ammon. acet. ʒ j, tinct. colchici. ʒ ij, aqua. ad ʒ iij, a teaspoonful every four hours; also, an expectorant mixture; and the free administration of a saturated solution of chlorate of potassa, both internally and as a gargle, with frequent washings of the throat with sulphurous acid lotion. Suffice it to say that this patient continued to progress favourably and recovered.

CASE No. 5.—In another family, residents of St. Joseph street, I saw four cases, three of which were of the milder type, but one malignant in character, and accompanied by severe coryza and otitis or inflammation of the external ear. The head was much affected and delirious, which alternated with a semi-comatose condition. The spinal cord and its membranes seemed to be unaffected. Urine very scant and clear; considerable difficulty in swallowing; pulse raging from 130 to 140; excessive thirst; angina intense; the throat and fauces assuming a highly congested appearance, dark in colour, after a day or two became covered with a membranous deposit akin to that in stomatitis or diphtheria.

Prescribed for this case sulphurous acid lotion to mouth and throat to be used as soon as possible, also a saturated solution of chlorate of potassa in frequent teaspoonful doses. To combat the specific virus and favour elimination of morbid products by the kidneys, prescribed following: sodæ hyposulphites, ʒ ij tinct. colchici. ʒ iv†, liqr. ammon. acet. ʒ j, aqua. ad. ʒ iij, a teaspoonful every four hours.

Surface of body to be anointed with olive oil warm; regular administration of ammonia and champagne. Thirst to be alleviated by draughts of

* I cannot, however, attribute too much value to the use of Champagne as a stimulant, although to be preferred to any of the alcoholics from its effervescent character. I should readily dispense with it entirely in favour of ammonia, either in the carbonate or aromatic spirits, which are I think indispensable in all low forms of fever.

† The use of colchicum and diuretics was invariably followed by a free flow of urine and an increase of the solids—with a diminution of the head symptoms.

lemonade, containing chlorate of potassa, and finally a mixture of quinia sulph. and tinct. ferri. mur. $\frac{1}{4}$ gr. dose of former and 5 gtt. dose of the latter every six hours.

Patient made a good but slow recovery.

CASE No. 6.—A child of 18 months old, resident in Murray street, was found suffering from a severe attack of scarlatina anginosa, but with an efflorescence of a dark crimson colour. The throat affection intense; the child delirious and restless; skin hot and dry*; urine scanty; pulse 140, small and weak. Treatment: anointing with warm olive oil, frequent lavements of throat with lotion of acid sulphurous 1 to 16, and the internal administration of the hyposulphites and carbolic acid as recommended by Bland, the prescription being as follows: ʒ sodæ hyposulphitis ʒ ij, acid carbolic gtt. xij, glycerine ʒ iv, aqua ad. ʒ iij, a teaspoonful to be given every four hours.

Saw case again on the 4th day. Throat affection aggravated; pulse 140; rash changing to a mottled appearance; child drowsy. Ordered diuretic mixture as follows, to contain colchicum, believing that retained urea might have something to do with the drowsiness or incipient comatose condition: ʒ spts. etheris nit. ʒ iij, liqr. ammon. acet. ʒ j, tinct. colchici ʒ iv, aqua. ad. ʒ iij. Dose, a teaspoonful every third hour.

Saw again in the evening. Pulse 180; no head symptoms; throat affection worse; breathing rapid. Ordered the following application to throat, ʒ acid carbolic ʒ iv, glycerine ʒ j, aqua. ad. ʒ iv. A teaspoonful to be added to a wine glass of warm water and used as a mouth wash.† To former diuretic mixt. add tinct. aconit. rad. gtt. xij, to be given as before. Stimulants and milk as support; after this had a good night's rest. On the following morning at 7 a.m. convulsions came on; feet cold; body cold; no rigidity; child perfectly flaccid and became quite purple or dark blue over entire surface of body; pulse imperceptible, distress in breathing; continued in a convulsed condition until dissolution at 1.30 p. m. same day.

CASE No. 7.—A child in same family as last, aged 4 years, a fine robust little boy. In this case the hyperæmia was marked ranging from 103 to 105,

*The hyperæmia was very great, but transient in its duration, and succeeded by a stage of coldness and excessive lowering of the bodily temperature, which increased as dissolution approached.

† The result of the application of the carbolic acid solution to the throat in this case was most satisfactory, and such as to induce me to give it a more extended trial in future.

with a pulse ranging from 120 to 160; throat much affected, efflorescence dense and dark colored, urine suppressed. In this case ordered colchici and diuretics for suppression of urine; to allay heat of surface warm baths 98° every six hours if necessary. For the throat the solution of carbolate of glycerine, and cleansing of mouth occasionally with sulphurous acid lotion, ammoniated spts. as a stimulant.

Notwithstanding that this case received the most zealous attention, using Tinct. Belladonna in addition to other treatment to allay spinal irritation. Child sank away completely exhausted on eighth day. The throat affection or angina and the ozena being intense, with prominent head symptoms throughout. I subjoin a table of temperature with rate of pulse, with the remark that the temperature was always sensibly diminished by the baths, but the abatement of perspiration was never of long continuance.

2nd Day of Illness	Tempt... 103 $\frac{2}{3}$	Pulse... 140
3rd " "	" ... 104 $\frac{1}{2}$	" ... 160
4th " "	" ... 104	" ... 156
5th " "	" ... 103	" ... 149
6th " "	" ... 102 $\frac{3}{4}$	" ... 140
7th " "	" ... 103	" ... 120

8th Day.—Child sinking rapidly, very great lowering of temperature. Pulse 150. Ozean very troublesome and offensive, throat affection intense. Has taken drinks well, but nothing seems to do child any good. Sank and died at 2 a.m. of 9th. No congestion of capillaries and no lividity of surface of body.

Thus ended a series of cases to me most interesting, and of sufficiently putrescent character to deserve the appellation of putrid scarlatina, in so far as the symptoms and appearance of the surface of the body is concerned.

OBSERVATIONS.

The foregoing cases have been cited as examples of malignant scarlatina, so terribly fatal in character, and will furnish a sort of ground work for a few brief observations respecting the malignant character assumed so frequently by this and other allied affections in Montreal.

I observe 1st, that the habitat or situation in which these cases occurred were usually badly drained, low lying or poorer districts of the city, giving colour to the supposition that sewerage gas or other effluvia from human offal was one of the chief factors in determining the type which an otherwise ordinary attack should assume.

2nd.—With regard to the constitutional peculiarities of such patients, I find almost invariably that

they have been persons of low vitality from some cause or other, as previous bad health; the strumous cachexia; or some other circumstances of a debilitating character. So far as I have been able to observe, the hygienic relations of such patients have been of a most unsatisfactory character, insomuch that, given a case of scarlatina, the constitutional cachexia, ill feeding, want of cleanliness, with neglect of personal comforts will so far prejudice the prognosis as to determine its unfavourable character; per contra, well fed, well clothed, warmly-housed, children free from any strumous diathesis, are as certainly favourable to a safe prognosis. This rule, however, I do not mean to say is absolute, because the most vigorous constitution may succumb to an overwhelming putrid poison, and in such cases drain gas will I think be found to be the chief factor.

Again, how can we account for the concurrence during a season like the present, and also in some that are past, of so many diseases assuming the malignant type, as we have seen illustrated in cases of malignant variola in some quarters; malignant diphtheria in another; and malignant scarlatina in another. While but very recently we saw an epidemic of malignant spotted fever, or cerebro-spinal meningitis, in our midst, and the cases of malignant typhoid fever during the last two autumnal seasons have been numerous.

My own conviction in this regard is that the assumption of the malignant type in some cases and not in others of all these various forms of disease is to be looked for, not so much in the amount of materies morbi present in the system as to other unfavourable circumstances. 1st, to the inhalation of an atmosphere, contaminated with disease producing emanations; in this city perhaps chiefly drain gas. 2nd, to the unfavourable physical condition in which the patient is found at the time, from the continued influence of circumstances unfavourable to the preservation of the health and vigor of the constitution. The depressing circumstances of mind, body and estate under which so many exist do, I believe, result in producing a state of things similar to that produced by the mining engineer who has laid his train of gunpowder, to which alone the match is required to be applied to show the disastrous consequences of such previous influences.

Why should so many cases of this type have occurred during the past and previous years. Because I think in at least the case of typhoid fever, it will be found that, with the lowering of the city supply of water, and the consequent greater accumulation of filth and the emanation of drain gas, the number of

such cases rapidly increased just as the number of cases of small-pox invariably increase during a cold spell in winter. (During the present winter the great scarcity of water has continued to favor the emanation of foul gas from the sewers.)

These diseases are of course epidemic, but not in their malignant character; necessarily this type or characteristic is in constant relation to poverty of some kind, either of outward circumstances, or of constitutional condition. The malignant types of disease find a congenial soil in such subjects and under such circumstances, and become increased in their virulence and fatality. This will be borne out by a reference to epidemics of typhus, cholera, yellow fever, &c., in years gone by.

The great similarity existing between the septæmia in their evidence of blood contamination, general characteristics, and results, leads to the inquiry whether we can in any way identify similarity of cause with similarity of effect. Certainly not, so far as the true nature of the disease is concerned, but decidedly so in reference to the general type and characteristics. It is quite true that one exanthem will not produce another, but often a combination makes its appearance, producing anomalous affections. It is also quite true that a typhus cannot produce a cerebro-spinal fever, and yet their manifestations too frequently bear a striking similarity. Neither will cerebro-spinal fever be considered contagious, or capable of inducing a malignant scarlatina, but we have violent manifestations of a similar pathological change or anatomical lesion occasionally presenting themselves.

I do not forget that our knowledge of the very existence of several of these "morbid poisons" is inferential only, our ideas of their nature purely conjectural and our reasonings upon their mode of action upon the blood and general system entirely speculative.

The concurrent existence of spasmodic cough with scarlatinal cases, throws the mind back upon the observations of Sir Henry Holland, respecting the frequent concurrence of whooping cough with influenza, scarlatina and other epidemic affections involving the mucous membranes covering the fauces and air passages among the *morbis-loci*.

Again, in some scarlatinal cases we have cerebral disturbance, in others spinal symptoms most prominent, while all experience proves that in toxæmic fevers the great nerve centres—prominently the brain—are most involved, as in typhus, typhoid, spotted or cerebro-spinal fever, malignant exanthems, &c.

Now, as similarity of effect, even in isolated cases legitimately pre-supposes similarity of causation, may it not reasonably be inquired concerning the *materies morbi* present in the exanthems, typhus, typhoid, spotted or cerebro-spinal fever, diphtheria and the like, in what respects are they similar? How do they differ? And in what way may they be considered as related, if at all; are they all zymotics?

The one great point of similarity, to my mind, seems to be their undoubted septic nature, as occasionally illustrated by their toxæmic influence upon the vital fluid, lessening the number of red corpuscles, and so affecting the fibrine of the blood as to reduce its plasticity, firmness and coagulability, and to favor its purulent decomposition.

Secondly.—Their similarity of action upon the great nerve centres and their coverings, as evidenced in the cerebral symptoms of cerebritis and meningitis and the spinal symptoms of myelitis and spinal meningitis so often manifested in such diseases.

Left as we are, largely to rely upon inferential deduction for our conclusions, it is no novelty to conclude that the whole family of septæmic affections, while possessed of distinct individuality, are nevertheless closely allied in affinity of nature and pathological action. This we find ourselves borne out in by actual post mortem revelation as to similarity of lesion in various septæmic diseases.

Thus the head symptoms in the exanthems and other affections named, are found to be due to congestions primarily attributable to a vitiated state of the vital current, the membranes and substance of the spinal cord in scarlatina, and cerebro-spinal meningitis, the throat symptoms in scarlatina, diphtheria and other cases of blood poisoning. From these and various other considerations of their relation to, and action, upon the vital forces I infer a similarity in the general plan of treatment.

In this respect all require sustaining treatment. The sulphites or hyposulphites at once commend themselves to the mind, and where a *specific disease germ* is undoubtedly present, as in the exanthems a remedy antagonistic to sporadic development, or catalytic multiplication of disease *germs* or *virus* is suggested and fully met in carbolic acid. Hence we find the hyposulphites and carbolic acid not only recommended as, *par excellence*, the remedy for that most loathsome and contagious of all diseases, small-pox; but, on the suggestion of Dr. Bland, these remedies are being used with unprecedented success in the treatment of scarlatina and other anomalous and allied affections. Ziemssen has recommended

the cold wet sheet or packing, but for my own part, I would as soon think of attempting to revive the dying embers of a smouldering fire by sprinkling water upon them, as by adding the depressing influence of cold to an already excessively lowered animal temperature. Tepid baths are unobjectionable and useful in great hyperæmia, better still hot mustard baths in cases of great vital depression with lowered temperature.

I say *anomalous*, because of the fact that we occasionally hear of an epidemic somewhere developing some new type of the septæmia, under the influence, it is to be presumed, of peculiar local modifying circumstances, as recently in the city of New Jersey, U.S. Notwithstanding that in zymotic affections prevention should be the great goal of ambition for the medical art, yet, once acquired, what treatment can be most relied upon, or have we any treatment sufficiently specific to be termed antidotal in malignant scarlatina and allied affections

In the treatment of zymotic affections having, as a local lesion, inflammation of the mucous membrane, chlorate of potassa seems to have deservedly gained the greatest repute.

While following the use of this remedy for the local affection of the mucous membranes, I am strongly of opinion that in all toxæmic diseases we require to avail ourselves of some remedy which may act as antizymotic or antiseptic, and for this purpose I select a sulphite or hyposulphite for the former, and carbolic acid for the latter, following Polli, of Milan; Bland, of Philadelphia; Chaussier and Bielt of Paris.

In scarlatina, where the head symptoms are prominent, I fear they are often attributable to retained uræa and hence I have used the tinct. of colchicum with diuretics and sedatives, where the action of the heart is much excited. In cases manifesting decided disturbance of the spinal cord or its membranes, I should be disposed, had I any more such cases, to resort to counter irritation and belladonna inunctions, and the internal administration of ext. ergota and belladonna, acting as they do upon the capillary circulation of these parts.

True, in three well marked cases of cerebro-spinal meningitis, I succeeded perfectly by repeated leaching to nape of neck and spine, and the administration of calomel, with bromide of potassium; but in this affection, as a complication of the scarlatinal poison, I should be slow to adopt the abstraction of blood, even locally by leechings,—besides the cerebro-spinal cases referred to did not assume the malignant type.

The presence of a pseudo-membranous covering in the mouth and fauces in certain cases observed, I am unable to account for, unless upon the supposition that it was of a stomatitic nature and not true diphtherite.

To what extent constitutional tendency, cachexia, idiosyncrasy or present condition may affect the character of an attack of a toxæmic disease, I am unable satisfactorily to determine, but my observations leads me to the conclusion, that all forms of disease are rendered more asthenic thereby, and that the toxæmia manifest a constant tendency to become malignant. It may, however, be replied that different types of the same disease are met with in members of the same family, but so are differences of ingesta, constitutional and inherited peculiarities and temperament, not to speak of wide difference which may exist in the inherent vital forces or nourishing processes going on in the different cases before us.

Such, gentlemen, are a few thoughts suggested by circumstances arising in connection with a few cases I have observed, and I offer them here as mere suggestions to the minds of others of more matured judgment and with more extensive means for observation, experiment and deduction.

An interesting discussion followed the reading of the paper, in which Drs. Craik, Hingston, Reddy, F. W. Campbell and others took part.

Progress of Medical Science.

THE PROGNOSIS AND TREATMENT OF CHOREA

By DR. FRANCIS E. ANSTIE, PHYSICIAN TO WESTMINSTER HOSPITAL.

[It has been proved beyond dispute that chorea is occasionally the result of embolism of a cerebral vessel, and from the knowledge of this fact it is natural that we should be tempted to imagine embolism as actually present in all these very numerous cases. This would be a grave mistake. There is, however, a connection between rheumatism and chorea which is more widely applicable to the explanation of the facts than the theory of embolism.]

In the inquiries which I have carried on for many years respecting the pathology of neuralgia, one of the most pressing questions for solution appeared to be the kind and degree of connection which existed between neuralgia and the rheumatic diathesis. There is no need to detain you with the details of that inquiry; suffice it to say that I was compelled to the conclusion that rheumatism is comparatively rarely a direct cause of neuralgia: the truly rheumatic cases of that disease are a very limited group. At the same time, however, I began to perceive another kind of connection between rheumatism and

neuralgia, which I believe will also be found to hold good between rheumatism and chorea. I observed that the hereditary character of rheumatism, which is sometimes well marked, is associated with hereditary tendencies to nervous diseases of various kinds.

[After relating the history of a family illustrative of this in a marked degree, Dr. Anstie observes.]

But this is what I particularly wish to mention:—So far from the chorea universally occurring in the victims of rheumatism, it was often strikingly the reverse.

The prognosis of chorea has assumed a great importance to me in consequence of what I have seen in hospital and private practice; and surely, it is a subject much too lightly treated in the ordinary systematic works on medicine. No doubt there are men who appreciate all the gravity of the subject, but they are in a minority.

I have observed a large amount of suffering and disaster to the health of which chorea has either been the direct cause or at least the prophetic forerunner. I know of few things which would more incline me to think gravely of the future of a family than the fact that I had found it much invaded by chorea.

[Of the accidental causes of chorea.]

The most regular in its operation is insufficient food. Where this has been the main cause of the chorea, or the chief reasons why the chorea is severe, we may hope everything from the effects of copious and generous nutrition.

It is certain that where we can *permanently* raise the scale of nutrition of a patient who has been brought into chorea chiefly by starvation, we may often save his nervous health, once for all.

The next, and one of the gravest questions in estimating prognosis of chorea, is whether the affection occurs in the presexual period, or after puberty has commenced. No doubt every experienced practitioner is more or less aware of this fact, yet I think it is possible to show its magnitude and its importance more clearly than they are usually seen.

[Dr. Anstie then relates two cases in which recovery was due to the patients not having yet reached the perilous period of life which commences with puberty, and then continues:—]

In very gloomy contrast with these cases are others which I have been unfortunate enough to see in the course of my experience. One was a girl of 17, who had menstruated from the age of 13, always profusely. She came into Westminster Hospital, not looking half so ill as the little boy whom I have mentioned; but she had not slept for several days, and was in continual general choreic movement—head, arms, legs, features were in perpetual action. Another twenty-four hours of this made a fearful change; she got into an almost maniacal condition, and died perfectly worn out in three days from admission and in about twelve days from beginning of the illness.

In the next place let me say a few words on the influence which the facts of heredity ought to exert in shaping our prognosis of chorea. And in this respect there are two things to be considered—the

prognosis as to the result of the individual attack, and the prognosis as to the patient's future life. In respect to this, there are certain facts not commonly known, as I suppose. If the family from which the patient comes be on the whole strongly disposed to insanity, the chorea itself will not unfrequently be a trivial affair, but it is likely enough to be the first intimation of a coming mental degradation.

It occasionally happens that a boy or girl, born of a family which has numbered many nervously diseased and a few really able members, has chorea in childhood, but in place of getting intellectual harm from it, he seems to date from the period when it leaves him a most marked increase in his intellectual powers. It by no means follows that his moral nature will improve *parri passu*; indeed the spectacle of a "bullocky Orton" turning into a clever rogue like the Claimant, after a youth beset with chorea and semi-imbecility, is, I believe, less uncommon than would be supposed by most persons.

[Now as to the treatment of chorea.]

One broad assertion which is frequently made is, that simple chorea always runs its own course in either four, six, or eight weeks, and then leaves spontaneously. No doubt it does so in very many cases, yet the longer one studies chorea the more one finds that there are many exceptions to this. Not to speak of the pretty frequent cases where chorea, interrupted for the moment by the onset of some acute disease, returns with double vigour and implants itself with double tenacity in the enfeebled organism of the convalescent patient, there is a far from inconsiderable number of simple cases of chorea which tend to drag on beyond that period of three months which, as Jaccoud justly observes, marks the limit at which chorea passes into the intractable type. I have become convinced that there are several means by which at least the disease can be kept to the shorter and more normal term. And besides this, I do not doubt that we can sometimes intervene in the terrible acute cases, with the effect of saving life and preventing the patient from becoming imbecile or epileptic.

In commencing the subject of treatment it is necessary to remark that if embolism be considered the probable cause of any given case of chorea, medicinal treatment must surely be vain. Tonics and cod-liver oil may possibly be of some use in improving nutrition, but we must necessarily wait for the removal of the disease by natural processes. When, therefore, a person who is notoriously suffering from valvular disease of the heart suddenly gets an attack of some kind, paralytic or epileptic, and thereupon passes into a state of chorea, there can be no sense in adopting any special plan of treatment beyond that already indicated.

In the very numerous cases, however, in which there is neither rheumatism nor heart-disease present, we should be very foolish, in my opinion, to give up the attempt to interfere with the disease, and indeed the great discomfort which the patient suffers, and the alarm which his friends experience, will not allow us to fold our hands. I wish therefore to mention the few things which I have found

really useful; and in the first place we will take the gravely threatening acute cases, such as those of the two children in the Belgrave Hospital, who have been already referred to. The boy, aged 6, is a remarkable monument of what the organism will endure from physicians. We were determined to test the power of succus conii to the utmost, and, commencing with 3vj daily, we got up to 8 ounces daily of the succus without producing any more effect than as if so much water had been given. I wish particularly to mention that the preparation was got from three different and first-rate chemists in succession, so that there is no reason to believe that we were employing an inert specimen; indeed, I believe our house-physician proved in himself the physiological activity of the sample of which the patient took 24 ounces in three days. The same result happened with the girl who was under treatment at the same time; however, she never got beyond three ounces of the succus daily.

In the excessively severe case of the boy, we tried not only conium, but bromide of potassium, camphor, ol. morrhuae, and zinc in large doses, all with only momentary effect. We then tried Jaccoud's plan, which I have found extraordinarily successful in several cases: viz., we sprayed the skin over the whole length of the spine with ether twice daily. I will not positively say that it was *propter hoc*, but I will say that immediately *post hoc* the symptoms greatly amended, and in the course of a fortnight the lad was perfectly free from movements. We kept him in the hospital several weeks longer, in order to re-educate his speech, which was grievously deficient. But by the time he left the house he could speak quite well and manage all his limbs; nothing amiss remained beyond a slight tendency to grimace. The girl, with whom succus conii, camphor, ol. morrhuae, bromide of potassium, and large doses of zinc had entirely failed, began to improve immediately on taking liq. arsenicalis in 5-minim doses, afterwards reduced to 3 minims. I am convinced that in one of these cases death, and in the other a protracted and very serious illness, were avoided by the use of remedies; and I will just say here that arsenic as an internal remedy, and the ether spray applied to the spine, have given me solid results such as have been obtained by no other remedy. The ether spray stands somewhat intermediate, I suppose, between the ordinary shower-bath and the spinal ice-bags of which so much has been said. Cod-liver oil and iron, however, are very useful in anæmic and generally debilitated subjects. And there is a special class of cases connected with violent ovarian excitement, or complicated with epileptic tendencies, in which the bromide of potassium is invaluable, and is the one remedy:

In the terribly dangerous acute cases of young women, especially where there has been sexual excitement and exhaustion, I believe nothing does any good but freestimulation, regular feeding per rectum, and opium in large doses. I regret to have to express my complete distrust in chloral, and in a host of other remedies that have been proposed.

In the milder stages, and especially with a view

to the future bodily and mental health, there are a variety of precautions which ought to be adopted.

Under these circumstances we often get the first considerable improvement by the use of the shower-bath. This old-fashioned and useful remedy is a two-edged weapon, and if employed in cases where the nervous system is too severely disordered and prostrated may produce bad results; but in the milder and more chronic type of chorea it is still worthy of being called a sheet-anchor. It gives that preliminary bracing to the nervous and moral tone, without which we may fail to get a leverage for other treatment. There is no absolute necessity for beginning with cold water, and in delicate subjects it is better at first to use it tepid; but we can soon advance to the cold shower-bath daily or twice daily. The second item of treatment is the training of the muscular system. We can do much more good with this, in most cases, than with medicine, provided that the patient's nutrition is kept thoroughly good. This lesson has been particularly enforced by my colleague Dr. Radcliffe, who always insisted much upon the value of muscular exercises which require rhythmical movements. He used, in Westminster Hospital, to give the choreic children skipping-rope exercise; and this will be found a very useful thing either in the absence of means for more elaborate training, or as introduction to more studied and complicated movements. I may conclude by pointing out the necessity for careful training in speech, where that faculty has been at all impaired, and also of attention to mental education in every case. The mere cessation of the choreic movements ought not to make us consider that we have done our work; it is most important that a judicious system of education should be at once adopted to strengthen the mind, and especially the memory. And although every care should be taken to avoid harsh or unkind treatment, it is very needful that a firm and regular discipline should be established, for anything like slackness or vacillation on the part of the educator is sure to be reflected and exaggerated in the behaviour of a nervously weak child.—*Practitioner, June, 1874.*

ACUTE RHEUMATISM.—Immovable bandages.—Favorable results are obtained in acute rheumatism, as regards the pain, the fever, and the duration of the disease, by fixing the parts immovably, and so maintaining them not only until all pain and swelling have left the joint, but until the constitutional symptoms have disappeared, and especially until the temperature has returned to the normal standard. This may be effected by means of pasteboard, or for small children and restless patients by plaster of Paris. (Dr. Oehme.)

ON THE USE OF CYANIDES IN ACUTE ARTICULAR RHEUMATISM.

M. Luton of Rheims, in the *Bulletin Général de Thérapeutique*, highly recommends the use of the cyanides in the treatment of acute articular rheumatism. The two cyanides with which he has experimented are those of zinc and of potassium. The first is a white inodorous tasteless powder, insoluble in water, but probably

soluble by the gastric juice. M. Luton administers it in average doses of $1\frac{1}{2}$ grains daily, either in pills or held in suspension in some preparation of gum. The cyanide of potassium is more active; is administered in maximum doses of from $1\frac{1}{2}$ to $2\frac{1}{2}$ grains, and preferably in pills on account of its disagreeable flavour. The pills should be silvered and kept in a stoppered bottle. The cyanide may be taken during or after meals, if there be any advantages in so doing. M. Luton reports many cases in support of the proposed medication.

TETANUS.—*Chloral and Bromide of Potassium.*—In a case of tetanus in a boy fourteen years of age, ten grains of chloral hydrate and twenty grains of bromide of potassium in syrup and water were given every three hours, the case being watched with great care. The next day the same was given every two hours, with the result of procuring four hours' sleep, with diminution of the tetanic spasms. The case went on satisfactorily, and on the fourteenth day the chloral was discontinued, as its action was so marked, but the bromide was continued in ten-grain doses for a few days longer. The noteworthy feature in the treatment of this case is the quantity of chloral taken by the patient, he having taken 1140 grs. in sixteen days (equal to fully 71 grs. a day) in a most acute attack of tetanus, with the result of the spasms leaving him on May 12th, exactly eighteen days from the date of seizure; while in their place the peculiar action of the medicine showed itself in a variety of ways. All kinds of delusions ensued. (Dr. J. B. Carruthers.)

ON THE INDUCTION OF PREMATURE LABOR.

(Abstract of a Clinical Lecture delivered at the Allgemeines Krankenhaus, Vienna.)

Reported by G. Wilds Linn, M.D.

Gentlemen,—I propose calling your attention to-day to the various methods made use of in the operation for the induction of premature labor. The manner of performing an operation so often required at the hands of the obstetrician, and upon which is dependent so much of good or of evil to mother and child, is, as you may suppose, of the greatest importance. It has taxed the ingenuity of the accoucheur for a century, and there yet remains in the mind of the profession much doubt and speculation upon the subject. There are those, it is true, who, by a complication of modern contrivances, claim to achieve brilliant successes, and to make this one of the easiest operations we have to perform. I hold in highest estimation the man of practical mind who makes use of few measures and those the most simple, while, on the contrary, the man with theoretical ideas and a multiplication of means is least to be trusted.

Without risk of incurring the charge of egotism, I think I can say I have had as many opportunities of ascertaining the relative values of the various methods used as any other man living,—certainly as many as any man in Germany; and therefore when I speak upon this subject I assume the right of speaking with some authority.

In considering the methods employed, or any particular method, it is first absolutely necessary that we bear in mind the character of the organ with which we have to do. Suffice it to say that the pregnant uterus and the non-pregnant uterus are two very different organs, and the treatment of these must be correspondingly different. He who thinks otherwise has had but little experience, and errs very much. The uterus of the pregnant woman is an exceedingly sensitive organ, and in all our operations upon it the fewer manipulations we make consistent with the necessities of the case the better.

The old method which was employed when the induction of premature labor was first sanctioned by the profession was the simple opening of the amniotic sac. This plan was for a long period practised, and with very good results. In time, however, it was affirmed that this early draining away of the amniotic fluid was inconsistent with the gradual dilatation of the cervix, and, hence, with the normal progress of labor. Then it was suggested to open the sac higher up at a distance from the os; and this method is still used by some who claim to have thereby good results. In reality this makes no difference in the progress of the case, as the rent made will proceed to the cervix so soon as labor-pains are developed.

The old writers, who entertained different ideas from those we hold concerning the length of the cervix in the latter months of gestation, deviated in time from the original simple plan. The first change made was in the introduction of the trocar with stilette. The danger in using this is at once apparent when we remember that very frequently the cervix lies horizontally in the vagina, so that the point of the instrument, if not carefully introduced, will pass through the posterior wall of the cervix. If force be used, it may not only pass through the wall, but, entering the peritoneal cavity, be made to enter the posterior wall of the uterus, and give exit to the amniotic fluid through the false passage so formed. In such a case, which is far from being impossible, the physician is not at the time aware of the injury he has done, and probably will not be until the death of his patient from parametritis or peritonitis reveals it in a post-mortem examination.

The mechanical dilatation of the cervix by the various speculæ devised for that purpose as a means of provoking labor are entirely disapproved of by me. Some of these speculæ I here show you. These all bear an antediluvian appearance. Some such instruments have been found among the ruins of Pompeii, and, though strongly advocated by some such men as Busch and Krause, are found deficient on trial.

The use of sponge tents has become very popular in late years in this operation. Simpson, who designed the tent, devised it for the non-pregnant and not for the pregnant uterus. That its use here is often productive of most serious if not fatal results cannot be questioned. It is often productive of parametritis, and pyæmic symptoms arising from the absorption of the foul discharges to which it gives rise are of no infrequent occurrence. That it is un-

certain as to time is also true. I have in many cases used it for days before I have succeeded in provoking active labor-pains. Laminaria tents have not been found more efficient than sponge tents, and, like them, will produce dangerous complications. Any foreign body which must so long remain in the cervix is dangerous.

The use of the catheter or flexible bougie I will not allow in my wards under any consideration. Its use has been highly lauded by some, and yet I am sure that here, as is too often the case, the favorable cases are reported, while those that are fatal are never heard from. Like the tent, it is also uncertain as regards time, and I have often used it for many days before delivery was accomplished. It cannot be employed with my sanction, and he who uses it does so on his own responsibility.

The use of injections into the uterine cavity, according to the method of Cohen of Hamburg, is dangerous. Many patients die from such treatment. Injections of water, either simple or medicated, should not be allowed under any circumstances, and would not be allowed by any one who understands the inextensible character of the uterine tissues. The use of cold water under such circumstances is barbarous in the extreme, always giving rise to the most intense pain. I entirely discountenance the use of intra-uterine injections, and hope that no student of mine will ever permit himself to make use of them to induce labor.

Vaginal injection, or the douche, according to the method of Kiwisch, is also most dangerous, and he who thinks differently has had but little experience. It does not act surely or quickly, and an inflammatory process very often results. Death, too, is not an infrequent occurrence from its use. I do not wish to entertain an unfounded prejudice, nor would I express myself so positively if I had not good reasons for doing so. A man, too, should be especially careful in opposing a method which is so popular. The manner in which the douche is applied makes but little difference. Great pain often follows its use,—a fact abundantly established by the histories of cases we have had in this hospital. I am not alone, however, in entertaining this opinion, for very many others who have tested this method coincide with me in this opinion. The danger in the use of the douche has not been found very great where the neck of the uterus is conical, the os being small; but where we have reversed conditions—a large cervix with the os somewhat dilated—the danger is proportionately increased. Hence the very probable presumption that the difficulty is produced by the entrance of the fluid into the uterine cavity. In this way also air may find a passage into the uterus, and death result from its transmission to the heart through the venous system. That fluid may pass through the Fallopian tubes into the peritoneal cavity is very possible; but I cannot so readily believe that the danger to be apprehended from this is great.

The tampon used by some is not to be recommended. It finds a much more proper place in placenta prævia, for it can be there used to much

better advantage than in the induction of labor. Its action in the latter case is very slow and uncertain.

For many years elastic bladders, dilated by air were used by the French, and more recently they have been extensively employed in England for the dilatation of the cervix; but they have failed to give satisfaction.

The injection of carbonic acid after the method of Scanzoni must be placed upon the same plane with the injection of water. Patients will die from its use, with the same symptoms and having the same post-mortem appearances as if they had suffered from the inhalation of the gas.

Suction of the mammæ for the purpose of inducing labor is entirely untrustworthy as generally practised. If persevered in until the desired result were effected, mastitis would certainly be a consequence.

Faradization as signally fails as suction of the mammæ, and cannot be relied upon. For many years I have had abundant opportunities to practise all these different methods, and now have an idea of what is right. Under no circumstances whatever will I allow myself further to experiment. The plan which I here pursue I have found upon a long and faithful trial to give better results than any other. This is nothing more than the practice of the original method, consisting in the employment of a pointed quill, or, what will answer the same purpose, a steel pen. This method, besides having the advantage of simplicity, is always applicable, as the instrument is ever at hand. The point of the quill is placed upon the palmar surface of the index-finger, which is then passed up to or through the cervix, and the membrane punctured. An improvement on this plan consists in making an opening in the side of the quill through which a sound can be introduced. The point of the quill is then brought into close apposition with the body of the sound. The latter is then passed through the cervix, the quill being kept in position, and when the desired distance is reached the sound is withdrawn, leaving the quill behind, and the puncture can be made. In this manner we overcome the difficulty of passing the projecting angle of the posterior wall of the cervix.

By this method no damage can result, and a long narrow cervix can be readily passed. As the amniotic fluid drains away, pains are induced, the head passes down, and in twelve hours delivery can generally be accomplished.

A NEW ANTISEPTIC.

Concerning the Antiseptic Properties of Salicylic Acid, by Prof. Kolbe, of Leipzig.—*Schmid's Jahrbucher.*

Translated by J. TRUSH, M.D., Cincinnati.

The author starts out with the remark, that the only published observations respecting the "physiological" properties of salicylic acid, were those of Betagnini several years ago. According to this author, salicylic acid, when administered in large doses (one to one and a half drachms in two days), produces ringing in the ears; in its passage through

the system, a part is decomposed and converted into salicylic acid, while another portion appears in the urine unchanged.

Certain experimental observations by Prof. Kolbe have demonstrated that the salicylic acid, if given to the amount of five grains at a dose, can be detected in the urine within two hours after administration, and continues to be present in this excretion twenty-four hours thereafter.

The known fact, that salicylic acid can be readily produced, synthetically, from carbolic acid and carbonic acid gas, and is decomposed at a boiling temperature and converted into the two compounds just named, led the author to infer that it might be possessed of properties similar to those of carbolic acid, an inference the correctness of which the following experiments would seem to substantiate.

1. To a watery solution of amygdalin a little salicylic acid was added, thoroughly mixed, and the mixture incorporated with an emulsion of sweet almonds, and set aside in an open vessel, together with an other vessel containing a like mixture of amygdalin and emulsion of sweet almonds, but without salicylic acid. After a lapse of two hours the latter emitted a strong smell of oil of bitter almonds, while the former was entirely free from this odor. Further experiments proved that the odor of the oil of bitter almonds would appear in these mixtures in the course of several hours, if the quantity of the acid added was very small, but could not be detected even after twenty-four hours when somewhat larger quantities of the acid had been employed.

2. Whenever mustard meal is mixed with warm water, the mixture in a few minutes gives off a strong smell of oil of mustard. Now the addition to such mixture of a small quantity of salicylic acid entirely prevented the development of this odor.

3. The addition of a little salicylic acid, (less than one part per thousand) to a watery solution of grape sugar, entirely prevented fermentation, the ferment evidently having been destroyed. Or, if added to a solution of grape sugar already in a state of fermentation, this process was speedily arrested.

4. Five different vessels, — glass jars — were charged, each with a quart of beer, of good quality. To four of these salicylic acid was added and in the following quantities: to No. 1, three grs.; No. 2, six grs.; No. 3, twelve grs.; and to No. 4, eighteen grs.; the fifth jar receiving no acid. The jars were then set aside, loosely covered with paper and exposed to a temperature, ranging between 68 and 75 degrees F. The beer in jar No. 5, containing no salicylic acid, commenced to spoil on the second day of exposure already, and the surface of the liquid was being covered with mold. Jar No. 1, with three grains of the acid, showed traces of this fungoid vegetation on the third day; No. 2, with six grains, on the fifth day; No. 3, with twelve grains, on the tenth day, while the quart of beer in jar No. 4, with eighteen grs. of the acid, was entirely free from this vegetation, even after twelve days of exposure. The beer was, of course, sour, but the acid, in the propor-

tion of about one part per thousand, had entirely prevented the development of the fungus.

5. Pure fresh cow's milk, with an admixture of 0.04 per cent of salicylic acid, was exposed in an open vessel for 36 hours to about the same temperature as above. At this time it coagulated just as milk without the acid would do. If, however the quantity of acid was slightly augmented, the souring and coagulation was retarded considerably beyond 36 hours. Milk holding a small quantity of the acid in solution retains completely its normal taste, the little acid being altogether inappreciable to the sense of taste.

6. The author prepared some pieces of fresh meat by rubbing small quantities of the acid into the surface. Thus treated the meat retained sweet and sound for weeks, though exposed to the open air. Before using such meat the greater part of the acid can be removed by washing or rinsing off with water; that which remains after such washing or rinsing can scarcely be detected by the sense of taste; probably because the taste of the acid is not very pronounced, being of a faintly sweetish character, and not all disagreeable. The experiments to determine the value of salicylic acid as a preservation of fresh meats for considerable periods of time, are not yet complete; should they furnish favorable results, much of the meat which at present is converted into extract might be preserved in its natural state at very small expense. At some future time Prof. Kolbe promises to publish the results of his experiments respecting the preservation of eggs, by means of this substance.

The usefulness of salicylic acid as an antiseptic for surgical purposes has not yet been fully ascertained. Prof. Thiersch gives the following as the results of his experiments with this substance on patients in the surgical wards of the Jacobs Hospital in Leipzig; Salicylic acid, — pure or mixed with starch, — sprinkled upon ulcerating cancerous surfaces, or sloughing sores, destroys, for a considerable length of time, all offensive smell, and without giving rise to any noteworthy amount of inflammation. Solutions composed of one part of salicylic acid; three parts of phosphate of soda and 50 parts of water, applied to granulating surfaces, markedly accelerate the healing process.

A number of operations were performed under a spray of salicylic acid and water (1 part of the acid to 300 parts of water), the wounds were subsequently dressed with wadding soaked in said solution and kept moist by means of a syphon-drop, about eight drops per minute falling on the dressings. The results thus obtained were very satisfactory; an amputation of the thigh, performed after this method, was not followed by either pain, fever, or swelling; and the dressings, which were removed for the first time on the sixth day after amputation, were free from offensive smell; the amputation wound it was found, had almost entirely healed, a few small points only being still open.

Equally favorable results were obtained in a case of amputation of the arm and another case of resection of the arm. It was observed in this coun-

tion, that whenever salicylic acid was kept in contact with open wounds, it speedily appeared in the urine.

Possessed of such properties, this substance, Prof. Kolbe claims, is entitled to a place on the list of really useful articles of the materia medica, and deserving of further and even extended trial.—*Cincinnati Medical News*.

BABIES' SORE EYES.

BY HENRY W. WILLIAMS, A.M., M.D.,

Professor of Ophthalmology at Harvard University.

The accoucheur has scarcely begun to congratulate himself on the favorable progress of his case after delivery, when, in many instances, the appearance of ophthalmia in the new-born infant renews his anxieties. The suddenness of the attack, the severity of the symptoms, the delicate state of the mother and child,—making it impossible, in most cases, to have other advice than that of the attending physician,—and the immediate and obvious consequences of his skill or of the want of it; these conditions combine to render such cases of grave importance.

From some cause, this disease has seemed to be more than usually frequent and virulent during the last summer and autumn, and I have been urged to say something in the *JOURNAL* about it and its management.

No case should be neglected, when there is even a slight discharge from the eyes of the young infants; a mild form of conjunctivitis, however, is often met with, marked by slight redness of the lining of the lids and a little mucous secretion, which requires only frequent cleansing of the eyes with tepid water and the use of simple ointment along the edges of the lids to prevent their adhesion at night; or, at most, the putting into the eyes, three times a day, a few drops of solution of two grains of alum or four grains of borax in an ounce of water. These are the cases in which nurses think they accomplish such wonders by spiriting into the eyes a stream of breast-milk: a waste of valuable material, but a procedure which does no other harm than to render the nurses self-confident, and to lead them to fatal reliance on the same means in cases of the more severe form of disease. This mild inflammation is apparently often caused by strong soap, or other acrid or irritating substances, rubbed into the eyes at the first cleansing of the child; cold and dampness are also causes. The same agencies may sometimes induce the more virulent disease which is the subject of this paper; but it is probably most often due to infection of the eyes, during birth, from vaginal or urethral secretions. This is made probable by the limitation of the time within which the first symptoms appear; for if the severer form of disease were often produced by the action of externa irritants, it would show itself at various periods, as a result of the continued carelessness of mothers and nurses, whereas it seldom begins later than ten days after birth, usually much sooner.

The form of purulent conjunctivitis known as ophthalmia neonatorum, or ophthalmia of new-born

infants, generally begins from the third to the sixth day after birth, a slight red streak on the skin along the middle of the upper lip being sometimes observed as a premonitory symptom before any discharge from the eyes is noticed. If the lid is drawn open, its lining is seen to be red and velvety, and a slight mucous secretion is found. In a few hours the lids may become enormously swollen and livid, the upper lid sometimes completely overlapping the lower and resting upon the cheek. The conjunctiva lining the lid becomes greatly tumefied and its surface granulated, and inspection of the eyes becomes impossible without the aid of an elevator. When by the help of this instrument the eye is seen, the conjunctiva of the eyeball is found to be in a condition similar to that of the inside of the lids. The secretion from the conjunctiva rapidly assumes a purulent character, and the quantity is very large, a teaspoonful perhaps accumulating in an hour's time. If this condition is not soon changed for the better, the defective nutrition, the pressure of the swollen lids, and maceration in the unhealthy secretion cause haziness of the cornea, and then ulceration and perforation; followed usually by hernia of the iris and perhaps loss of vision.

Two opposite and equally fatal errors of treatment are unhappily prevalent. On the one hand, nurses frequently regard babies' sore eyes as a slight matter, and neglect to call the attention of the physician to the early symptoms, relying on the breast-milk as an infallible cure. Then, when the increased swelling of the lids makes the use of this means impossible, they are too often ready to apply an alum curd or a poultice, "to draw the inflammation," thus greatly increasing the danger of ulceration or sloughing of the cornea. On the other hand, the physician, unfamiliar with these cases, and alarmed at the intensity and duration of the symptoms, feels that the latter must be subdued by active treatment, and may employ caustics or stimulants adapted to disease of the same tissues in adults, but not well borne by the infantile subject.

Of all curative means the *most important is constant cleansing of the eyes*. This should be repeated according to the amount of the discharge, every two hours, every hour, or even every half-hour during the day, and once or twice at least at night, until the diminished secretion and lessened thickness of the lids allow of a less frequent repetition. The lids may be opened with the fingers of both hands by the nurse, whilst another person pours in tepid water from a spoon or sponge. If the lids are greatly swollen this becomes impossible, and a syringe must be used, which should be perfectly clean, and have a smooth and not too sharp point. Its nozzle to be gently passed under the edge of the upper lid, and the contents injected so as thoroughly to wash out the palpebral cavity. This must be done often, as already advised, for it must be borne in mind that the continuous soaking of the cornea in the copious purulent discharge seems to soften its texture and prepare the way for ulceration. Special care should be taken, in cold weather, to make the water so warm that the child may have no shock, and thus to avoid its cry-

ing, as the thickened lids are often everted when the child cries. Should this eversion occur, the lids are to be replaced as gently as possible with the fingers. A little simple ointment should be used along the edges of the lids, when the child sleeps, to prevent agglutination and give opportunity for the free escape of the discharges; as also to protect the external skin from excoriation.

If these means are gently used, the child is not much disturbed, and soon falls asleep after them. These measures for securing cleanliness appear to be sufficient for the cure of many even severe cases; but I think it safer, where the symptoms are formidable, to alternate with the injections of water the use of a mild astringent, as, for instance, a solution of five grains of alum in an ounce of water. This should be applied in the same way, and should be warmed if necessary. A solution of crystals of borax, of the same strength, may also be used. These are the best collyria for these cases; but a solution of sulphate of zinc, a fourth or a half of a grain in an ounce of water, may sometimes be serviceable. Any *strong* astringent solutions, or any solutions of nitrate of silver, acetate of lead, or corrosive sublimate; the introduction beneath the lids of mercurial or nitrate of silver ointments; the application of the crayon of nitrate of silver, pure or mitigated with nitrate of potash, or of the crayon of sulphate of copper: all these *should be avoided*. Cases may perhaps do well where these have been employed, especially if great care has at the same time been taken as regards cleanliness of the eyes; but they are dangerous remedies. Moreover, they sometimes evidently cause agonizing pain; and there is great risk that the mother, unable to bear the dreadful sight of her infant's sufferings may, refuse, unless the physician has established the strongest hold upon her confidence, to continue so harsh a treatment, and may place the child probably in less skilful hands, though blaming the doctor if the eyes are lost.

The condition of the cornea must be closely watched, and the lids must be raised for this purpose, by means of an elevator. If unprovided with such an instrument, the physician may form one by bending the end of the handle of a spoon, with which he can draw up the lid; or he may perhaps effect his object by using a broad hair-pin, bending the rounded end in the same way. Any central cloudiness or ulceration of the cornea would indicate the use of a drop of a solution of sulphate of atropia, two grains to an ounce of water, put into the eye once daily, or oftener, and continued while any cloudiness remains. Should perforation of the cornea take place, hernia of the iris may perhaps be prevented by its use, and if the opening is small and is promptly healed, good vision may be preserved. The physician should not relax his vigilance until the symptoms are much improved, as the cornea sometimes yields unexpectedly, under the effects of the long continuance of the disease; even in its later stages and after its force is apparently spent.

Every pains should be taken to secure good nutrition for the child. Without exposing it to cold, the air of the room should be renewed. The light should

be moderated, so that the child may open its lids when they are not too much swollen, and thus permit the discharge of the secretions. The child will not open its eyes if the room is too light or too dark.

The prognosis of this affection is favorable, even in the severest cases, if treated promptly and diligently from the outset; and I once more urge use of the simpler remedies as unquestionably the best. But if ulceration or a sloughy condition of the cornea is already present when treatment is begun, the result is often unfavorable, whatever means may be employed. Yet we need not wholly despair even where these conditions exist, as the eye will sometimes recover with at least partial vision.

A most important part of the physician's duty is to take every precaution against contagion. A minute particle of the morbid secretion may convey the disease to the eye of a healthy person. The attendant should therefore direct the thorough cleansing or destruction of all articles soiled with the purulent discharge; great care in using the syringe, so that no drop of the injection may be thrown back from beneath the lids into the eye of the nurse; and immediate washing of the hands whenever they have touched the sore eyes or anything contaminated by them. *Boston Medical and Surgical Journal, January 28.*

ON THE TREATMENT OF SUSPENDED ANIMATION IN NEW-BORN CHILDREN.

NOTES OF A LECTURE AT THE HARVARD MEDICAL SCHOOL.

BY CHARLES E. BUCKINGHAM, M.D., *Professor of Obstetrics.*

With some obstetricians, the condition of the newborn child, compared with that of the mother, is of secondary consequence. I confess it is so in my estimation. This is a matter which depends upon the religious views of different individuals, and of course is not to be here discussed. Both the mother and the child require attention, and you can oftentimes give directions for the benefit of the child while you are making the required pressure over the uterus which has just expelled it.

Sometimes the child cries lustily as soon as it is expelled. Sometimes it gasps feebly, with long intervals between its respirations, which may of themselves become more frequent and stronger, or less frequent and more feeble. It may come into the world blue and flabby, and without a visible sign of life. If there be beating of the umbilical cord, however, there will almost certainly be a gasp, and that gasp may be repeated; or if not repeated unaided, your assistance may restore the child to life. Even if there be no pulsation to be seen or to be felt, you may in some cases hear it by putting your ear over the heart. You need not trouble yourselves about a ligature upon the cord; make the child breathe. And for this end it is not worth while to spend time in trying the Marshall Hall method; you have a chest to deal with which has never been expanded, and a pair of lungs which have never been inflated. Send for a couple of pails of water, one cold and the

other rather warmer than it would be comfortable to take an entire bath in. A child who has never breathed, if rapidly dipped in these alternately a few times, will often cry audibly. But you must not wait for the pails of water before trying other measures to make the child breathe; if you do, it will be just so much neglect. With a dry rag over your little finger, thoroughly wipe the mucus from the fauces; that operation alone will make some children cry. Take the child up in a dry towel, or a pocket-handkerchief if you have one at hand, or in anything which will keep it from slipping from your grasp; hold it with the scapulae in the palm of your left hand, the finger and thumb embracing the occiput, which should be firmly pressed backwards; the finger and thumb of the right hand should close its nostrils. Apply your mouth to that of the child and try to inflate its lungs; you need not fear that you will blow too hard; indeed, unless you place a moderately dry cloth between the child's mouth and your own, you will find it difficult to inflate at all. But why press the head forcibly backwards? Because in so doing you close the passage of the œsophagus; and should you neglect that precaution, you would find the stomach inflated instead of the lungs, and a new obstacle thus put in the way of the child's breathing, by your own carelessness.

You should inflate the lungs ten or fifteen times in a minute; and the process should be continued as long as there is the slightest possibility of life. The occasional alternate dipping will help your efforts. In some cases, a rapid and more forcible pulsation of the heart is felt by you upon your very first insufflation, and this, as a rule, will be repeated and increased in strength with every succeeding attempt, until as you take your lips away you will each time see the child gasp, open its eyes, heave its chest, and at last cry. The color, which has been leaden and dull, becomes of a positive red. The points upon which you placed your fingers, before the operation, became white, and remained so long enough for you to count twenty or more; but now the color returns more and more rapidly, and you will find, as the child's respirations become independent of your aid, that the color returns almost immediately on the removal of the pressure.

Be sure that all chance of life is gone before you stop your exertions; I have known an infant, who was laid aside in a sheet as dead by one of our profession, to live to adult age. So long as the breathless child is cool, if pulsation exists even to a slight degree, life is still possible. Excess of heat to such a child will diminish its chances for life. Why, then, you may ask, do I dip it in hot water, as well as in cold, to make it breathe? Simply as a stimulant to its skin. It is not to be left in the hot water an instant; it is dipped in hot water for the same reason that I would spank it, or slap it with a wet towel, the object being to irritate its nervous system and make it cry.

If you will now simply wrap the resuscitated infant in a blanket, and leave him without washing or dressing or food for a few hours, he will be better off than if you weary him with further attentions.—*Boston Medical and Surgical Journal.*

CROUP AND DIPHTHERIA.

SIR WM. JENNER has published during the month (*Lancet*, Jan. 2 and 19) a "Clinical Lecture on Croup and the Diseases that resemble it." It is full of instruction, put in the simplest form. To give a summary of it is almost impossible, from its condensed form; we therefore select some points that deserve the special attention of the professor, and state Sir William's views in his own words:

It was once supposed that membranous inflammation of the larynx was peculiar to children. It is now known that it is not so. It occurs, not so very unfrequently, in persons of advanced life. Diphtheria is an acute specific disease attended by inflammation of the pharynx, having as its result exudation of lymph. It is a specific inflammation arising from a specific cause. The specific inflammation in diphtheria has a tendency to spread, to spread over the pharynx in all directions, to pass upwards to the nares, downwards to the larynx, and, in rare cases, to the œsophagus and stomach. From the pharynx it may spread down the trachea and into the bronchi. So that in diphtheria we get, not unfrequently, membranous inflammation of the larynx. But membranous inflammation of the larynx, I have told you, is croup. Is there, then, a membranous inflammation of the larynx distinct from the acute specific disease diphtheria? Are there a true croup and a diphtheritic croup? Certainly, if you were to place in the hands of the best pathologist the larynx of a child who had died from membranous inflammation of the larynx, the so-called idiopathic croup, and that of one who died from a true diphtheritic inflammation of the larynx, he would be unable to distinguish the one from the other. There is no anatomical character by which he could say, "This is true croup; this is diphtheritic inflammation of the larynx." If, however, the pharynx was also found to be the seat of exudation of lymph, he would say, "This is undoubtedly diphtheritic inflammation of the larynx." But it is beyond question that true diphtheritic inflammation may be limited to the larynx; that, in exceptional cases, the pharynx escapes the exudation. Seeing, then, that there are no anatomical characters to distinguish the one disease from the other, are there any clinical characters by which the two affections may be separated? It has been supposed that the presence of albumen in the urine would be sufficient, and I formerly laid much weight on this distinction. But later years have satisfied me that in cases which present all the characters of true croup, which are sporadic, spread to no other person in the house, come on apparently from exposure to cold and damp—that in such cases albumen may be present in the urine. It has again been urged that true croup has no tendency to spread; but this manifestly should no more separate a single case from the diphtheritic croup than should a single case of scarlet fever, because it did not spread, be separated from other cases of scarlet fever. The cause, again—the fact that some cases of croup came on after distinct exposure to cold and wet—cannot be sufficient to separate croup from diphtheritic croup, for it is beyond question

that a considerable number of cases of diphtheria do, to all appearance at least, date their origin from exposure to cold and wet. I have seen several solitary cases of true diphtheria thus originating; not spreading, or spreading, to other persons in the house, as the case may be. So my opinion has undergone some modification, and I am inclined now to the belief that there is no such disease as idiopathic, simple, membranous inflammation of the larynx. I say I am inclined to this belief. I am not sure that it is true; but as I formerly thought that the weight of evidence was in favour of their non-identity, I am now inclined, from my further experience, to think that the two diseases are really identical, that the so-called croup is really diphtheria.

Membranous inflammation of the larynx is one of the gravest diseases; it kills rapidly. If the termination be fatal it usually is so within a few days from the outset; rarely does the disease last a week, supposing that the windpipe has not been opened. The disease is usually preceded by uneasiness in the pharynx, sometimes by well-marked evidences of diphtheria; often, however, the pharyngeal symptoms are trifling, and the gravity of the illness is only appreciated when the child wakes in the night with croupy breathing—that is, with rough, hoarse, loud, lengthened respiration. The difficulty of inspiration is due to two causes. At first it is due to the swollen condition of the mucous membrane, and also largely to the superadded spasm. Subsequently it is due to the false membrane narrowing the passage, and also largely to the superadded spasm. The paroxysms of difficulty of inspiration from which the patient suffers are due to the spasm. The disease is attended by a certain amount of febrile disturbance, and there is a little uneasiness in the larynx, perhaps some pain and tenderness. The lymphatic glands adjacent to the larynx are commonly enlarged and tender. (They require to be felt for.) There is hoarse, rough cough, with expectoration of at first a little glairy mucus, and subsequently pieces of false membrane—that is, of tough lymph.

To avert death in cases of membranous exudation into the larynx we open either the larynx or the trachea; the trachea in a child; the larynx in an adult. We select the larynx in an adult because of the facility with which it is reached. We are driven to open the trachea in a child because the larynx is too small to admit the tube. The opening into the windpipe still further interferes with the power of coughing. The patient in croup is, as I have said, unable to close his larynx well; still he can close it to a certain degree, and he is able to cough to that degree. The tube of course he is unable to close, and hence acrid matters about the tube are more liable to be drawn downwards, and therefore to become impacted in the lung, to produce pneumonia, and, in their passage downwards—so acrid is the matter—to produce bronchitis. It must be remembered that the inflammation extends downwards, not merely because the inflammation itself has a tendency to spread, but because the matter thrown out

is acrid, and has a tendency to produce inflammation, which, in the constitutional state of the patient, will be a membranous inflammation. Thus, in some cases of diphtheria, the ear is the seat of membranous inflammation, and acrid matter as well as lymph is poured out. It runs down the outer side of the ear. As it passes down it excites inflammation, and the inflamed surface becomes covered with a false membrane. That this false membrane is not the result merely of extension of the inflammation is probable from the fact that if a blister is applied to a person suffering from diphtheria, the raw surface frequently becomes covered with lymph, with a false membrane, with a diphtheritic exudation. You will thus understand that the fluid exuded is an irritant; that this irritant produces inflammation; that the inflammation in the constitutional condition is attended with an exudation of lymph. It is a specific inflammation, because the person is suffering from a specific disease, just as when a person is the subject of constitutional syphilis, the local inflammations assume frequently a syphilitic character, or in the subject of cancer, local injury may cause changes of texture cancerous in nature.

This leads me to a point of some practical importance in regard to tracheotomy. It is commonly stated that the bronchitis which so frequently follows tracheotomy in diphtheria is the result of the entrance of the cold air through the tube. It is said that in ordinary breathing the air is warmed as it passes through the mouth and nose and the pharynx and larynx, and so it is warmed air only which comes in contact with the bronchial tubes; that the entrance of cold air excites inflammation, and hence that many patients operated on for tracheotomy in croup die from bronchitis. To prevent this entrance of cold air, and I should say also of dry air, the patient's bed is surrounded with blankets, and a tube discharging moist vapour is introduced within the blanket-curtains, so that the patient may breathe a warm and moist air.

It seems to me that if the explanation I have given you be correct, there is no need for these special means—for these blankets and hot vapour. We know that if the larynx be opened for any other affection—for example, such a case as we have now in the hospital—there is no tendency to the occurrence of bronchitis, and the patient walks about and breathes the ordinary air, with very little protection, and without danger. A little protection may be necessary. Not only are these special means unnecessary, but in the disease diphtheria they are most injurious. They are most injurious because they tend to produce that exhaustion which is the cause of the fatal termination in so many cases during the second week of their illness. The relief which the patient experiences when you remove all this apparatus is marked. You must have seen it in the women to whom I have referred. Thus you will understand that I think it most important for the success of the treatment of croup, should tracheotomy be performed, that the patient should be kept in a moderately warm atmosphere, a moderately moist atmosphere, but an atmosphere only so moist as may

be produced by a kettle on the fire throwing a little moisture into the room, only so warm as shall be agreeable to the patient. I am sure that I have seen cases terminate fatally that would have recovered had they not been thus over-nursed, over-cared for; had, that is to say, the origin of the bronchitis been properly appreciated.

INEBRIATION (*New York Medical Journal*, October, 1874).—Dr. T. D. Crothers, after considering the physiological and pathological effects of alcohol, arrives at the following conclusions:

1. Alcohol diminishes and destroys nerve-force, tending to develop paralysis of motor and functional activity.

2. Inebriety is a disease of certain parts of the brain, and of the nutritive functions which it controls.

3. This disease is provoked by alcohol in variable quantity, depending upon some unknown condition of the body at the time of exposure.

4. A weakened will-power, and mental aberration, and tendency to inebriety, not inherited, are manifestations of disturbance of the co-ordinating power of the nutritive function.

5. This disease is inherited, and exists as an alcoholic diathesis, which may spring into activity, remain latent, or develop into other irregularities and functional disease.

6. Inebriety is the active cause of many of the nervous and functional diseases of the brain.

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

EDITOR:

FRANCIS W. CAMPBELL, M.A., M.D. L.R.C.P., LOND.

SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editor, Drawer 56, Post office, Montreal.

MONTREAL, FEBRUARY, 1874.

We have to thank many of our subscribers who during the past month have remitted the amount of their subscriptions. We duly appreciate their thoughtfulness, and thank them sincerely. Will others follow their good example.

THE LATE WILLIAM SUTHERLAND, M.D.

The announcement which we made in our last issue of the death of Dr. Sutherland would be received with sorrow by every reader of the *Record* who knew him. He was universally respected both by the public and the profession, and his death leaves a blank in the medical circles of Montreal which will be extremely difficult to fill. A man of rare genius, of

great general knowledge, well read in every department of his profession, liberal and enlightened in all his views—his death is a public loss. As a lecturer on the subject of chemistry the mysteries of which he unfolded to many hundreds, if not several thousands of students, during his long career. As a College professor he was perhaps excelled by none other, and equalled by very few. Gifted ever with a ready flow of language, he was able to throw around even the dullest portions of chemistry an interest which always won the attention of students. Dr. Sutherland graduated at McGill College, in May, 1836, his inaugural dissertation being on asphyxia. He almost at once proceeded to the Niagara frontier and began the practice of his profession. Although much success attended his start in life, inducements were offered him, and about 1841 he returned to Montreal and began practice. In the autumn of 1843 he made, so to speak, his first public appearance, having with several other gentlemen organised, *The Montreal School of Medicine and Surgery*. Of those associated with him in the organization of this School Dr. Munro alone remains. The opposition which this School met with called from Dr. Sutherland in his first introductory lecture the full vigor of his pen, and perhaps to this day this lecture remains the best evidence on record of his powerful mind and strong determination. The hard work which was entailed upon Dr. Sutherland in this School of Medicine will be understood when we state that he lectured two hours daily, one hour in French and the other in English, on the subject of Chemistry. He was also one of the organisers of an institution that had a brief existence, viz., the Montreal Provident Dispensary. In the year 1849 he was induced to accept the Chair of Chemistry in connection with McGill College, and up to the year 1866, when failing health compelled him to economise his labor, he filled the position of Professor of Chemistry in that University, not only with satisfaction to the Governors, but with delight to all his students, who loved, revered and respected him. In 1844, Dr. Sutherland, in conjunction with Dr. Francis Badgley, published and edited a monthly medical periodical called the *Montreal Medical Gazette*, we believe the first English medical periodical ever published in Montreal. It only existed, we understand, for one year, but its pages are to-day intensely interesting to any one interested in the medical politics of Montreal. The Editorials from the pen of Dr. Sutherland are easily recognized and so bitter are some that one might fancy he had dipped his pen in gall. But bitter as he could be and was in his writings, yet with all there is evidence that the

writer had not forgotten he was a gentleman and a member of a noble profession. In this publication we notice that the idea of an organization of the medical profession of Canada, into a society was discussed, but, owing to the difficulty of travelling in those days, it does not seem to have been taken up. Dr. Sutherland, however, still kept it in view, and, in 1850, we find him bringing it before the Medico-Chirurgical Society of Montreal for discussion. The result of this action of his was the appointment of a committee, consisting of Drs. Badgley, Sutherland and David (Dr. David alone now surviving) to submit to the profession in Canada a prospectus of the object to be attained by the formation of an association to be styled The British American Medical and Surgical Association. Nothing seems to have resulted from this committee, and it was not till 1866 that Dr. Marsden, of Quebec, again agitated the matter, and through the Quebec Medical Society brought the profession together, resulting in the formation of the first Canadian Medical Association. Dr. Sutherland was for many years one of the Physicians to the Montreal General Hospital, but about 1861 he retired upon the Consulting Staff. Although Dr. Sutherland relinquished his professorial duties in 1866, being at that time elected Emeritus Professor of Chemistry, he continued to follow his strictly professional duties till Dec., 1872, when he announced his retirement from general practice, and his intention of devoting himself to consultation practice. Of this latter up till last spring he had as much as his gradually failing strength would permit him to attend to. By last mid-summer, very reluctantly, his many professional friends saw him withdraw from consultations also. From that time, he attempted to get such comfort as his disease would allow him, and surrounded by his family and numerous friends he patiently waited his Master's summons. Early on Tuesday morning, the 9th of February, it came and he passed peacefully to his rest in the sixtieth year of his age. His disease at first seemed to be purely laryngeal, induced by the accidental inhalation of chlorine gas in his class-room; but whatever it may have been originally, it a few years ago developed into tubercular phthisis of a very chronic character.

At a meeting of the Medico-Chirurgical Society of Montreal, held on the 19th of February the following resolutions relative to Dr. Sutherland's death were adopted.

Moved by Dr. Hingston, and seconded by Dr. Francis W. Campbell, and

Resolved: 1. That this Society desires to place on record the great loss which it and the pro-

fession at large have sustained by the death of their late friend and associate, William Sutherland, M.D., whose high attainments and noble qualities enabled him to attain the first rank among the profession in Montreal.

Resolved: 2. That in his death the profession have lost a most valuable member; one kind and ever ready with sound advice, assistance and encouragement to his junior brethren, and to his patients an excellent physician, a valued friend and counsellor.

Resolved: 3. That this Society desires to extend to the bereaved family of the deceased their most heartfelt sympathy in the irreparable loss which has befallen them.

Dr. Hingston in moving the above resolution spoke warmly and affectionately of him who had gone to his long home; of his kindness and gentleness and of the extremely delicate way which he had acted towards the profession, on his retirement from general practice refusing to recommend who his successor should be. In this he recognized that spirit of fairness towards his professional brethren which was characteristic of Dr. Sutherland.

Dr. Francis W. Campbell, in seconding the resolution, alluded to the love felt for the deceased by all who knew him, to the great interest he constantly evinced in those who had been his pupils, and to his keen sensibility of avoiding anything which could be looked upon as unjust to those who were, like he was once, struggling to gain professional position.

Dr. Reddy spoke feelingly of the blank which his removal had caused, and of the kindness of heart which ever characterized all his actions. Other members feelingly alluded to the event, and the Society adjourned.

TO CORRESPONDENTS.

J. W. M., Montreal. Your letter has been received. The article you allude to will in all probability receive some notice in our next issue.

P. O. G. Warkeworth, Ont. Thanks for your good opinion as to the practical character of the Record.

Dr. W. H. Arthur, Ont. Will see that the Record is sent regularly in future.

Dr. W. Oakville, Ont. Sent the statement as desired, but have not heard from you since.

THE CHEMISTRY OF MILK.

Dr. Cameron, the city analyst of Dublin, communicated lately to the Royal Dublin Society some interesting researches which he has made with reference to the chemistry of milk. He pointed out

that the white colour and opacity of milk were not due, as was commonly stated, to the liquid being a fatty emulsion, but that they were owing to the fact that the fat globules in milk were invested with a caseous solid membrane which reflected light. By appropriate treatment all the fats of butter could be extracted from milk, and yet the residue would retain the characteristic appearance of that fluid. Butter-milk, which contained only 0.5 to 0.7 per cent of fat, was yet a perfectly white liquid. In milk there were fat globules without investing membranes, but they were not numerous. The solids in cow's milk never sank below 12 per cent. in the case of town dairy cows, or 11.5 per cent. in the case of farm cows on poor pastures. In Dublin milk of average quality, and when pure, the solids averaged 13 per cent., and the fats 4.1 per cent. From ten analyses of Irish mares' milk, Dr. Cameron concluded the average composition to be—Water, 90.0; butter, 0.90; cheesy matter, 1.92; sugar, 6.78; mineral matter, 0.40—100. Sow's milk he found to be extraordinary rich, and to contain water, 81.72; butter, 5.66; cheesy matters, 7.06; sugar, 4.60; mineral matters, 0.96—100. It showed no cream on standing.

LOCAL USE OF HYDRATE OF CHLORAL.

Dr. Heron Watson has been lately making extensive trial, in his wards in the Royal Infirmary, Edinburgh, of hydrate of chloral as an antiseptic and disinfectant. It is used in the form of an aqueous solution of about five grains to the ounce, and also as an ointment combined with paraffin, white wax, and almond oil. It answers the purpose admirably, and is found to be a non-irritating application, while at the same time it cleans and heals sores, and keeps down the bad smell. It is also being tried as a preservative solution for pathological specimens, and appears likely to be very useful for that purpose; but there has not yet been sufficient time to test it thoroughly.

AN ADVERTISING DOCTOR IN 1700.

The *Flying Post*, January 6, 1700, contains the following advertisement: It presents an idea of the medical practice of that date perhaps but little understood.

"At the Angel and Crown, in Basing-lane, near Bow-lane, liveth J. Pechey, a Graduate in the University of Oxford, and of many years' standing in the College of Physicians in London: where all sick people that come to him, may have for sixpence a

faithful account of their diseases, and plain directions for diet and other things they can prepare themselves. And such as have occasion for medicines may have them of him at any reasonable rates, without paying anything for advice. And he will visit any sick person in London or the Liberties thereof; in the daytime for two shillings and six pence, and anywhere else within the bills of mortality for five shillings. And if he be called in by any person as he passes by, in any of these places, he will require but one shilling for his advice."

In the *Practitioner*, Dr. Anton Ewald describes a case where vomiting of much acid fluid occurred on alternate days, with the expulsion, from the mouth and anus, of great quantities of combustible gas, which burned with a yellow flame when lighted. The inflammable nature of the gas was first discovered by the patient, who, when lighting a cigar, found to his surprise that his eructations took fire. Chemical analysis showed the gaseous eructations to consist of a mixture of carbonic acid, hydrogen, oxygen, nitrogen, marsh gas, and a little olefiant gas. On examining the contents of the stomach it was found that lactic acid and butyric acid fermentation had been going on in the stomach at the same time as alcoholic fermentation.

TORONTO EYE AND EAR INFIRMARY.

We have received the seventh annual report of this Institution, which seems to be doing a good work. During the past year 81 persons were received into the Infirmary as in-door patients, the largest proportion of them coming from outside of Toronto. Mr. Langmuir, the Government Inspector of Hospitals, reports very favorably on the Institution. We, however, question much the wisdom of his giving, and of the surgeons of this charity publishing a certificate of competency from him, as is done in the following paragraph, copied from page 17: "Whether in respect of the wonderful character of the operation, the quickness of performance, and the skill and ingenuity exhibited, the operation reflects the utmost credit on the surgeons." We always thought the duty of Inspectors appointed by Government was to examine not only the internal economy of hospitals, but their sanitary state. We never before imagined that they were required to report on the skill and competency of the attending physicians and surgeons.

The American Newspaper Advertising Agency of Geo. P. Rowell & Co., New York, is the only establishment of the kind in the United States which keeps itself persistently before the people by advertising in newspapers. They evidently receive their reward, for we have it from a reliable source that advertising orders issued by them for their customers have exceeded three thousand dollars a day since the commencement of the year, and this is not a very good year for advertising either.

PERSONAL.

Dr. Hingston has just been elected Mayor of Montreal, by a majority of 4,000 over his opponent. Dr. H. is the first member of the medical profession who has occupied the Civic Chair since the retirement from it of the late Dr. Wolfred Nelson some seventeen years ago. We have no doubt but that our confrere will ably and honorably fill the very distinguished position to which his fellow citizens have elected him.

Dr. Paquet, M.P. for Berthier, en haut, has been elevated to the Dominion Senate.

Dr. A. B. Larocque, one of the Medical Health officers of the City of Montreal, has been elected member of the American Association of Public Health.

Dr. Paré of Sherbrooke and Dr. Paincaud of Valrennes (M.D. Victoria) have just returned to Canada after nine months' sojourn in Europe, principally in Paris.

Alexander A. Fergusson, (M.D., McGill, 1864,) of Franklin Centre, P. Q., has been appointed Coroner for the district of Beauharnois, comprising the Counties Beauharnois, Chateauguay, and Huntingdon. The local press speak of the appointment as one that will give general satisfaction.

Dr. Hughes Bennett, late Professor in the Edinburgh University, has settled at Nice, France, and intends carrying on practice. This change has been rendered necessary by the state of his health.

OBITUARY.

Dr. Robert Adams died in Dublin, Ireland, on the 13th of January, at the ripe age of 83 years. He held every position of note in the gift of the Medical profession of Dublin. He was, however, best known to the profession by a very extensive and valuable work on Chronic Rheumatic Arthritis, which he published some years ago. Although able

to retire, he continued in the all but active duties of his calling; and is said literally to have died in harness.

THE GREAT AMERICAN DOCTOR.

It is now somewhere near eighteen years since Montreal was distinguished by having among its residents, for the greater part of one year, a man, who, under the name of "Tumblety," the great Indian Doctor, made something of a stir, not alone among the uneducated, but among many whose position should have prevented so barefaced an imposition. He filled columns of our daily papers with chiefly purchased certificates, drove a fast horse and a flashy looking carriage, and for a half season was a clever adroit at humbugging not a few out of considerable sums of money. Suddenly as he appeared on the Montreal stage, he about as suddenly departed, and during the long interval which has elapsed from that time to this we have not till a few days ago heard of him or even seen his name mentioned. By the *British Medical Journal* of the 6th of February, we see that, under the title of the *Great American Doctor*, Tumblety has again come to the front at Liverpool, and that, too, in not the most enviable light. A man consulted him, and was given a variety of medicines, among the rest a mixture of which he took a dose, one tablespoonful, and died the same night. A certificate of death being requested from Tumblety he refused to give it, and returned the fee (thirty shillings) which had been paid to him. Although a post mortem was held, no evidence of poisoning could be made out, and the verdict was death from natural causes. We simply note this case to show, firstly, that our brethren across the Atlantic are as easily imposed on as thousands are with us, by the veriest quacks, and, secondly, that these quacks obtain from the working classes fees for single consultations which they would grudgingly pay to a regular practitioner for a month's work.

CLOSING OF MONTREAL MEDICAL SCHOOLS.

We understand that the Medical Faculty of McGill College, close there lectures on the 13th of March. Bishops College Medical Faculty terminate there lectures on the 19th March. The examinations commence almost immediately after.

DIED.

In Montreal on the 9th of February, William Sutherland, M.D., aged sixty years, Emeritus Professor of Chemistry, University of McGill College.