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THE S I S

by

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Subject

Pneumonia - How most successfully treated
in General Practice.

Scope of Paper. In the following paper it is proposed to show certain varieties⁴ of the treatment of Pneumonia, as dealt with in a large general practice, and the opinion of the writer as to the mode of treatment which seems to him most suitable to the general practitioner.

The disease itself I do not propose to discuss except in so far as may be required to describe the effect of treatment on general symptoms, and on final issue. I assume that in the cases hereafter detailed my diagnosis was correct, and that it was pneumonia that had to be dealt with. Nor shall I discuss the pathological

or ^PPhysiological aspects, but purely the therapeutical aspect. The cases taken and compared are as nearly as possible alike, that is in age, temperament, general appearance, in order that the treatment in each may be the more satisfactorily compared, and the conclusion drawn as to which treatment seems to be best in my experience in general practice.

It is to be remembered, ^{the} the question is considered from the point of view of the general practitioner, who has not the advantages of a trained nurse to carry out his instructions in all their minutiae, and who has to order, often to an ignorant person, what he thinks will prove the most beneficial to his patient, and be at the same time likely to be carried out. For in many of the cases that are to be narrated, the only attendants were the mothers (old women as a rule) or wives, who had little or no experience in the care of the sick.

I may also say that in most cases there was only one visit in the day, and consequently no regular chart could be kept as to temperatures, pulsations, respirations etc. From this one visit the actual condition the patients were in had to be gathered, and compared with the condition of the day before, and the treatment for the next 24 hours had to be based on the result of

this comparison. This will of course be easily understood from the fact, that in a large general practice (unless in exceptional cases) it is utterly impossible to make more than one daily call. Besides, as in most cases there was no trained nurse, it was impracticable (even if more frequent calls had been possible) to keep a correct record of all symptoms. The record would only extend to the 2 visits, and to the condition of the patient at these particular times.

In cases where there was the help of a trained nurse her reports have been given. In the other cases I will note down the conditions and symptoms as I proceed.

I don't know that my treatment may seem, even in the eyes of those situated as I am, the best. I can only say that I have tried various methods, and one I have found the most satisfactory. That as a rule I should be inclined to follow not blindly, but cautiously. Circumstances may arise, and do arise, when in pneumonia, as in all other diseases, no empirical treatment can be followed. That I allow, and would be the last to adopt any routine or cast iron rule, but I am only working on the broad and general rule, that, ^{this as} ~~what~~ I hope to prove, is the best to follow in a large, general, mixed practice. As circumstances arise, modifications must be introduced,

either to palliate the disease, to ward off complications, or if they have arisen to overcome them.

Modes of treatment For convenience I mean to tabulate
under headings. under certain headings of treatment
3 different cases. These 3 cases
are taken from amongst many others, of which I have notes, but I think with their results they will be sufficient to support my conclusion as to which is the best treatment to be followed in my circumstances. I might naturally give all my cases, but as there would be a general sameness, and monotony, they would I think prove tedious, instead of interesting. The results in the cases given are typical of the treatment followed, so that it can be assumed that in those not given there is the same ratio as to favorable and unfavorable endings as in those stated.

I of course may be met with the usual objection that in pneumonia, as in all other diseases, different cases may call for different treatment, and while admitting that, as I have said, the cases I have taken for comparison have all been of about the same age, sex, temperament, vigour, etc.,

For the sake of clearness the modes of treatment are arranged under 4 heads.

- 1st. Antipyretic.
- 2nd. Depressant, and Antiphlogistic.
- 3rd. Stimulant.
- 4th. Antipyretic and Stimulant.

Under these headings will be included not only the medicinal inward treatment, but also any local external application^s, which by their action can be classed under any of the above headings.

1st. Antipyretic. In these cases I have given medicines tending to lower the temperature such as Diaphoretics, Antipyrin, Antifebrin, Quinine, with local applications, either in the form of ice bags, or india rubber bags made in such a way as to keep up a constant stream of cold water by means of an ingress and egress stop cock.

This was the basis of my treatment, but occasionally slightly modified, after the temperature had been reduced, by either one or other of the different modes to be described.

2nd. Depressant & Antiphlogistic. In these cases I generally gave Mercury, Antimony, Bromide of Potash, small doses of Veratrum, occasionally opium with local applications of Cantharides,

Croton oil, or blood letting by means of leeches.

3rd. Stimulant. These cases were generally treated with stimulating mixtures such as Alcohol, Ammonium, Chloroform, with local application of poultices of linseed meal and mustard, or simply mustard leaf.

4th. Antipyretic & Stimulant. These in the beginning were principally treated with mild diaphoretics, some anodyne to relieve pain, then afterwards with stimulating expectorants, and tonics, local applications of poultices of linseed meal and mustard at first, and afterwards liniments such as Camphor, Eucalyptus, Turpentine and oil etc.

Under each of these headings I will give the daily treatment with effects on temperature, breathing, and pulse, and I shall at the end try to compare the different modes, and give reasons why I should prefer one to the other. I shall also indicate the diet prescribed, I shall also give the history of each case, and then proceed with the symptoms, and treatment de die in diem.

Cases under Antipyretic treatment.

1st. Denis McGuire. Patient aged 22, strong, and muscular, occupation labourer out of doors. Complains of pain in the right side and difficulty of breathing. Patient seen by me on the third day. Up till that time he was quite well, when after taking breakfast he felt a severe rigor, and as he said "did not know what was coming on him." Since that he has found his respiration hurried. He is troubled with cough, and complains of pain referable to the mammary region. He has also been very much flushed, and has perspired copiously. Around the mouth there is the characteristic eruption of "herpes labialis." He expectorates a good deal, and the expectoration is frothy, and tinged with blood.

Physical Signs Respiratory System.	Percussion reveals dulness over right mammary, infra-scapular, and infra-axillary regions. On auscultating the breathing partakes of the tubular character. Ascending you distinctly detect small crepitation. Left lung normal. Breathing, 38.
------------------------------------	---

3rd. day

4

Liq.

Antipyrin grs. 60
 divide in pulv 12
 one every 2 hours.
 Ice bags to the chest

Dietary. Milk with potash water.

5th. day

4

Liq.

Liq. Amon. Acet. 3 $\frac{3}{4}$
 Spt. *ant. nitro* 3 $\frac{3}{4}$
 Acid nitro muriat dil. 3 $\frac{3}{4}$

Aq. ∞ 3 $\frac{3}{4}$ VI
 every 3 hours in water

Diet. Light soup, or beeftea, with plenty
 of milk.

Vascular System. Pulse 120. Heart sounds normal.

Digestive System. Tongue dry, and coated, appetite
bad. Bowels regular.

Urinary System. Urine thick, and dark coloured. Spec-
fic gravity 1018. Reaction acid. No
albumen. Microscopic characters nil.

When I saw him on my first visit his pulse was 120, breathing 38, temperature 103. As he was a strong and muscular man I considered this a case, ^{in which} to try the Antipyretic treatment, especially as the temperature was high, and the inflammation still extending upwards. I therefore ordered ice bags to be kept on the chest, and side, and gave him 5 grain doses of Antipyrin every 2 hours.

4th. day. Temperature 100. Pulse 110. Breathing 34.

Patient complains of weakness, tubular breathing well marked, not much pain. Antipyrin and ice bags to be continued.

5th. day. Temperature 99. Pulse 100. Breathing 30.

Patient feels better, and thinks his cough is much improved. Breathing still tubular. Antipyrin and ice stopped. Ordered a mixture containing acetate of ammonium, sweet nitre and nitro-muriatic acid, and the right lung to be covered with cotton wool. Beef

7th. day

Quinina Sulp. grs. 60.

Acid Hydrobromic 3*iii*

Aq.

3*ssvi*

3 times a day in water.

sq.

3/p

tea and milk to be continued.

6th. day. Temperature 99.6. Pulse 110. Breathing
30. Seems to be going on fairly well.

Treatment same as preceding day to be continued. Cough has not annoyed him much, but it is very hard and dry and at times troublesome.

7th. day. Temperature 100.6. Pulse 120. Breathing
34. Tubular breathing still marked, but indications of "Crepitus Redux" towards base. Feels not quite so well, or comfortable, but does not complain much.

Owing to the temperature showing signs of rising I ordered a mixture of quinine, and hydrobromic acid, and an occasional ice bag to be applied to the chest. Face, and hands to be sponged with vinegar and water. Bowels have moved daily and ^{he} passes urine freely. Has fitful turns of sleep, but not of long duration at the time.

8th. day. Sent for in a great hurry. Patient seems much distressed, breathing laboured and hurried 42. Temperature 104. Pulse 120. Complains of severe frontal headache, and also severe lancing pain towards base of lung. The dulness is still well marked, but the breathing was not so tubular, and I could not de-

8th. day

ay

Salicin grs. 120
divide in pulv 6
 one every 2 hours

ly

ay

Pil opii *ni*
 to be taken at once

Brandy ³VI
 every 2 hours.

3/4

test the crepitus, ⁰ owing to the rise of temperature I stopped the mixture, and ordered 20 grain doses of Salicin every 2 hours until night when I returned.

At my return visit patient seemed worse, although temperature was slightly reduced, 103. Ice bags stopped, but Salicin continued. Breathing still very hurried, and I could detect a slight putrid smell from the breath. As the pain was still very severe I ordered 1 grain of opium, and ~~3/4~~ of brandy every 2 hours.

9th. day. Temperature 104. Pulse 130. Breathing 40. Odour increasing, and expectoration shewing purulent signs. Vomiting powders, ⁰ ordered to be stopped, and patient put on brandy and water alone.

From this on to the 14th. day patient grew gradually worse, and expired at the end of the 14th. day.

Registered cause of death. Gangrene following pneumonia.

Second Case.

William Docherty, aged 24.

History. When called to this patient he was sitting on a chair, and seemed to be suffering great agony from pain in the side, and difficulty of breathing.

General Appearance. He was a strong, fleshy man, robust and well made, if anything, inclined to corpulence.

Physical Examination. I ordered him to bed, and on examining him I found dulness over the whole base of the right lung, fine crepitation extending up towards mammary, infra-axillary and infra-scapular areas.

Temperature 102. Pulse 115. Breathing 32. Face flushed. Sputa coloured.

General History. Was informed by his mother that he had been ill for 3 days, that the illness commenced with a cold, and feeling of shivering. Liver was slightly enlarged but not ^hmodulated. No vomiting. Appearance of skin and conjunctiva normal.

Urine somewhat cloudy leaving *amorphous uric acid* on settling. No albumen.

3rd. day

Quinine Sulp. grs. 24

Acid tartaric grs. 60

Aq. $\frac{1}{2}$ VI $\frac{1}{2}$ every 3 hours in water

Diet.

Sweet milk, and ice,

Ice bags to chest

4th. day

Antipyrin grs. 60

Amide in pulv 12

one every 3 hours.

3rd. day. As this patient seemed to me to be strong physically, I considered him also a good case for Antipyretic treatment. I therefore ordered ice bags over right lung, and gave mixture containing 2 grain doses of quinine every 3 hours with milk, and ice for diet.

4th. day. Temperature 101.6. Pulse 120. Breathing 38. Patient does not seem so well to-day, although there was a slight fall of temperature. Complaints of pain, and during the night had a good deal of vomiting. Tongue very furred. Quinine mixture stopped, and ordered 5 grain doses of Antipyrin, cough very irritating during the night and hard. Examination with stethoscope reveals fine crepitation still going on upwards but tubular breathing at base. Ice bags ordered to be placed more on the mammary and infra-scapular regions.

5th. day. Temperature 100. Pulse 110. Breathing 38. Pain not so great, but patient was very restless during the night. Complained more of feeling of suffocation. Drank pretty freely of milk and soda with ice.

Stopped ice bags, but still continued Antipyrin, cotton wool put over lung.

12½

6th. day

Quinine Sulp. grs. 12

Acid tartaric grs. 40

Spt. Chloroformi 3 ½

Aq. 20 3 pVI

3 ¾ every 3 hours.

Beef tea in addition to milk.

7th. day

Spt. alk Sulp 3 ½

3 ¾ Aq. 20 3 pVI
every 2 hours

Brandy 3 ¾ every 2 hours.

6th. day. Seems very weak to-day and pale. Tubular
breathing over middle half of lung.

Temperature 100. Breathing 40. Pulse 120. No râles
detected. Tongue still coated. Bowels moved. Urine
very high coloured, no albumen. Pain not quite gone,
but does not complain. As patient seemed a little better
I ordered him 1 grain doses of quinine with 10 minims doses
of spirits of chloroform in order to relieve the dyspnoea,
Cotton wool or flannel round chest. Beef tea to be given
also.

7th. day. Temperature 100.6. Breathing 40. Pulse 120.

Patient seems very weak and slightly comatose
Lung still consolidated, and breathing tubular. Appearance
seems cyanotic. As I considered patient extremely ill
I ordered $\frac{1}{2}$ ounce doses of brandy every 2 hours, with 10
minim doses of sulphuric ether. Beef tea to be continued,
along with iced milk.

8th. day. Patient worse. Temperature 103.6. Pulse
130. Respirations 44. Lung still con-
solidated. Breathing tubular, appearance more cyanotic.
Subsultus tendinum present. Perfectly unconscious.

As patient was dying I ordered small doses of brandy
to be continued every hour, and medicine to be stopped.

9th. day. Patient died on the 9th. day with evident
 signs of Carbonic acid poisoning.

Registered cause of death. Pneumonia.

Quinine sulph. grs 24 $\frac{1}{2}$

Acid Sulph aromat. 3 $\frac{1}{4}$

Aq. ad 3 $\frac{1}{2}$ VI

$\frac{1}{2}$ 3 $\frac{1}{2}$ every 2 hours in water

Ice bags to the chest.

Diet.

Iced milk with potash, light soup.

Third Case.

George Docherty, aged 26.

History. This patient was a brother of the preceding and was quite well up to the death of his brother. The day after his brother's death he went to look after the opening of the grave in the cemetery. When he came home at night he complained of feeling cold, and began vomiting. He did not complain of any pain. Thinking it was a chill, he got a foot bath, some warm drinks, and went to bed. As he was getting worse I was sent for during the night.

When I saw him he was flushed, and breathing hurriedly with but a slight cough. Up till then he was a strong, healthy, man, well developed, and never had any disease.

Examination. On examining him there was dulness over right base, with slight crepitant râles, little or no expectoration, and blood not apparent.

Breathing 36. Pulse 110. Temperature 102.2. In this case I resolved to try the same treatment, as in the preceding case so ordered ice bags to the base of the lung, and instead of Antipyrin I gave 2 grain doses of quinine dissolved in aromatic sulphuric acid in 15 minim doses.

3rd day. 3i of Trich Opia wheaded mixture.

4th day. 9.
Lij

Antipyrin grs. 60
made in pulv 12
one every 2 hours

As patient was costive I ordered a dose of castor oil.

2nd. day. Temperature 103. Pulse 120. Breathing 38. Dulness extending upwards, crepitation also increasing. Tubular breathing distinct. Treatment same as preceding day. Sputa slightly colored.

3rd. day. Temperature 122. Pulse 120. Breathing 38. Complains of severe pain in infra-scapular region, which hinders him^s breathing and especially when taking a long breath. Ordered 3 $\frac{1}{2}$ of tinct. Opu. to mixture. Ice still to be continued. Diet as above.

4th. day. Temperature 100. Pulse 108. Breathing 36. dulness extending from lower border of the spine of the scapula to base of lung. No crepitation heard. Breathing tubular. Ice bags stopped and ordered to be rolled in cotton wool. Complains of feeling giddy, and wanders a good deal in his speech. Told he was very restless during the night, and did not sleep well. Complains greatly of thirst. Owing to the giddiness I stopped the quinine and ordered 5 grain doses of Antipyrin every 2 hours.

hi Brandy 3 1/2 ✓
3 1/2 every hour
Light soups to be given frequently.

5th. day. Seems improving slightly, temperature 99,
 falling. Breathing still quick 38.

Pulse rather higher 120. If anything weaker than the
preceding day, but neither hard nor jerky. Antipyrin
ordered every 3 hours instead of every 2 hours. Still
seems wandering and speaks incoherently. Dulness
still well marked, no râles, breathing tubular.

6th. day. Passed very restless night, does not
 look so well. Temperature 102. Per-
spiring freely. Pulse 120. Pulse wave hard and
thready. Breathing 36. Dulness still well marked, as
yet no signs of crepitus redux. Antipyrin stopped or-
dered 3 $\frac{1}{2}$ of brandy every hour. Light soup frequently.

7th. day. Still restless, semi comatose, pulse
 flickering, breathing 42. Temperature
104. Lung still consolidated, no signs of returning
crepitation. Ordered 3 $\frac{1}{2}$ of brandy every hour, and
cotton wool to be continued round chest, and back.

8th. day. Had a very bad night, very restless, coma-
 tose, subsultus tendin^um, pulse 130.

Breathing 46. Temperature 104.6. Profuse perspira-
tion. As I saw the patient was dying I ordered no

change. Patient died at night fall.

Registered cause of death. Pneumonia.

Summary of Results. Such unfortunately has been the result of all the cases I have treated as above. I have given these three as examples. The last two being brothers, and of a healthy family, are the more remarkable, as other 2 brothers in the same family, and who contracted the disease recovered, but under different treatments. I shall at present say nothing more about them, as I hope towards the end to compare the cases and to give what I believe to be the cause of the non-success of the treatment. I shall now proceed to give 3 cases under the second heading with their results.

3rd. day. *q*

Pot. Bromid. 3 $\frac{ij}{\text{y}}$ $\frac{ij}{\text{y}}$
 Vin Antimonialis 3 $\frac{ij}{\text{y}}$
 Aq. *av* 3 $\frac{ij}{\text{y}}$ VI
3 3/4 every 4 hours in water

Local application, Cantharides blistering
 fluid.

Diet.

Milk, Arrowroot, Beef tea, or light soup.

Cases under Second Head. Viz:- Depressant & Antiphlogistic.

First Case.

Alexander Nixon, aged 22. *Sanguine, and robust.*

History. Two days before I was called patient complained of severe chill, and afterwards felt acute pain in the right side with difficulty of breathing. On the supposed 3rd. day when I saw him he was very much flushed, breathing hurriedly 36. Pulse 120. Temperature 102. Examination. On percussion there is dulness on right side extending from infra-scapular region to the base of lung, and also extending round ~~the~~ under right mammary region. Auscultation reveals fine crepitation at the base extending upwards with tubular breathing. Sputum rusty coloured.

3rd. day. I ordered a mixture containing 15 grain doses of Bromide of Potassium with 10 minimis doses of antimonial wine every 4 hours, and the affected part to be painted with blistering fluid.

4th. day. Had restless night. Temperature 103. Pulse 120. Breathing 38. Part covered with blistering fluid inflamed, and pretty much vesicated. Blisters cut, and vaseline cloth placed over raw surface, cotton wool put over cloth, then bandaged round. Complains

6th. day.

5 minim^s doses of Spt. Chloroformi to be
added to mixture.

still of pain on breathing, and has the feeling of suffocation. No change ordered.

5th. day. Temperature 103.4. Pulse 120. Breathing 40.

Fine crepitation still heard over scapular region, infra-~~maxillary~~axillary, and mammary, but at the base complete condensation with tubular breathing. Ordered to continue the same treatment but as the bowels did not act for a few days $\frac{1}{2}$ of castor oil to be taken.

6th. day. Temperature 102. Pulse 120 Breathing 38.

Patient has the appearance of being somewhat better. He does not complain of pain, but cannot sleep. Still very thirsty, and was wandering during the night. Vomited also during the night, says he feels faintish. Ordered 5 minims doses of chloric ether in mixture.

7th. day. Temperature 101.6 Pulse 120 Breathing 38.

Faint signs of crepitus redux beginning. Slept during the night, has no pain, and thinks he can breathe more freely. However I can't say there is much change, as patient to me seems dazed and bewildered looking, so that his answers are unreliable. Vesicated part of side almost healed. Flannel ordered to cover the part. Same mixture and diet.

20 $\frac{1}{2}$

8th. day. Add 20 minimis doses of Spt. *with acid* to mixture.

9th. day. *4*

Acid nitromuriat dil. 3 $\frac{1}{2}$
Spt. Chloroformi 3 $\frac{1}{2}$
Inf. quass. co. 3 $\frac{1}{2}$
Aq. *2 3* $\frac{1}{2}$

hi. 3/4 every 4 hours in water.

8th. day. Temperature 100. Pulse 110. Breathing 34.

Decided improvement, breathing freer, Sputum more abundant, no pain, speaks more sensibly, and is inclined to take a little food. Ordered chicken with tea and toast. Still takes the same mixture with the addition of Sweet Spirits of Nitre as he was complaining of some uneasiness during micturition.

9th. day. Temperature 99.4. Breathing 30. Pulse 115.

Cough becoming soft, expectoration quite free. Patient looking fairly well, not flushed. Urine better today, still inclined to eat, and sleeps well. Antimonial mixture stopped, and a general tonic ordered.

10th. day. From this on patient made a good recovery.

My notes after the 10th. day are only for every alternate day, and latterly only for every 4 or 5 days. At the end of 5 weeks he was out, and although weak was gradually gaining strength, so much so that at the end of 2 months he was able to resume his work as a joiner.

Fifth Case.

John McGowan, Aged 24.

Appearance. Patient strong, well developed and muscular. Always has been healthy up till a few days ago. Seen by me on the 3rd. day after taking the rigor.

Present Symptoms. When seen by me complained of pain in the right side, and cough. Present illness commenced with rigor, gradually lessening and developing into a feverish state with great thirst, and profuse perspiration. On the 2nd. day he felt a severe lancing pain in the right side, which hindered him from coughing, and taking a deep breath. His expectoration was brownish in colour. There is no herpes labialis but patient is very much flushed.

Respiratory System. Over the front there is dulness at the right base, and behind the dulness extends from the angle of the scapula downwards to the base. On auscultating there is an absence of râles at the base, but as you ascend towards the scapula there is heard distinct

3rd. day.

Vin Antimonialis 3T.
 Spt. Chlorof. 3 ¼
 Inf. quass 3 ½
 Aq. w 3 ½
 every 3 hours in water.

Croton liniment to be rubbed on the part.

Diet.

Milk with soda water. Beef tea.

4th. day.

Add 5 minim^s doses of Tinct. Op^u to mixture.

fine crepitation. The breathing is bronchial, Pulse 120.
Temperature 102.4. Respirations 34.

3rd. day. My first treatment in this case was to have
the part smeared all over with croton lini-
ment, and covered with cotton wool, and to give Antimonial
wine along with Spirits of Chloroform and quassia.

4th. day. Dulness more marked, and extending upwards.
Fine crepitation also heard. Pulse 120.
Temperature 103. Respirations 38. External surface
showing signs of slight redness owing to the liniment.
As the temperature had risen, I ordered patient to be
sponged with vinegar and water, once or twice daily.
Complains still very much of pain when coughing, or
breathing deeply. Sputa still tinged with blood.
Owing to pain ordered 5 minims doses of laudanum to mix-
ture.

5th. day. General appearance similar to preceding
day. Temperature 103. Pulse 120. Res-
pirations 38. Dulness occupying much the same area, and
still fine crepitant râles. Pain not quite so severe.
Pupils somewhat contracted, showing the presence of opium.
Mixture to be repeated, with the exception of the Tinct.

6th. day.

Pil *Hy Scary* 5 grs.
mitte Calce 2
 One night and morning.

8th. day.

Vin Antimon 3 $\frac{1}{2}$
 Vin Ipecac. 3 $\frac{1}{2}$
 Spt. Chlorof 3 $\frac{1}{2}$
 Inf. quass. 5
 Aq. 2 3 $\frac{1}{2}$ VI

3 $\frac{3}{4}$ every 4 hours in water.

of Opium. External surface well marked with minute papular eruption. Complains severely of it owing to the soreness and itching, vaseline ordered to be rubbed over it.

6th. day. No improvement with the exception of having slept at very short intervals, but the patient's mother said the sleep seemed very disturbed and "wandery." Pulse still 120. Temperature 103. Respirations 40. No change in mixture but as the bowels had not been operated on for 4 days, ordered blue pill.

7th. day. Seems a little better from general appearance, not quite so flushed. Bowels acted 3 times. Complains of pains in the stomach and sickness. Temperature 102.2. Pulse 120. Respirations 38. Dulness still well marked over same area, no râles heard, breathing quite tubular. Ordered beef tea twice daily. Had a better night, and more rest.

8th. day. Still seems better but complains of soreness of the mouth. No salivation. Pain in the stomach passed away. Temperature 101.6. Pulse 115. Respirations 38. Dulness much the same, but there are slight signs of returning respiration. Large

crepitant râles heard, but they are few. 10 minims doses of Ipecacuanha wine to be added to the mixture. Complains very bitterly of the external inflammation of the croton oil liniment. Vaseline to be applied every few hours.

9th. day. Breathing to-day seems much improved. Pulse 110. Temperature 100.4. Respirations 34.

There is a decided change for the better. Dulness is disappearing and crepitûs redux returning. Had a good night, slept for a few hours at a time, and peacefully. Says he would be all right were it not for the external irritation of the skin. It however is dying off, but the itching is exceedingly annoying. Feels weak, asked for wine but refused. Allowed a small steak grilled.

10th. day. Temperature 99.6. Pulse 100. Respirations 30. Seems cool and collected.

Lung opening up and dulness disappearing, seems now in fair way of recovery.

Patient in this case made a good recovery, and at the end of 2 months was able to resume his ordinary employment, viz:- that of a labourer.

Sixth Case.

General Appearance. Strong and muscular. Sanguine
temperament. Patient complains
of cough and dyspnoea.

Examination. On examination there is marked dulness over the base and mammary region of right lung, extending round the back. On auscultation there is tubular breathing over affected part, both anteriorly and posteriorly. There is no crepitation, owing to condensation having taken place, but extending upwards there are still heard fine crepitant râles.

5th. day. Temperature 102. Pulse 120. Respiration 40. As patient was full blooded I

26½

ay
5th. day.

Vin Antimonialis 3 $\frac{1}{4}$...
" Ipecac 3 $\frac{1}{4}$...
Pot. Bromid 3 $\frac{1}{4}$...
Mucil. acaciae 3 $\frac{1}{4}$...
Aq. ad 3 $\frac{1}{4}$ VI
3 $\frac{3}{4}$ every 4 hours in water.
6 leeches.

Diet.

Milk with potash water ad libitum. Beef
tea and toast.

ly
7th. day.

ly
Calomelanos grs. 6
Pulv jalap Co. grs. 60
to be taken at once.

ordered 6 leeches to be distributed over different parts, with Antimony, Bromide of Potash, and Ipecacuanha wine, with instructions that after the leeches dropped off. bathing the parts with hot water should be continued for $\frac{1}{2}$ an hour, then cotton wool to be applied and a bandage of flannel to be put tightly round.

6th. day. Temperature 102.6 Pulse 120. Respiration 38. Patient had a very bad night, restless and wakeful. Cough very irritating. Told that the leeches did well, and that a fair quantity of blood came after they dropped off. Treatment same as preceding day.

7th. day. Temperature 102 Pulse 120. Respirations 39. There is not much change. Dulness increased higher up towards scapula. Breathing bronchial, lung quite consolidated, few râles, and these not very distinct. Patient does not complain much, unless of the "tightness" across his chest. Milk diet to be continued. As he required a laxative I gave 60 grains of Compound jalap with 6 of calomel.

8th. day. Temperature 102.4 Pulse 120. Breathing 38. Patient still restless and sleepless.

9th. day, Add 10 minimis doses of Spirits of Chloroform
to mixture

2 10th. day. 5 grain doses of Iodide of Potash to be
added to mixture.

Painting with Iodine.

11th. day. Tepid water sponging.

Cough hard, dry, and irritable. Pain in side very slight. Dulness much the same as yesterday, auscultatory signs also similar. Bowels moved very freely, and patient thinks he is keeping better. Leech wounds now healed. Treatment same as yesterday.

9th. day. Temperature 102. Pulse 125. Breathing 38.

No pain, had a few hours rest during night. Dulness still well marked. Lung still in the condensed state, but scattered over the affected part, some moist râles. Spirits of Chloroform to be added to the mixture, otherwise treatment as before.

10th. day. Temperature 101.8. Pulse 115. Respirations

35. Seems to-day better. Tongue cleaning, and patient has a more placid appearance. Dull area slightly diminished, and evident signs of lung softening all through. Cough freer, and expectoration easier to come away. Affected area ordered to be painted with Iodine night and morning, and 5 grain doses of Iodide of Potash to be added to mixture in the hope of promoting absorption.

11th. day. Still seems better. Temperature 100.6

Pulse 110. Respirations 30. Had a quiet night, slept at intervals, had no pain. Skin

28½

Beef tea and toast

13th. day.

Fly Blister

Grilled steak and boiled rice.

very itchy no doubt owing to excessive perspiration. On that account I ordered him to be sponged with tepid water. Dulness decreased, and crepit^us redux returning. Ordered beef tea with toast.

12th. day. Still seems improving. Temperature 100.

Pulse 115. Respirations 30. Is now coughing a good deal, but it seems soft. Complains to-day of slight pain at the infra-scapular region. Auscultation reveals nothing abnormal. No friction sound to be heard. Crepitation heard returning through all the affected part. Sputa purulent but no smell.

13th. day. Patient still seems better. Temperature

99.4. Pulse 100. Respirations 28.

Still complains of pain, and says it troubled him a good deal during the night. Fly blister ordered over affected part. Auscultation and percussion gave no indication that anything was wrong. Patient takes his beef tea well, and has been ordered grilled steak with boiled rice.

14th. day. Patient worse. Called early in the morn-

ing. Pain very acute and confined to

4
Lij

Pil Opii 6 (gr. I)
one every 4 hours.

Whisky 3 3/4
3 3/4 every three hours in water

4

Acid Carbolic M 24
Acid nitro muriat dil 3 1/4
Aq. as 3 VI

Lij

3 3/4 every 4 hours in water.

the spot between the 6th. and 7th. rib. Respirations 36. Temperature 102. Pulse 120.. Auscultating over the part I could not recognise any lesion, but patient to me seemed very much worse, and was exceedingly restless. The pain seemed agonising. I stopped mixture and put him on to grain doses of opium every 4 hours. Called at night. Pain owing to opium less but temperature, breathing, and pulse much the same as in the morning. Poultices ordered if pain increased.

15th. day. Patient worse. Sputa purulent, slight putrifactive smell from breath, opium continued and as patient seemed weaker, $\frac{1}{2}$ of whisky to be given every 3 hours.

16th. day. Patient still worse. I had now a case of gangrene to contend with supervening on pneumonia. I ordered nourishment along with the whisky, and gave 2 minimis doses of carbolic acid every 4 hours. But I had no hope now of cure. Patient lingered gradually getting worse, and wasting. He died from gangrene of the lung 6 weeks from date of illness.

As there was no post-mortem it was difficult to know what was the cause of the gangrene. I could not ascribe

it in this case to the treatment as patient seemed up to the 14th. day to be going on favorably. Whether (as I suspect) it was due to some thrombus I could never make out, as that could only be discovered by post-mortem examination.

Summary of
Results.

These were the results from my second class of treatment, more satisfactory than the first certainly, but not quite perfect. It was easier carried out than the first, as the instructions given to the attendants were simpler, and therefore more easily understood.

I now proceed to the 3rd. heading.

Third Mode of treatment, viz:- Stimulant.

Seventh Case.

James Bissett, aged, 28 Labourer, strong and muscular.

History 3rd. day. Patient states that his illness commenced 2 days ago with a very severe rigor, which lasted for a good many hours. After this he complained of feeling pained all over the body. The pain then seemed to settle in the left side, and hindered him through its lancinating character, from taking a long breath, or even breathing easily. The cough commenced yesterday, short and dry. Since then it has been getting worse, and more irritable. Patient expectorates a good deal. The sputum is thinnish and watery, but on the top thick and gluey, and thinly streaked with blood. Patient is very flushed in appearance, and the mouth is foul. Temperature 102. Respirations 36. Pulse 110.

Examination. There is dulness over the mammary region, and behind complete dulness all over the left lung from beneath the angle of the scapula to the base. On auscultating over the mammary region there ^{are} ~~is~~ heard

3rd. day.

Ammon. carb. grs. 60"
 Vin Ipecac 3 $\frac{1}{2}$ "
 Spt. Chlorof 3 $\frac{1}{2}$ "
 Spt. Ammon. Aromat. 3 $\frac{1}{2}$ "
 Aq. $\frac{1}{2}$ 3 $\frac{1}{2}$ VI
 3 $\frac{3}{4}$ every 4 hours in water

Poultices of linseed meal and mustard 4 of
 meal to 1 of mustard to be applied every
 2 hours.

Diet.

Beef tea, milk and potash.
 Whisky $\frac{1}{2}$ an ounce every 3 hours in water.

5th. day.

Ol Ricini $\frac{1}{2}$ 3'

moist crepitant râles. At the back there is condensation at the base, but fine crepitation can be heard higher up. Vocal resonance is much exaggerated. Cardiac dullness normal, as also sounds.

Treatment. Ordered poultices of linseed meal and mustard, over affected part, and carbonate of ammonium, chloroform, aromatic spirits of ammonium.

4th. day. Temperature 103. Respirations 39. Pulse 120.

Dulness still increasing at back, crepitant râles heard under scapula. Patient has an anxious look, still very flushed, very thirsty. Had a restless night. Treatment same as above.

5th. day. Temperature 103. Respirations 42. Pulse 120.

Had a very bad restless night, did not sleep. Pain gone from side. Seems exhausted although flushed. Dulness pretty uniform round base and middle part of lung, both in front and behind. Tubular breathing distinct all over. Cessation of crepitation owing to complete condensation all over. Same treatment both as regards mixture and poultices. Ordered a dose of castor oil as bowels are costive.

6th. day. Temperature 103.2. Pulse 120 Respirations

6th. day.

Poultices every 4 hours.
 Whisky every 4 hours in $3\frac{2}{3}$ doses
~~every 4 hours~~,

8th. day.

4 Ol Sinapis $3\frac{1}{2}$ IV
 To be rubbed on the chest and back night
 and morning.

Whisky $3\frac{2}{3}$ every 6 hours.

20 minim^s doses of Inf. quass. to be added
 to mixture.

9th. day.

Egg flip. Grilled steak.

44. Has no pain. Patient wandering considerably.

Dulness the same, and auscultatory signs the same as preceding day. Bowels well moved by castor oil. Poultices ordered to be continued every 4 hours instead of every 2. The mixture to be continued, but the spirits to be given only every 4 hours.

7th. day. Temperature 103. Respirations 40. Pulse 120.

Still looking weakly. Skin moist. Dulness still well marked, and no sign of any return of râles in the lung. Has no pain but still very uneasy and wandering. Poultices to be continued.

8th. Day. Temperature 102.8. Pulse 120 Respirations

40. Patient not quite so flushed, and seems somewhat better. Had restless night, but slept occasionally. Dulness the same but signs of condensation giving way, and crepitus redûx returning. Breathing seems easier. Poultices stopped, and cotton wool substituted after being rubbed with mustard oil. Whisky only to be given every 6 hours.

9th. day. Temperature 101.6. Respirations 37. Pulse

115. Decided improvement. Dulness disappearing. Crepitus redûx returned. Patient beginning to expectorate freely, and is able to sleep. He still

10th. day. Whiskey stopped. Light soups

wanders a little. Ordered egg flip with grilled steak.

10th. day. Temperature 100. Pulse 110. Respirations 30. Seems much better, temperature gradually descending, and breath sounds becoming more normal. Appearance pale, but seems sensible. Mixture to be continued. Whisky stopped. Light soups to be given.

11th. day. Temperature 99.6. Pulse 100. Respirations 28. seems much better, dulness disappearing, also condensation. Breathing better as crepitus can be heard all over. Still weak.

12th. day. Patient still much better, and considered out of danger. He gradually went on improving daily, and at the end of six weeks he had made a perfect recovery, and was able to go away to the "Sea Side Homes" as a perfect convalescent.

2nd. day. 4

Amm. Carb. grs. 60
 Spt. Chlorof. 3 4
 Vin Ipecac 3 4
 Spt. Amm. aromat. 3 4
 Aq. ad 3 4
 3 3/4 every 3 hours.

Diet. 4

Milk and soda with ice.
 3 4 of whisky 3 hours.

Poultices every 2 hours.

Eighth Case.

Rev. J. McL. aged 23.

General Appearance. Pale, not very strong, but never
had any illness of note.

History. Was called out at night to sick call, and
shortly after returning took a chill. The
night was very cold, but he walked very quickly, and
thinks he overheated himself.

2nd. day. I was called the second day, and his ap-
pearance was flushed, and hectic. His
breathing was 26. Pulse 90. Temperature 100. He com-
plained of slight pain at the base of the right lung, but
had only slight cough. There was no expectoration. On
examining him I thought I could detect dulness over base
of right lung and slight crepitant râles over same region,
but as they were very indefinite I merely ordered a good
warm mustard foot bath, hot drinks, and poultices until
night time. At second visit the disease was more pro-
nounced. There was marked dulness over base and cre-
pitant râles. Pain had increased and there was a dry,
hard, cough. Pulse 109. Temperature 101. Breathing

4th. day.

Spt. Chlorof. 3
 Vin Ipecac. 3
 Zinct Camph Co. 3
 Inf. quas. 3

Aq. 40 3 3VI

every 4 hours in water.

Whisky still to be continued.

30. I now made up my mind that I had pneumonia to deal with, so ordered poultices every 2 hours with 3 $\frac{1}{2}$ of spirits every 3 hours, and ordered a nurse. Stimulant Expectorant mixture given.

3rd. day, morning. Temperature 102. Pulse 120. Respirations 37. Had a very restless night, and complained of great dyspnoea. Was very thirsty and could not sleep. Ordered poultices until nurse came.

Night. Nurse came at midday and reports patient to have been very restless. Did not complain so much of the pain, as of the difficulty of breathing. Dulness over lung increasing upwards, and fine crepitation well marked. Sputa slightly coloured, but not yet very characteristic. Temperature 103.4. Breathing 40. Pulse 120. Treatment similar to that of the morning.

4th. day. Nurse reports a very bad night, restless, and sleepless. Temperature 103. Pulse 125. Breathing 45. Took considerable quantities of milk. Does not complain of pain, but still of his breathing. Dulness well marked over the whole of the lung, and the sputa well coloured, and seem easier to come away. Complains of burning pain in epigastrium. Mixture

4th. day. Poultices stopped.

5th. day. *ly* Brandy } ʒVI
3 ʒ every 2 hours
Ol Sinapis } ʒIV
To be used as directed.

stopped and another substituted. Complains of feeling very weak, and exhausted, and should like poultices stopped as he thinks they cause him to perspire too freely. Treatment however to be continued until night.

Night visit. Nurse thinks he had a better day. Temperature 103.4. Pulse 130. Breathing 48.

Dulness quite distinct over whole lung, and bronchial breathing. Had an occasional sleep during the day. Thirst still very severe, and perspiring profusely. Ordered to be sponged with vinegar and water. As he complained of excessive weakness, and exhaustion the poultices were stopped, and the whole right side to be covered with cotton wool. Mixture to be continued until morning.

5th. day. Nurse reports very restless night. Perspiration profuse. Sleepless owing to cough having been very troublesome. Temperature 103.2. Pulse 130. Respiration 44. Breathing tubular unless over the region of the scapula, where crepitant râles are still heard. Complains of no pain. Chest ordered to be rubbed with mustard oil. Brandy in 3 $\frac{1}{4}$ doses to be given along with mixture.

Night. Breathing still heavy. No pain, cough some-

Tapioca pudding once

6th. day. Chicken Soup.

7th. day. Brandy to be given every 4 hours instead
of every 3

what allayed, but hard. Temperature 103. Pulse 125. Respirations 44. Took fair quantity of milk with tapioca pudding.

6th. day. Not quite so restless during the night.

Dozed occasionally, but always waked up dazed. Cough not so troublesome, but coming on at times in the form of paroxysms. Dulness well marked over whole lung. Crepitation faint at upper lobe, and breathing wholly tubular. Temperature 102.6 Pulse 120. Breathing 40. Mixture to be continued.

Night. Little or no change. As bowels have not acted ordered Castor oil. Passed fair day. Took chicken soup, with toast, and milk and soda.

7th. day. Slept better during the night, and breathing seemed easier. Complains of no pain.

Temperature 102. Breathing 39. Pulse 120. Condition of lung much the same as previous night. Brandy reduced to $3\frac{1}{4}$ every 4 hours. Milk, and chicken soup to be continued. Bowels acted well during the night.

Night. Looks better. Dulness much the same, but occasional crepitant râles heard at base. Temperature 102. Pulse 120. Breathing 35.

8th. day. Had solid chicken

9th. day. Pil Opu, 92 I
Brandy 3/3

8th. day. Passed night well, had good sleep. Tem-
 perature 101.6. Pulse 120. Respirations
 34. Dulness still marked, but crepitus redux more dis-
 tinct. Cough hard, but occasional discharges of phlegm.
 Seems on the whole better to-day. Mixture continued.

Night. Report similar to morning one. Had a good day.
 Temperature 101.4. Respirations 30. Pulse
 110. Dulness the same but lung showing evident signs of
 recovery. Took plenty of milk, and had a little solid
 chicken.

9th. day. Was sent for during the night as patient had
 got much worse. Had risen to go to stool
 about 3 a.m. and took a severe chill. When seen by me he
 was shivering and seemed to be in great distress. Complain-
 ed of pain in the left side, lancing in character, and
 hindered him from breathing, ordered $\frac{3}{4}$ ^{brandy} and 1 grain of
 opium. Temperature 104. Pulse 130. Breathing 45.

10 a.m. same There was evidently a serious relapse.
 morning. Seemed very much worse. Had a very bad
 night. Sputa coloured, and patient
 wandering greatly. Dulness over base of left lung with
 distinct crepitation. Poultices continued.

Night. Symptoms still very unfavorable. Temperature
 104. Respirations 48. Pulse 135. Stimu-
lants continued every hour, opium pill to be repeated for
pain.

10th. day. Patient much worse. Semi comatose. This
 condition gradually getting worse went on
for the next 3 days, when patient succumbed through sheer
exhaustion from the effects of double pneumonia. He had
evidently caught the chill when rising to stool, and as
he was not of very robust constitution he was unable to
withstand the attack in both lungs.

4th. day.

Spt. Chlorof. 3 $\frac{ij}{ij}$
 Spt. Ammon aromat 3 $\frac{ij}{ij}$
Dist. Opu 3 $\frac{ij}{ij}$
Dist. Hyoscyam 3 $\frac{ij}{ij}$
 Vin Ipecac 3 $\frac{ij}{ij}$
 Aq $\frac{ij}{ij}$ 3 $\frac{ij}{ij}$ VI
 § $\frac{ij}{ij}$ every 4 hours in water.

Poultices of linseed meal and mustard every 2 hours.

3 $\frac{ij}{ij}$ of brandy every 2 hours

Diet.

Milk iced and Potash water.

Ninth Case.

Francis Slaven, aged 29.

General appearance. Patient of sanguine temperament,
strong and robust.

History. 3 days before I was called in he complained
of chill, and afterwards of severe pain in
right side with great difficulty of breathing.

4th. day. When I saw him on the 4th. day he had an
anxious appearance, face red, and breathing
very quick. His cough was short and irritating. He
complained of severe pain in the side. Temperature
102.6. Pulse 120. Respirations 38. There was marked
dulness over base extending up towards scapula² region.
Crepitation was well marked, and although the sputum was
scanty, still what came was decidedly tinged with blood.
Owing to the dyspnoea I ordered poultices to be applied
every 2 hours with mixture containing Chloroform, Sal
Volatile, and opium with Hyoscyamus.

5th. day. Temperature 103. Respirations 44. Pulse
130. Had a very restless night, breathing
worse, but pain not so great. Sputum well coloured and

6th. day.

Brandy to be given in $\frac{3}{4}$ doses every
3 hours.

7th. day.

Mixture to be repeated without the Tinct
Opii in it.

8th. day.

Beef tea and Milk puddings.

more abundant. Dulness still extending, and crepitation marked. Treatment as above to be continued.

6th. day. Temperature 103. Pulse 130. Respirations 42. Had another restless night, but did not complain of pain. Breathing very short and difficult. Perfect consolidation over lung, unless at the top where slight crepitation can be heard. Breathing in other parts tubular. Complains of being weak. Brandy ordered in ~~3~~^{3 1/2} doses. Poultices to be continued along with mixture.

7th. day. Temperature 102. Pulse 120. Respirations 40. Seems easier, had a better night and seemed to sleep or doze occasionally. Dulness well marked over whole lower part of lung, and bronchophony also well marked. Complains now of no pain, and cough seems to have left him. Breathing still hurried, and gives him the feeling of asthma. Owing to absence of pain, Opium taken from mixture, but otherwise to be given as before.

8th. day. Symptoms much the same as preceding day.

Slept rather better than preceding night. Temperature 101.4. Respirations 38. Pulse 120. On the whole seems better, ordered beef tea with milk puddings.

9th. day. Temperature 100.6. Respirations 36. Pulse

9th. day.

Ol Camph 3 3/4
 Chest to be rubbed night and morning.

Grilled steak.

10th. day.

Am. carb. grs. 60.

Spt. Chlorof. 3 1/2

Vin Ipecac. 3 1/2

Inf. quass. 3 1/2

Aq 20 3/4 3/4

every 4 hours in water.

Tea, toast and fish.

Brandy stopped.

110. Seems much easier. Crepitus redux returning. Had a good night and slept for 2 hours at a time. Does not complain of any pain, but would like something more to eat. Ordered grilled steak. Poultices to be stopped and chest to be rubbed with Champhor oil, and covered with cotton wool. Mixture still to be continued.

10th. day. Temperature 99.6. Respirations 30. Pulse 100. Slept well during the night, and seems much better. Cough soft and easy. Phlegm slightly purulent. Has no pain. Perspiring freely. Brandy to be stopped. Same diet with stimulant expectorant. Tea and toast with fish.

11th. day. Temperature 99. Pulse 100. Respirations 26. Evidently all danger is now past. Complete crepitus redux; and all urgent symptoms have disappeared.

Patient went on improving until the 20th. day, when he was able to get up. He afterwards went to the "Homes" and returned therefrom perfectly well.

4th. day.

Liq. Ammon acet 3 1/4
 Spt. *alka nitro* 3 1/4
 Acid nitro muriat dil 3 1/4
 Vin Ipecac 3 1/4
Am. Opū 3 1/4
 Aq *VI* 3 1/4
 3 1/4 every 4 hours in water.

Jacket poultices every 2 hours.

Diet.

Milk with soda water and ice.

Fourth Mode of treatment, viz:-

Antipyretic and Stimulant.

Tenth Case.

James Crawford, aged 27.

General appearance. Strong, muscular, and well developed, sanguine appearance.

History. Patient complains of pain on right side with cough. It commenced with rigor 3 days ago, then pain hindering him from taking a long breath.

4th. day. On examining him to-day there is distinct crepitation over lower base of right lung, with marked dulness, and the sputum is rusty coloured. Pain severe. Temperature is 102. Respirations 38. Pulse 120. Ordered jacket poultices every 2 hours with milk and soda water with ice, also febrifuge mixture containing Sweet Nitre, Nitric acid, Ipecacuanha wine, and opium.

5th. day. Temperature 103. Pulse 125. Respirations 42. Crepitation still increasing upwards, but patient does not complain so much of pain. Breathing

7th. day.

Castor oil

\$3½

Beef tea.

8th. day.

Poultices every 3 hours instead of
every 2 hours.

difficult, and troubled with insomnia. Perspiring very freely and had rather a restless night. Same treatment to be continued.

6th. day. Temperature 102.6 Respirations 40. Pulse 120. Had another restless night, and cough was very troublesome. Faint traces of blood still in sputum. Marked dulness extending from scapula to base of lung. Treatment still the same.

7th. day. Temperature 102. Respirations 42. Pulse 130. Consolidation over whole lower part of lung, breathing tubular, but had a few hours sleep. Thinks he is a little better. Very thirsty and bowels very uneasy. Ordered Castor oil, and afterwards is allowed to have some beef tea.

8th. day. Temperature 101.6. Respirations 39. Pulse 125. Not much change. Lung in much the same condition as preceding day, but slight signs of crepitus redux. Slept for a few hours. Poultices to be applied every 3 hours instead of 2 hours, and same mixture to be continued.

9th. day. Temperature 100. Pulse 120. Respirations 38. Crepitus[^] redux increased, and lung beginning

9th. day.

ap. 3 3/4 of brandy every 4 hours.

Ol Eucalypti

Ol Olivae

3 3/4

3 3/4

To be rubbed on the chest night and morning

Ammon. Carb. grs. 60

Spirit Ammon. aromat

Spt. Chlorof

Vin Ipecac

1/2 Cinchon co.

Aq. ad 3 1/2

3 3/4

3 3/4

3 3/4

3 3/4

3 3/4

3 3/4 every 4 hours in water.

Convalescent Stage.

ap. Acid nitro muriat dil

Ferri 1/2 Quinine extract

Aq

3 3/4

3 3/4

3 3/4

3 3/4

3 3/4

3 3/4

3 3/4

3 3/4

3 3/4

3 3/4

3 3/4

3 3/4

3 3/4

3 3/4

3 3/4

3 3/4

3 3/4

3 3/4

3 3/4 3 times a day.

to act. Complains of feeling very weak. Ordered $\frac{1}{2}$ of brandy every 4 hours. Instead of being poulticed any longer I ordered a liniment containing eucalyptus oil to be rubbed on the chest and back night and morning. I also had the diaphoretic mixture stopped, and a stimulating expectorant substituted for it. Chest also to be covered with cotton wool.

10th. day. Still improving. Temperature 99.6 Pulse 100. Respiration 34. Condensation of lung disappearing. Large crepitant râles heard, and breathing becoming much better. Slept well during the night.

Result. This case went on well daily until there was a perfect cure at the end of six weeks. At the end of 2 months from the date on which I first saw him the patient was able to resume his work. During the last fortnight of convalescence I gave him a tonic which seemed to strengthen him, and bring back his appetite. He had no relapse, nor as far as I knew any bad effects from the pneumonia.

3rd. day. *ly.* *Lij ammon acetat* 3 *ij*
Spt. colth lib 3 *ij*
Acid nitro muriat. dil 3 *ij*
Vin Ipecac 3 *ij*
Nepenthe 3 *i*
Aq 2 *3+VI*
ly *3 Sp* every 3 hours in water
 Poultices every 2 hours

Diet. Milk with soda water and ice.

5th. day. Ice given to suck.

Eleventh Case.

Andrew Higgins, aged 29.

General appearance. Strong, muscular and healthy.

History. Complains of pain in the right side, which
 he says commenced 2 days ago with severe chill.
He has also very great difficulty of breathing, especially
after coughing, or any slight exertion. The cough is dry
without any sputum.

3rd. day. Temperature 101. Pulse 120. Respirations 34.
 He was flushed and evidently suffering a good
deal of pain. When I examined him fine crepitation could be
detected over base of right lung, and decided dulness on
percussion. Ordered poultices with febrifuge mixture.

4th. day. Temperature 102. Pulse 120. Respirations 40
 Inflammation increased, crepitation extending
upwards, sputa tinged with blood, and dulness also extend-
ing. Passed a restless night, sleepless, and very thirsty.
Poultices to be continued with plenty of milk and soda
water.

5th. day. Condition much the same as previous day, only
 symptoms more aggravated. Temperature 103.

6th. day.

Mixture to be repeated without the Tinct.

Opii in it.

Poultices every 3 hours.

Beef tea, or light soup to be given.

Castor oil *℥ 2ij*

Pulse 130. Respirations 46. Sputa distinctly tinged. Dulness well marked over whole of infra-scapular region, and breathing tubular in lower part, although in the upper part of lung there is still fine crepitation. Owing to temperature being high I ordered ice to be sucked. Poultices to be continued.

6th. day. There seems a slight improvement to-day.

Temperature 102.4. Pulse 130. Respirations 42. Passed a better night and slept a few hours. Pain in the side has passed away entirely. To-day the lung seems solid, and breathing tubular. The cough has partially disappeared. Poultices ordered every 3 hours, but mixture to be given as before minus the opium. Beef tea or light soup to be given once a day. Bowels not acting. dose of Castor oil.

7th. day. Patient much the same to-day. Improvement still holding. Slept fairly well at intervals during the night, and was not troubled much with cough. Temperature 102. Pulse 125. Respirations 39. Lung is in much the same condition as day previous. Breathing bronchial, there is not much cough, and no pain. Takes his milk well, and had a good night. Poultices occasionally to be put on.

9th. day. *cp.*

Ammon carb. grs. 60.

Spt. Chlorof. 3 *up*Spt. Ammon aromat. 3 *up*Vin Ipecac. 3 *up**7 inch* Cinchon co. 3 *up*

Aq. 3VI

Ly *up* *Ly* *up* $\frac{1}{2}$ $\frac{1}{2}$ every 4 hours in water.Ol Eucalypti 3 *up*Ol *Alion* $\frac{1}{2}$ $\frac{1}{2}$ IV*Ly* To be rubbed over the part night and morning.

Fish and grilled steak to be given.

8th. day. Still further improvement. Temperature
 101.4. Pulse 120. Respirations 39.

Breathing still bronchial. Patient feels fairly well
but complains of great perspirations. Had a fair night,
and was not much troubled with the cough. Lung still in
state of condensation, but patient on the whole favorable.

9th. day. Patient passed a good night. Evident
 signs this morning of convalescence. Tem-
perature 100. Pulse 120. Respirations 38. Crepit^{us}
redux now heard. Patient feels much better. Febrifuge
mixture stopped, and stimulating expectorant ordered.
Liniment of Eucalyptus to be rubbed outside on the affect-
ed part. Soup, with a little fresh fish or grilled
steak, to be given.

10th. day. Patient still further improved, and evident-
 ly convalescence has set in. Temperature
99.4. Pulse 110. Respirations 30. Cough soft. and
expectoration free, there is no pain, and appetite is be-
coming better.

Result. The record of this case in one of gradual
 improvement daily, until at the end of 5
weeks the patient was able to get out, and at the end of

2 months he was able to resume his ordinary employment. During convalescence he was taking tonic medicines such as Cinchona bark and Nitro muriatic acid which help to build him up and increase his appetite. He made a good recovery and had no sequelae of any kind left.

2nd. day.

Lij Ammonia $3 \frac{1}{4}$
 Trich. Opü $3 \frac{1}{4}$
 Am. acet. nit. $3 \frac{1}{4}$
 Vin. Ipecac $3 \frac{1}{4}$
 Acid nitro muriat dil $3 \frac{1}{4}$
 Aq $3 \frac{1}{4}$ $\frac{1}{2}$ VI
Lij $3 \frac{1}{4}$ every 3 hours in water

Poultices every 2 hours

Diet.

Milk and soda water

Twelfth Case.

James Anderson, aged 30.

Appearance. Strong, muscular and well formed.

History. Complains of pain in left side, with great difficulty of breathing. The pain is exceedingly acute, when he coughs. Pain started yesterday, had begun after his having a very severe chill.

2nd. day. When I saw him he looked worn, and flushed, with increased breathing. He had had a restless night and complained much of the pain. The tongue was furred and dry, and general appearance anxious and hectic. Temperature 102. Respirations 34. Pulse 120. On examining him there was dulness over the base of left lung, with small crepitant râles. There was no sputa,^{um} but the cough was very troublesome and hacking. I ordered poultices every 2 hours, with febrifuge mixture. Owing to severe pain opium was added.

3rd. day. Temperature 103. Pulse 125. Respirations 40. He had had a restless night, and the only change was that he was not suffering so much pain, but the inflammatory signs seemed to have increased, and

5th. day. Ice to suck.

Whisky $\frac{3}{4}$ §VI
every 4 hours.

Mixture to be repeated without Tinct.
Opii

to have become more marked. There was still little or no expectoration, and in what there was no blood was discernible. The urine was high coloured, but non albuminous. Same treatment to be continued.

4th. day. Had another very restless night, cough very troublesome, but no great pain. Temperature 103. Pulse 130. Respirations 44. Condensation in lower part of lung, but inflammation creeping upwards towards scapula, and very distinct fine crepitation. Expectoration rusty coloured, but scanty. Complains of weakness and of being very thirsty. Has begun to wander slightly. Still ordered the same poultices and mixture.

5th. day. Temperature 103.6. Pulse 135. Respirations 46. Ordered ice by the mouth. Still had a restless night, and seems very exhausted. Ordered $\frac{1}{2}$ ounces of whisky every 4 hours to counteract the weakness. Consolidation still extending upwards, and crepitation heard at the angle of the scapula. Expectoration freer than preceding day, and distinctly coloured. Urine still high coloured but no albumen. Perspires freely. Has now no pain. Opium to be taken out of mixture.

6th. day. Temperature 103. Pulse 130. Respirations 44.

7th. day.

Poultices every 4 hours instead of
every 2 hours.

Chop or steak with tea and toast.

8th. day.

Poultices stopped.

Am carb grs. 60

Spt. Ammon aromat 3 ³/₄ ³/₄Spt. Chlorof 3 ³/₄Vin Ipecac 3 ³/₄Mist Cinchon co 3 ³/₄Aq ²/₃ ³/₄ ³/₄3 ³/₄ every 4 hours in water.Ol Eucalypti 3 ³/₄" Olivae 3 ³/₄To be rubbed on the chest night and
morning.

Whisky stopped.

If anything had a better night, although not much. Lung consolidated from the scapula to the base. Fine crepitation still heard over the upper portion, but tubular breathing over all the other part. Poultices still to be continued.

7th. day. Temperature 102. Respirations 40. Pulse 125.

Had a better night, not troubled much with cough. Tubular breathing over all affected part. Poultices every 4 hours. Beef tea with chop or steak to be given with a little tea and toast.

8th. day. Temperature 101.6. Pulse 120. Respirations

40. Lung still consolidated but evident signs of crepitus redux at base of lung. Breathing is easier. Slept during the night and says he felt refreshed. Poultices stopped, and liniment ordered along with stimulant cough mixture. Whisky also stopped.

9th. day. Temperature 100.4. Pulse 120. Respirations

36. Patient much better, and slept well.

Has no pain. Lung gradually recovering, and breath sounds returning. Cough becoming soft, and expectoration semi purulent. Mixture to be continued.

10th. day. Still gradually improving. Temperature

During Convalescence

9/ Acid nitro muriat dil 3 ^{ss}
 nick singhais 3 ^{ss}
 nick Nucis Vomicae 3 ^{ss}
 Spt. Chlorof 3 ^{ss}
 ss Cinchon 3 ^{ss}
 Aq ad 3 ^{ss}
 1/ \$ 3/p 3 times a day before food.

99.6. Pulse 110. Respirations 30. No pain. Cough easy. Slept well. Feels weak.

Result. This improvement continued, and at the end of 30 days the patient was able to go out as a convalescent. During convalescence he had a tonic, and within 2 months he was able to resume his usual employment, viz:- ^{as a} joiner.

Comparison of Cases.

I have now given 3 cases under each head, with the various treatments, and results. These results represent the terminations I had in all similar cases. As will be seen the last mode of treatment proved more favorable in my hands than any of the others.

I now propose to compare it with the other 3, as also with the treatment mentioned by various authors, and authorities with the hope of being able to prove that this 4th. mode of treatment, though simple, is the most effectual for the general practitioner.

In the first set of cases the treatment was purely Antipyretic. By the applications I used. and the drugs I employed, I tried to reduce as soon as possible, and as far as I could, the abnormal high temperature, and possibly in that way try either to arrest the spread of the disease or to check it at the stage it had reached. In the 3 cases I have given I did succeed in lowering the temperature, and apparently in arresting the spread of the disease. But my success was only temporary. Evidently the application of cold together with the Antipyretic drugs,

entrusted to inexperienced hands, was too much for the constitution. As a result I had in one case gangrene of the lung, and in the other 2 reaction set in with increased temperatures, and greater virulence of the disease, and fatal results despite the fact that I had recourse to stimulants. These latter may possibly have helped the patients for a time, but evidently had no permanent effect once the disease had reawakened.

As I mentioned at the beginning of my paper it must be remembered that I had no responsible or proper nurse attending my cases, otherwise the results, even in the 1st. class of cases, might possibly have been different. No doubt the patients could have been watched more closely, regularity in the application of the ice attended to, and probably stimulants given according to the state of the patient. But I had to accommodate my treatment, and give my instructions to the class of nurse found in the house.

In the second class of cases, viz:- those treated with Depressants and Antiphlogistic remedies my success was much greater. Of the 3 cases given $\frac{2}{3}$ made a good recovery, and one died. As I explained (see page 30 *16th day*)

gangrene set in, but what it was due to I could not say; its onset was sudden, and without warning. I partially ascribe the good results to the fact that the treatment generally was more easily carried out than that adopted in the cases under the 1st. head. In Number 2 there was no danger that excessive cold would be applied too long, or that the drugs would be pushed to such an extent as to be likely to bring on symptoms of collapse. In all these cases the external treatment was by means of blisters, (which were ordered to be kept on for a certain number of hours), or leeches were put on with orders that bleeding was to be arrested as soon as they fell off, or croton oil was applied, which had the one result of bringing out a pustular eruption, but did not require repetition. While I had no decrease of temperature in any of these cases, nor arrestment of the disease, I ascribe the good results from it chiefly to the fact, that the treatment was much more easily understood by those attending the patients, and therefore more easily and satisfactorily carried out. There was nothing in it that would prove in any way hurtful to the patient, even if the attendant made a slip. All that was as a rule required after the first application was simply that the parts should be

protected, and kept warm, and ~~that~~ the patient should be attended to in the way of diet. and nourishment, and I think it was owing to this that I had the recoveries.

In the 3rd. class of cases the success was not apparently ~~so~~ great. Still I do not think this was due to the treatment. The fatal termination of one of these cases I ascribe more to negligence on part of the attendant, who allowed the patient to get up to stool on a very cold morning, with the result that he contracted a chill and had double pneumonia.

In none of these cases did I try to lower the temperature. I merely acted on the expectant, and watched the progress of the case. If there was pain I applied the poultices, and gave stimulating drugs, principally Ammonium. If the patient seemed depressed, or collapsed, then Alcohol was given in some form or other. The advantage of this treatment like the preceding in a general practice, with no trained attendant was its simplicity, and the ease with which it was carried out. The instructions were simple and the line of treatment was familiar to all, no matter of what social position. A

poultice could easily be made at any time if there were pain, and applied, and generally it acted as a fair anodyne. It left no broken skin after it, as in the second class of cases, nor did it tend to cause any injury to the lung, as in the 1st. class of cases. No doubt this treatment had no effect either in lessening temperatures or in arresting the disease, but I did not aim at either. I merely wished to assist nature, and so bring about a cure no matter how long it might take. And as a result I had practically no death, for as I said above the death I had was not due to the treatment, but rather to the neglect of it.

I now come to the 4th. class of cases, viz:- those in which the treatment consisted of a combination of the Antipyretic and Stimulant. In this class I had no deaths. This happy result was not due to any favoring conditions in the patients, as being stronger, more robust, or of better constitution than the others; but rather to the treatment which in itself is simple. and easily applicable to all conditions of patients.

I at first gave a simple diaphoretic mixture containing

5 minim doses of opium. In conjunction with it I ordered continuous poulticing to the affected part for at least 24 hours. While this treatment neither reduced temperature, nor arrested the disease, it had certainly a very soothing effect upon the patient. It relieved the acute lancing pain in breathing, and the heat of the poultices caused the affected lung to act more freely. If the patient at times shewed any signs of weakness, I did not hesitate to give alcohol, either in the form of whisky or brandy. This treatment was generally carried on until after hepatization, when a stimulant expectorant was given, which had the effect of clearing the lung of purulent matter sooner. As weakness and debility always followed in this stage from the reaction of the inflammatory fever, small quantities of spirits were given so as to neutralize the collapsed condition, and at the same time help to strengthen the patient. After the pneumonic symptoms subsided, the patient was generally put on to mineral tonics, with good strengthening diet so as to help convalescence, and in all cases where it was possible a change of air either to the country, or seaside, was recommended. Judging from the experience I have had, I consider the last mode of treatment the best, and most applicable in

all cases included in a large general practice.

Before giving the reasons which seem to me to support this conclusion, it may be convenient here to consider this mode of treatment as compared with the systems, which have been from time to time followed since about the 17th. century.

Comparison with ancient treatment.

Up till 60 years ago, Pneumonia might be said to have been treated on no other principles than those guiding the treatment of general inflammations which caused constitutional disturbances, such as, fevers, peritonitis, etc., and this treatment was practically the same as had been followed for centuries before. It might be summed up in the generic title of bleeding. No doubt as time went on, drugs were added, such as Antimony, and Mercury, but these were not given simply because it was Pneumonia that was being treated, but rather on the broad lines that an inflammation was present, and that these drugs had a specific effect in arresting or allaying it. Had the constitutional disturbance been due to peritonitis, pleurisy, or to any

Notes from Professor Gairdner's lectures on Pneumonia in Practice of Medicine. Session /79.
Glasgow University.

specific fever, the same remedies would have been applied in the hope of doing good.

And in looking over the older authors, one can well see that it was hardly possible for them to do otherwise. They had no knowledge of the pathology of the disease, they did not distinguish the stages, which the disease passed through, and therefore were not in a position to apply accurately any specific treatment. It was not until after *Laennec* had demonstrated that in Pneumonia there was heard a certain sound which he called "râle crepitant," and which distinguished this disease from all other inflammations and fevers that treatment began directly to be applied to it. No doubt long before *Laennec's* time methods were known for the examination of the chest, such as those of Avenbrugger, and Bischat, but it was not till after *Laennec's* time that the physical signs were verified, the precise parts mapped out, and treatment put on a clear basis.

Up till that time the different treatments, or rather modifications of the same treatment might be classified as belonging to different schools, or countries, and were faithfully followed by their respective disciples for years. There was no change, what the Professor

Vide Professor Lazarus Riverius's works. Dean of
the Faculty of the University of Montpellier.
Opera Medica Universa.
Treatise de Peripneumonia. Published 1672.

His words are:-

"Posteaquam vero ^Wnon videntur vires ^eulteriorum
venae sectionem, cucurbitulae admonendae sunt
scapulis, et dorso, tum siccae, tum maximè
scarificatae, quantum vires ferre possunt."

taught, the disciple practiced. And not only was this the case during the last century, but even further back into the 17th. century. Thus Dr. Lazarus Riverius in his *Opera Medica Universa* (he himself following the treatment of Celsus and Galen) is emphatic in his recommendation of treating Pneumonia by bleeding twice and three times a day. And as he says "if the strength will not permit of venous bleeding, then dry cupping must be resorted to with scarification."

This treatment was followed more or less up to the present century. Each school claimed perfection, and considered its mode not only best in relieving the disease, but also as shewing the best ultimate results. Thus we have the Italian school as represented by Rasori, who not only bled excessively, but also gave large doses of tartar emetic. In our own country we had Sydenham with his disciples, and in France to a less extent Chomel.

For the first half of the present century this mode of treatment was the rule, but it was then beginning to be recognised that it was obsolete, and that the results did not justify its continuance. With better education, and a higher standard of medical knowledge, Pneumonia like all other diseases was beginning to be treated not in the old rule of thumb style, but with a view to strengthen the

patient, and to combat symptoms as they arose.

It became evident that Pneumonia like all other febrile diseases was one taxing the strength of the patient, that its tendency was to wasting, and that the remedies formerly employed, such as bleeding etc. were only helping on that wasting, and giving the patient less chance of recovery. Statistics were of little service, for it was difficult to compare, especially from want of knowledge as to the classes of patients, the age, strength, condition etc. Then different countries and localities might have different results, owing to atmospheric conditions, town life, hygienic surroundings etc. But even looking merely at the results of the older treatment one would not be justified with our present knowledge in following it. Hence it is seldom if ever practised. The pendulum may possibly have swung too much in the opposite direction, but so long as Pneumonia is considered an exhausting disease, threatening life owing to its wasting character on the constitution, so long is it the duty of the physician to watch, and apply remedies which have the tendency to counteract such wasting, and enfeeblement, and rather to strengthen his patient by nourishment, than debilitate him by further exhaustion.

Under the old treatment Rasori had a mortality of 10%. Bonlilland with his "Jugulant treatment" 12%, Chomel 32%, Grisolle 15%, and I may feel justified in preferring to that treatment the one which I recommend in which the mortality was nil. Further I consider that its superiority is emphasised by the difference of circumstances. Probably all these masters had the very best assistance, in many cases I had little or no assistance in the sick room. They would have cleanliness, pure air, healthy surroundings. In many cases I had quite the opposite, and not only that, but unfavorable conditions made more so by the noise of the streets, overcrowding and uncleanness. Thus I think it would be useless to revert to a form of treatment which according to the Masters' own shewing has under most favorable circumstances, been much more fatal, than that which is advocated in this paper under circumstances much less favorable. If the pendulum has swung, it has done so judiciously, for with our higher knowledge, it has been incumbent upon us to treat the disease in the broader light of what will conquer it, with a view of restoring our patient to health, and strength.

I now come to the more modern treatment which with various modifications exists at the present time. This

Gairdner's Clinical Medicine 1862. Page 52.

modern treatment to a great extent is embodied in either one or other of the different headings I have given. There does not now exist any particular school advocating one special treatment over another, as was the case with the older physicians. The leaders and teachers of to-day rather impress on us the idea, that Pneumonia is not a disease that can be treated in routine fashion with this or that drug, but rather that we are to combat symptoms as they arise, and keep in mind that it is the patient, rather than the disease we are to treat.

Professor Gairdner in his clinical Medicine published 1862 gives, I think, the key note when he says, page 52. Asked. "Are you Antiphlogistic, or Contra stimulant, or Stimulant, or Expectant in your practice?" Answers. "So far as I can observe we have no system in the matter, for myself within the last 3 months I have treated different cases by all these methods, believing that what is to be treated is not so much the pneumonia as the individual patient."

That I think conveys the true mind of the physician of the present day. No man can point to any particular drug as heroic in pneumonia. One may prefer one, another another, but all tending according to his best judgment to

Sir Thomas Watson's Practice of Physic. 5th. Edition
1873. Page 104.

ease the patient, and mitigate the disease.

Sir Thomas Watson while of the same opinion as Professor Gairdner as to the general treatment has a preference for Antimony. This drug, he tells us, ought to be given at the earliest stages, and in doses of $\frac{1}{2}$ of a grain to 1 grain every hour or so, to be stopped as soon as pyrexia disappears, and convalescence is established. I have also given it in the form of Antimonial wine, but I could not say that I have been so impressed with its good results as to give it a very high place in my pharmacopeia in the treatment of pneumonia. My objection to it as well as other Depressants, is, that pneumonia is in itself a depressing disease, and although in the beginning it is over active, and stimulant owing to the excessive pyrexia, still the reaction is sure to come afterwards. Instead therefore of giving a depressant, which tends still further to deepen the depression, more good I think can be had by giving drugs equally good as Antipyretics, but without the tendency to cause depression. Thus I am inclined to give the febrifuge as noted in my 4th. class of cases. No doubt I would change it to other Antipyretics if necessary, but were I at all to sanction routine practice I would prefer it to others for the reason that it is a soothing

Theory and Practice of Medicine

by

Bristowe. 3rd edition. 1887

page 387.

mixture which relieves pain and instead of depressing tends rather to keep up the strength. The amount of Opium given is so small, that it has but little effect in causing any greater dyspnoea than what is actually present.

Professor Gairdner and Sir Thomas Watson have a preference for poulticing. Bristowe in his Theory of Medicine prefers ice and cold compresses to poultices, which latter he thinks of no avail. I am inclined to follow the teaching of the first 2 masters in preference to the latter. Unless where I had trained nurses assisting, and where I could possibly make 2 or 3 visits a day, I would never use the ice or cold compress. My treatment with such has been fatal, and such theories as given by Bristowe are misleading to the profession, unless to those who are possibly intended to be hospital physicians. To such the advice might be good, but to one, such as I, having been engaged in general practice, it would be fatal were it to be made his routine practice. I have still belief that cold would be beneficial both for the relief of pain, and for the pyrexial stage, but my objection to it is that unless particularly well watched you have either gangrene setting in, or possibly reaction of a more decided character; thus in either case causing more danger to the

On the treatment of Pneumonia by the ice bag.
D. B. Lees, M.D. Lancet, 1889, Vol. 2. page 890.

patient.

I prefer using poultices from which there can be no possible danger in the hands of the inexperienced, and I think by using them, I am acting up to the advice of the 2 masters I first mentioned, and carrying out their rule that the patient is to be my first care and the pneumonia secondary.

Dr. Lees on ice treatment.

No doubt in the hands of Dr. Lees (who had everything favorable for the application of the ice bag) the results were good, and as he says in 4 of his 18 cases the disease was arrested, and of the others none died. *His experience of this treatment* ~~This~~ certainly contrasts very favorably with my own; but if Dr. Lees' mortality was nil under this treatment, and mine was cent per cent, my only palliation was that his cases were much better watched than mine, and were not left to be attended by people almost ignorant of what they were doing, and whom I had to trust to carry out my instructions, doubtful indeed if they would do it in the way in which they were instructed.

From the Antipyretic drugs I have had little benefit. The temperature may have been lowered, but only to rise again. In their case they require to be watched, and given under careful hands, and even then I do not think they cut short the disease. My experience is certainly against them. Those of my cases that did recover, did so I think independently either of Quinine, Antipyrin, Antifebrin, or Salicylic acid.

Conclusion.

I may now sum up. Looked at in the light of my own experience, and after considering the systems practised since the 17th. century down even to the latest just referred to I believe I am justified in contending that the treatment advocated in this paper is the most suitable for the general practitioner, and my reasons are:-

- 1st. It is simple in its application.
- 2nd. It is easily taught to anyone, who is not trained to nursing.
- 3rd. It does not necessitate the watching which is required in using ice bags, or blisters.

- 4th. It is painless, as it does not affect the skin.
- 5th. It cannot harm the lung by causing gangrene, owing to sudden extreme changes in the local temperature.
- 6th. Sometimes in vesication from Cantharides, if the part is not kept clean, and continually dressed, the patient is kept in extreme pain from an open suppurating sore, causing restlessness, insomnia, and irritation, but it is otherwise with poultices which are soothing and anodyne.
- 7th. The physician has not the same anxiety as he knows the attendant will be able to carry out all his instructions as to poulticing, which would not be carried out either in cold applications, in blistering, or in bleeding.
- 8th. As the disease has a depressing tendency on the constitution, stimulation is necessary both in the form of drugs, and food to keep up the strength.
- 9th. Alcohol is given when exhaustion is present.
- 10th. No drugs are given having any depressing tendency on the constitution, but rather those which are tonic and stimulant.

To these may be added that it embodies the teaching of the highest medical authorities. viz:- Watson, Gaird-

ner, Reynolds, Sturges, etc., and as I have found, it is the most successful in the working of a large general practice.

For these reasons amongst many I have been inclined to follow the last mode (4th. mode in paper) of treatment. I am not however so dogmatic or empirical as to say that it is absolutely the best, or that I would be inclined to follow it universally. In pneumonia as in all other diseases different modes of treatment must be resorted to under different conditions. If I always had the services of efficiently trained nurses, healthy hygienic surroundings, and cleanliness in every possible way, I might, and would vary my treatment in the direction of some of the other divisions. I have pointed out, as I might hope with these valuable aids to have satisfactory results. But where these are wanting, and where one has practically none of these aids I am inclined to follow the 4th. mode. This conclusion I have come to from experience of a long series of cases amongst all conditions met with in a large general practice, and that in a city in which, although much has been done to improve the surroundings of the people, there is still much required to make working class localities really pure, healthy, and free from contamina-

tion.

As will be observed my conclusion has not been arrived at without long and careful observation, and experiment. I was first led towards it by the successful treatment of pneumonia in the Royal Infirmary, Glasgow, in the winter of 1881 - 2, when I had the privilege as Resident House Physician of assisting Professor Charteris there. On entering into practice on my own account I determined to experiment with other systems with the view of testing their value as compared with the value of that to which I had already begun to incline. The result is given in this paper.

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S.S.*

18th May 1896
