



THE
USE OF ANTIPIRYNE
 IN
 CHEST DISEASES OF CHILDHOOD.

A
GRADUATION THESIS
 BY
ELIZABETH BIELBY
 FROM
BEVERLEY, YORKSHIRE, ENGLAND.

PRESENTED TO THE
 MEDICAL FACULTY OF THE UNIVERSITY OF BERNE
 AND ACCEPTED TO BE PRINTED ON THE REPORT
 OF

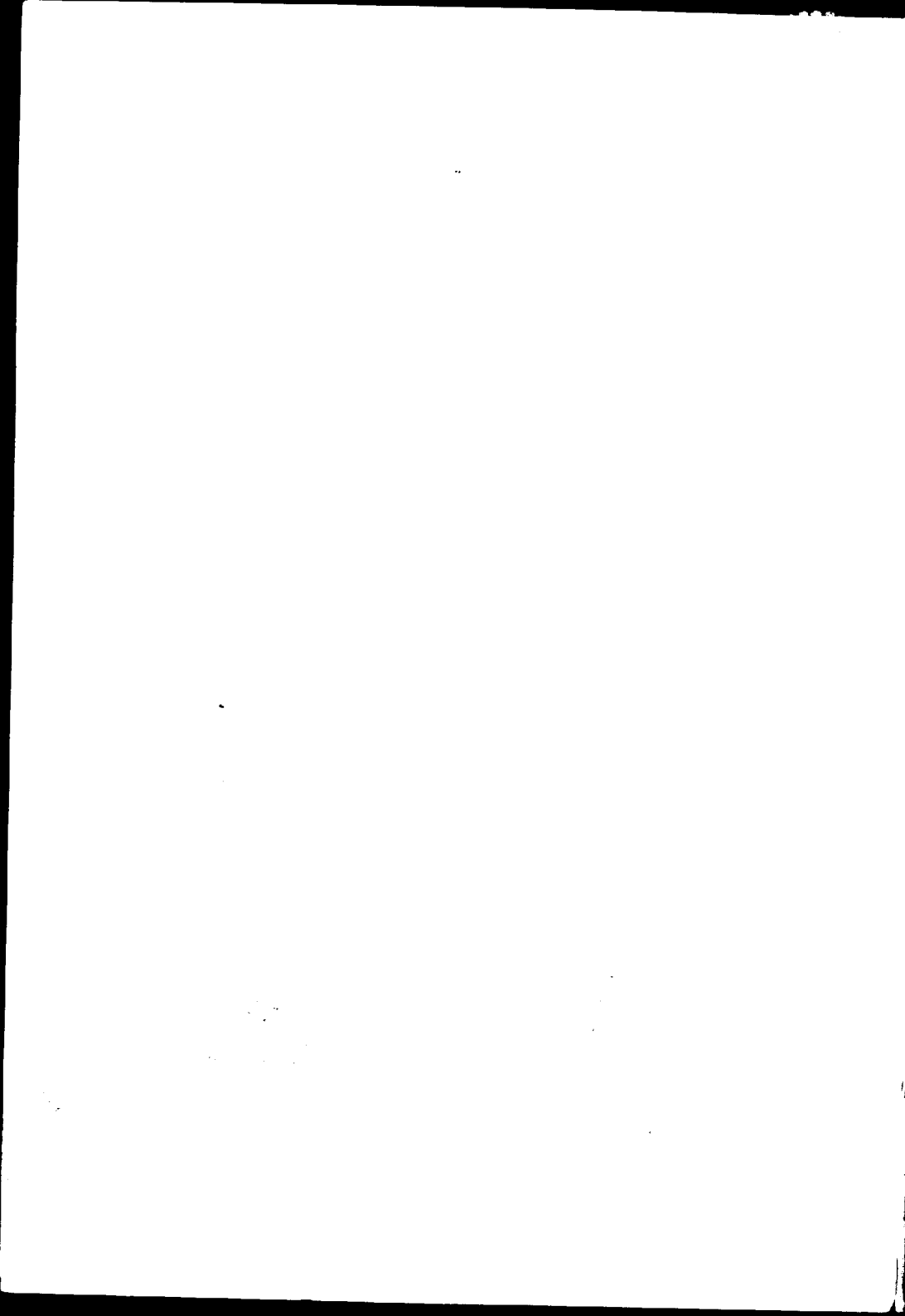
Prof. Dr. Demme



BERNE, February 1885.

Prof. Dr. NENCKI, Dean.

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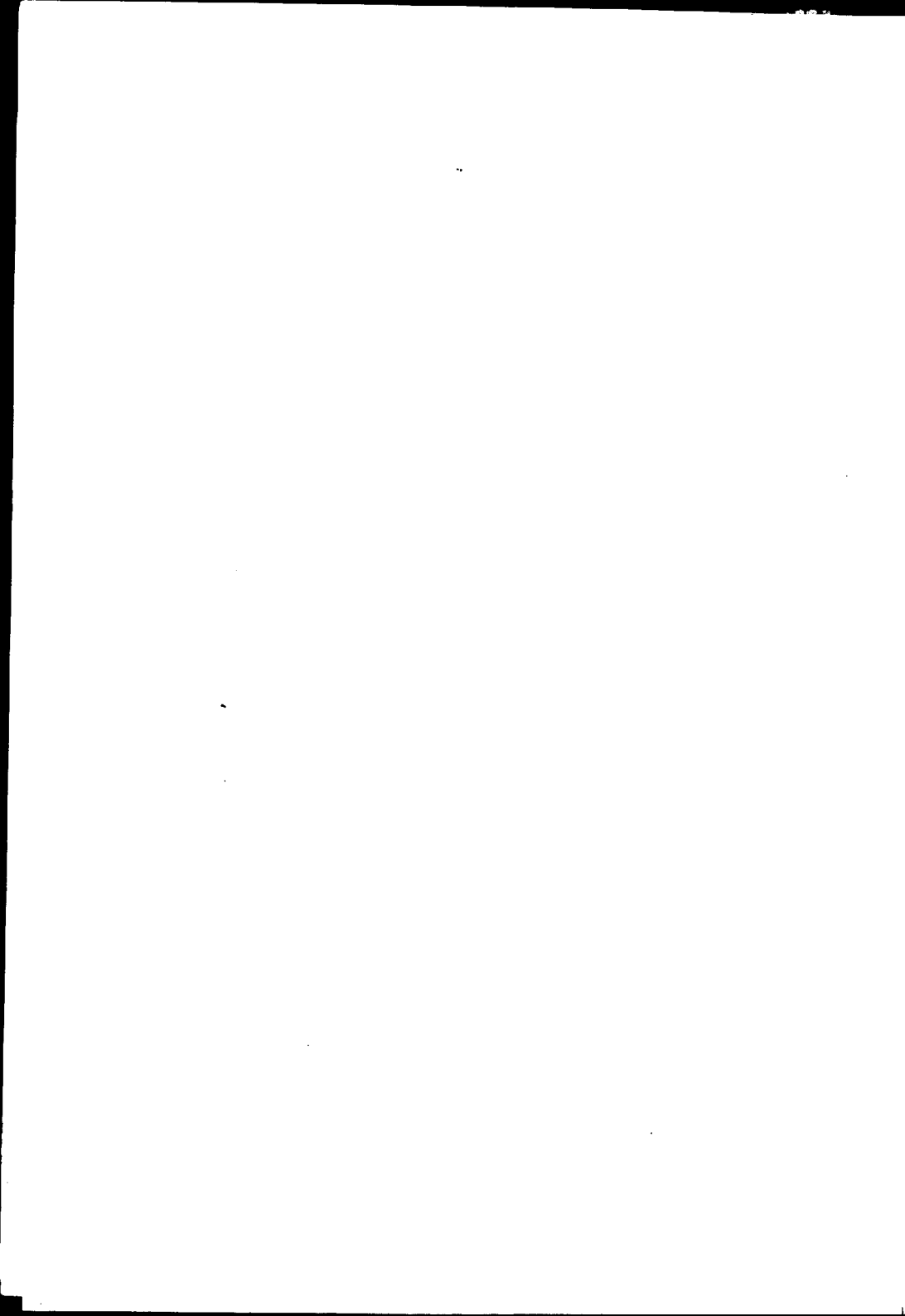
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THE USE OF ANTIPYRINE IN CHEST DISEASES OF CHILDHOOD.

Within the last few months there has been brought to the notice of the Medical Profession, — and more especially to the notice of the Medical Profession of Germany, France and Switzerland, a new Antipyretic, which if it bears the test of a wider experience than it has yet enjoyed, will prove of incalculable value in diseases attended with high fever.

This new medicine is called Antipyrine; it was first prepared by Professor Knorr of Munich, from the ingredients of coal tar. The exact nature of the drug is kept a secret, and protected by a patent.

According to the experiments of Dr. Huchard, Physician at the Bichat Hospital in Paris, Antipyrine gives the following chemical reactions ¹⁾.

Antipyrine	+	Tannin	=	Greyish white <i>Precipitate</i> .
„	+	Jodine & K. J.	=	Reddish <i>Precipitate</i> .
„	+	Double Jod. of Mercury and Potassium	=	Light <i>Precipitate</i> .
„	+	Chloride of Platinum	=	Yellow <i>Precipitate</i> .
„	+	„ „ Mercury	=	White <i>Precipitate</i> .
„	+	„ „ Gold	=	Yellow <i>Precipitate</i> well marked.
„	+	Nitrate of Mercury	=	Red colour well marked.

¹⁾ L'Union Médicale. December, 6th, 1884.

- Antipyrine + Sulphuric Acid = No effect.
 „ + Hydrochloric Acid = Slight yellow *colour*.
 „ + Perchloride of Iron = Portwine *colour*,
 this reaction is particularly well marked.
 Nitric Acid (cold) = No effect.
 „ „ (Hot) = Red colour.

As this medicine has been tried so successfully by many Doctors, in various diseases of adults, and children, I am allowed by the kind permission of Professor Demme, to write on the result of its use in Lung diseases of children under his care in the Childrens Hospital Berne. I take this opportunity to offer him my warmest thanks, not only for the cases I have been allowed to watch, but also for his advice with regard to the study of the diseases, and the most important points which, in each case, ought to engage our attention.

Before giving the particulars of the cases we have treated, it will be better to give a short review of what has — up to the present time — been written on the subject.

1st. All authors agree, that Antipyrine is a very soluble substance.

Dr. M. P. Guttman says that three gramms of water will dissolve seven gramms of Antipyrine leaving hardly any precipitate ²).

2nd. Antipyrine gives rise to very few secondary symptoms, and, in this respect, it is far superior to Quinine, or Kairin. In some cases vomiting followed its use, but was neither distressing or continuous.

Professor Penzoldt remarks that in diseases of children — if there was vomiting after the drug was given — he gave it by the rectum. By doing so, he found the

²) La Semaine Médicale. July 24th, 1884.

temperature came down as quickly, as when given by the mouth, and the vomiting was entirely prevented ³⁾).

The same result was noticed by Dr. Guttman ⁴⁾ and also by Dr. Rapin ⁵⁾.

Dr. D. A. Cahn records two cases where after giving Antipyrine for several days — in large doses — an exanthematous eruption was noticed on different parts of the body. The eruption, however, caused no trouble or inconvenience to the patients, and it disappeared as soon as the medicine was discontinued, returning again when it was recommenced ⁶⁾).

Dr. Meissen of Falkenstein says the eruption is between Erythema, and Urticaria, and that it occurs in ten per cent of the cases ⁷⁾.

3rd. It has been observed that sweating, more or less profuse occurs; but those who have had the opportunity of using both drugs, say that the sweat caused by the use of Antipyrine is never so profuse as that caused by the use of Käirin.

Dr. Carl von Noorden thinks if a dose of Agaricin (0,005 of a gramm) is given with — or from ten to fifteen minutes before — the Antipyrine the sweat will be much lessened ⁸⁾.

Dr. Meissen of Falkenstein is of the same opinion as Dr. von Noorden. He tried Antipyrine specially in cases of Phthisis — and he found that the sweat is much diminished by the use of Agaricin while the antipyretic value of Antipyrine was in no way lessened

³⁾ Berliner klinische Wochenschrift No. 30, July 28th, 1884.

⁴⁾ " " " " No. 20, May 19th, 1884.

⁵⁾ Revue Médicale de la Suisse romande, July 15th, 1884.

⁶⁾ Berliner klinische Wochenschrift No. 36, Sept. 8th, 1884.

⁷⁾ Deutsche medicinische Wochenschrift No. 51, Dec. 18th, 1884.

⁸⁾ Berliner klinische Wochenschrift No. 32, Aug. 11th, 1884.

by giving Agaricin. — He gave from 5—10 Millgr. of Agaricin in pill with the Antipyrine, — which was given in wafer ⁹⁾.

4th. In all cases treated with Antipyrine, the temperature falls gradually, and also rises steadily without rigors.

5th. It seems to be the opinion of most of the observers, that the frequency of the pulse and respirations are lessened as the temperature falls, and are increased, when the temperature rises again.

Professor Penzoldt remarks, that he found no effect on the pulse when the temperature fell ¹⁰⁾.

On intermittent fever Antipyrine seems to have no effect in preventing the attacks: so, in this respect, it is not equal to Quinine.

Dr. H. Falkenheim tried it in six cases of intermittent fever: and, though he gave the drug in five gramm doses at different times before the attacks came on, it had no power to cut short the attacks of fever. One of Dr. Falkenheim's patients had thirty-five gramms in twenty four hours without the least effect being produced ¹¹⁾.

Dr. Paul Guttman has also observed that, on intermittent fever, Antipyrine was not so sure in its action as in other fevers ¹²⁾.

Dr. Meissen of Falkenstein has tried it most successfully in Phthisis and he considers that, in that disease, it is far superior to any other known antipyretic. He also says Antipyrine may be used when it is desirable to produce sweating ¹³⁾.

⁹⁾ Deutsche medicinische Wochenschrift No. 51, Dec. 18th, 1884.

¹⁰⁾ Berliner klinische Wochenschrift No. 30, July 28th, 1884.

¹¹⁾ " " " " No. 24, July 16th, 1884.

¹²⁾ La Semaine médicale, July 24th, 1884.

¹³⁾ Deutsche medicinische Wochenschrift No. 51, Dec. 18th, 1884.

Having thus, in a few words, noticed the chief points mentioned by most of the authors, who have written on the effect of this new medicine, I wish to draw more particular attention to what Professor Demme has — in two valuable papers — written on the subject. The first of these papers is almost entirely devoted to experiments on rabbits and frogs which he made with Professor Luchsinger in the Laboratory of the last named gentleman¹⁴).

The Antipyrine was presented to Professor Demme by the Makers Messrs. Meister, Lucius & Brüning, Chemische Fabrik in Höchst a Main (Germany).

Several experiments were made at different times, and with different doses. The effects seemed to be chiefly on the central nervous system, and on the heart. The blood pressure was first raised and then fell quickly.

In rabbits one gramm was sufficient to kill.

In frogs 0,35 of a gramm.

In experiments, where 1.1 gramm was given the poisoning was very quick. In those, where 1.01 gramm was given, the poisoning was slower. In small doses i. e. 0,5 of a gramm for rabbits; 0,03 of a gramm for frogs got irritation of the central nervous system, and finally paralysis.

In the second paper, Professor Demme gives instances of the use of Antipyrine in diseases of children. The youngest of his patients was six months, the eldest fourteen years¹⁵). He gave the medicine in all the cases as soon as the temperature showed a tendency to rise. As a rule, he gave it in doses of from one gramm to 0,5 of a gramm every hour for three hours. The temperature was taken every hour, sometimes every halfhour. When, in the few cases where there was vomiting, the

¹⁴) Fortschritte der Medicin, No. 20, Oct. 15, 1884.

¹⁵) „ „ „ No. 21, Nov. 1, 1884.

drug was repeated half an hour later. Very rarely the vomiting continued. Professor Demme never found it necessary to give it by the bowels on account of the vomiting. In one case, before the medicine was given, the patient had a temperature of 41,7. A dose of 0,5 was given, every hour for three hours. The temperature went down to 37,2 — ultimately to 36,0. The patient was without fever for about twelve hours. When the temperature began to rise again, 0,1 was given; which was sufficient to keep the temperature down for forty-eight hours; though, at the same time, the disease was progressing.

Professor Demme found in a case of Rheumatic Arthritis Antipyrine was of more service than Salicylic Acid.

The Erythema which other Authors have observed, also appeared in some of Professor Demme's cases. — But except in one case, where the patient complained of an irritation all over the skin — the patients did not suffer from any inconvenience while the eruption lasted or afterwards.

In a case of severe *Diphtheria* Antipyrine, not only, did not bring the temperature down, but gave rise to serious cardiac symptoms. In less severe cases of this disease the temperature was lowered after the drug was given without any bad symptoms.

Professor Demme is of opinion — after most careful observations — that where the heart is diseased, or the blood poisoned from any cause, Antipyrine should be given with the greatest care, and the patient watched most assiduously. If the temperature falls rapidly, the contractions of the heart becoming slower, and the beats irregular, the case should be looked upon as intoxication by Antipyrine.

Professor Demme further remarks:

- a) Antipyrine has no power over the course of the disease.
- b) The organism does not get accustomed to the drug.

- c) As a rule there was profuse sweating, when the temperature fell, but not any rigors.
- d) The urine was often increased in quantity.
- e) In cases where there was an eruption on the skin it was — as a rule — preceded by rigors. The eruption did not last more than five days.
- f) In one case of Abdominal Typhus the number of stools were lessened.
- g) In all the cases, recorded by Professor Demme the temperature was taken in the rectum.
- h) In none of the cases was any other cooling remedy used.

Having now seen what those — who have had every opportunity of judging of the effect of this new medicine, and who have spared themselves no trouble to come to a correct conclusion — have written on the subject, we will pass to the consideration of the cases I have been allowed to watch.

The temperature is given with each case, with the quantity, and time of each dose of Antipyrine.

Case 1.

Wüthrich, Arnold. Aged 4 years.

Admitted: 23. X. 84.

Discharged: 31. XI. 84.

Diagnosis: Pneumonia crouposa.

Result: Cured.

Anamnesis: Father is a shoemaker, healthy. Mother is weak. Has had two children. One died of diarrhoea at the age of six months. The patient — Arnold — was not nursed by his mother; was fed on flour and milk. He has always been delicate; often suffering from diarrhoea and intestinal catarrh.

The present illness commenced eight days since, with fever, headache, pain in the chest, cough, loss of appetite, not able to sleep, constant diarrhoea. Has had seven or eight motions each day. Motions liquid, colour light green. Was brought to the Hospital on the afternoon of the 23rd. of October.

Present Condition: 24. X. 84. Child is small but fairly well nourished, face pale.

Heart sounds are normal.

Mucous membranes are cyanotic.

Percussion of Lungs: *Behind* over the scapula and especially over the supraspinous fossa decided dulness, with slight tympanic sound. Passing downwards, the sounds become sonorous.

In front on both sides the breath sounds are sonorous.

Auscultation: Behind on the right over the seat of dulness, there are moist râles. Expiration is laboured with bronchial breathing. Over the other parts of the thorax the breath sounds are sharp but, except this, they are normal.

25th. On the right over the supraspinous fossa and over the scapula, the dulness is more marked than yesterday, and there is also bronchial breathing. At both, inspiration and expiration moist râles can be heard.

On the left behind, the sounds are normal. Under the right clavicle and extending to the third rib distinct dulness, beyond the third rib the dulness is less distinct and there is tympanic sound.

Diagnosis: *Pneumonia crouposa of Right Lung.*

Though the fever — (due to the administration of Antipyrine) — has quite left the patient, still the disease has progressed, since he was admitted into the Hospital. The dulness which, at first, was limited to the right scapula has spread all over the posterior part of the right lung. The child

is very weak and languid; his face is a little swollen. Cheekes and mucous membranes cyanotic.

26th. This morning patient had no fever, temp. 37.0. Pneumonia of right lung is fully developed. Over the posterior and anterior right side of the thorax, there is well marked dulness, bronchial breathing is very distinct. Left lung is quite free.

The expression of the face is less anxious.

Tongue and lips dry.

The mucons membranes are less cyanotic. Respi- rations between 32 and 36 per minute. Urine is clear and passed freely.

27th. The dulness has diminished, distinct tympanic sound. Bronchial breathing is less marked. This evening the temperature is very low 35.2 to 35.6.

28th. Patient has not had any abnormal rise of temperature since the evening of the 26th. when it was 38.0. Is not now languid. Has a good appetite taking a quantity of food.

29th. Temperature normal. On the right side, both anteriorly and posteriorly, slight dulness and abundant moist râles. Bronchial breathing quite gone.

On the right side, from under the clavicle to the third rib, there is tympanic sound.

30th. Resolution complete.

31st. Dismissed cured.

Date.	Time.	Temp.	Pulse.	Resp.	Antipy- rine.
23 X.	5. P.M.	40.0.	136.	44.	0.5.
	6. "	39.8.			0.25.
	7. "	38.8.			0.25.
	8. "	39.0.	132.	46.	
	9. "	39.2.	140.	48.	0.5.
	10. "	38.0.	120.	40.	

Date.	Time.	Temp.	Pulse.	Resp.	Antipy- rine.
	11. P.M.	37.0.	116.	40.	
	12. "	35.4.	116.	40.	
24th. X.	1. A.M.	36.0.	108.	38.	
	2. "	36.0.	104.	36.	
	3. "	36.2.	106.	34.	
	4. "	36.4.	110.	34.	
	5. "	36.6.	102.	30.	
	6. "	37.0.	108.	32.	
	7. "	37.2.	110.	32.	
	8. "	37.2.	112.	30.	
	9. "	37.4.	106.	28.	
	10. "	38.0.	112.	32.	
	11. "	39.4.	130.	42.	0.5.
	12. "	39.0.	120.	40.	0.5.
	1. P.M.	38.6.	108.	40.	0.5.
24th.	2. "	38.4.	100.	32.	
	3. "	38.2.	100.	32.	
	4. "	37.8.	106.	28.	
	5. "	38.0.	112.	40.	
	6. "	38.8.	116.	42.	0.5.
	7. "	40.0.	120.	44.	0.5.
	8. "	37.6.	126.	32.	
	9. "	36.8.	120.	28.	
	10. "	36.4.	124.	32.	
	12. "	36.2.	120.	28.	
25th.	2. A.M.	36.0.	108.		
	4. "	36.4.	108.	32.	
	6. "	38.8.	116.	36.	0.5.
	7. "	37.0.	116.	38.	
	8. "	37.2.	120.	36.	
	9. "	37.4.	124.	32.	
	10. "	37.2.	100.	28.	
	11. "	37.8.	112.	30.	

Date.	Time.	Temp.	Pulse.	Resp.	Antip.
	12. A.M.	38.4.	122.	34.	
	1. P.M.	39.8.	140.	46.	0.5.
	2. "	39.0.	136.	44.	0.5.
	3. "	38.8.	140.	44.	0.5.
	4. "	37.8.	130.	38.	
	5. "	37.2.	120.	34.	
	6. "	36.2.	100.	30.	
	7. "	36.2.	100.	30.	
	9. "	36.2.	100.	32.	
	11. "	36.0.	104.	30.	
26th.	1. A.M.	35.8.			
	3. "	36.0.			
	5. "	36.2.			
	7. "	36.6.	116.	32.	
	8. "	37.0.	120.	32.	
	9. "	37.2.	120.	32.	
	10. A.M.	37.2.	120.	32.	
	11. "	37.4.			
	12. "	37.8.			
	2. P.M.	37.8.			
	4. "	38.0.			
	6. "	38.4.			0.5.
	10. "	36.4.			
27th.	1. A.M.	36.0.			
	4. "	36.4.			
	8. "	37.0.	96.	16.	

Case 2.

Kräuchi, Marie. Aged 15 months.

Admitted: 27. X. 84.

Discharged: 20. XI. 84.

Diagnosis: Pneumonia crouposa.

Result: Cured.

Anamnesis: Father was stonebreaker. He was quite healthy until he had Pneumonia from which he died.

Mother is healthy. Has had five children. One died of meningitis.

No hereditary diseases.

The patient — Marie — is yet nursed by her mother. She was quite well until eight days since. For three or four days has been feverish, strong cough, very thirsty, no appetite. On the 26th. or 27th. vomited.

Present condition: The child is thin and badly nourished; face is pale. Nothing particular to notice about the body.

Percussion and Auscultation of the lungs: *On the left* over the scapula from the third to the seventh spinous process, dulness crepitations; distinct bronchial breathing on inspiration.

On the right nothing abnormal.

In front, on both sides, no dulness, but moist râles.

The heart: Extent of dulness, and sounds are normal.

Liver: The upper border reaches to the sixth rib and the lower border about 2 cm. over the umbilical line.

Spleen is a little enlarged reaching by its anterior border to the right vertical mammary line.

29th. Since yesterday bowels moved three times, motions loose. Last night respirations were 40 per minute and pulse 132.

Mucous membrane of the nose and mouth dry. Cough troublesome. The dulness on the left side has extended somewhat downwards; and, at the lower limit of the dulness, there is a tympanic sound.

Auscultation shows the same condition as yesterday. There is strong bronchial breathing. The râles are dry, fine crepitations.

30th. The general state of the patient is better. Urine normal and passed freely.

On the left side, where there was dulness, moist râles can be heard. The dulness has diminished, tympanic sound disappeared, slight bronchial breathing. The dulness over spleen is much less.

31st. Pneumonia is becoming resolved. On percussion yet a slight tympanic sound. On auscultation moist râles are heard. Child has had two loose motions. Slight swelling of the abdomen. Pulse 104, respirations 28.

1. XI. 84. The disease can be considered cured.

20. XI. The child has been well fed and has derived great benefit from the food she has had. Weight 8475 grammes. Dismissed cured.

Date.	Time.	Temp.	Antipyrine.
27. X.	5. P. M.	38.2.	
	8. "	38.0.	.
	11. "	38.0.	
28.	6. A. M.	37.4.	
	9. "	37.2.	
	12. "	37.2.	
	3. P. M.	37.0.	
	6. "	37.2.	
	10. "	36.8.	
29.	6. A. M.	39.0.	0.1.
	7. "	38.0.	
	8. "	37.8.	
	9. "	38.2.	
	10. "	38.0.	
	11. "	38.6.	0.1.
	12. "	38.4.	
	1. P. M.	37.8.	
	2. "	37.6.	
	3. "	38.0.	
4. "	38.2.		
5. "	38.0.		

Date.	Time.	Temp.	Antipyrine.
	6. P. M.	38.4.	
	7. "	39.0.	0.1.
	8. "	38.2.	
	9. "	38.2.	
	10. "	38.0.	
	11. "	38.4.	
30. X.	1. A. M.	38.6.	0.1.
	2. "	38.2.	
	4. "	37.8.	
	5. "	37.4.	
	6. "	37.8.	
	7. "	38.0.	
	8. "	37.4.	
	9. "	37.0.	
	10. "	37.2.	
	12. "	38.0.	
	3. P. M.	39.0.	0.1.
	4. "	39.0.	0.2.
	5. "	37.8.	
	6. "	37.2.	
	7. "	36.6.	
	9. "	36.8.	
	10. "	36.8.	
1. XI.	4. A. M.	37.4.	
	6. "	37.6.	
	9. "	36.6.	
	12. "	37.2.	
	7. P. M.	37.0.	

Case 3.

Bachmann, Emma. Aged 6 years.

Admitted: 28. X. 84.

Discharged: 11. XI. 84.

Diagnosis: Pneumonia.

Result: Cured.

Anamnesis: Father is a stonebreaker. Father and mother are both well. Have had six children, all in good health. This patient — Emma — was nursed for eight months, afterwards was brought up by hand. Has had inflammation of lungs, twice also inflammation of the tonsils, but has not had any other illnesses. Has not been well since the 25th., has been languid, coughs much. Has not taken food well since yesterday. — Up to last night had no fever. Stools normal. From the 27th. to 28th. slight convulsive vomiting.

Present condition: 28. X. 84. Well developed and well fed child. cheeks red, tongue coated. Abdomen not swollen.

Liver: Superior border is near the sixth rib in the mammary line: in the axillary line reaches to the seventh rib. The lower limit is two fingers breadth below the arch of the ribs.

Spleen: Normal.

Respirations: 36 per minute, superficial and irregular.

Percussion and Auscultation of lungs: Behind no dulness. On the left side inspiration is sharp. On the right — in front — normal. On the left from clavicle to lower border of third rib muffled tympanic sound. Over this spot there is bronchial breathing and moist râles.

Not much fever.

30th. In the evening, temperature was 39.0.

Antipyrine 0,5 given.

Auscultation and Percussion shows the same state as yesterday. Behind over the suprascapular fossa — left — dulness and bronchial breathing with some crepitations.

Weight 19,000 grammes.

31st. Last night, an hour after Antipyrine was given, strong sweat, but no rigor.

This morning there were some red spots on the face, legs, and arms. The spots are large and become pale on pressure. To-day smaller doses of Antipyrine 0,25, were given. Bowels not moved. Ol. ricini ordered.

The dulness on the left side in front is not in any way altered. On the left behind, from the supraspinous fossa to the lower border of the scapula, there is distinct dulness, bronchial breathing and fine dry crepitations.

1. XI. 84. Yesterday evening, there were some spots on the body but none on the face. To-day they have quite disappeared.

3. XI. 84. Yesterday Antipyrine was not given. Last night at 7 o'clock the sister noticed large red spots on the body of the child. So, it may be supposed the eruption developed itself twenty-four hours after the last dose of Antipyrine. This morning the spots were quite visible. On the cheeks they are red and large like the eruption of Rubeola or Urticaria. On the legs they are specially well marked on the sides of extension. On the upper parts of the thighs and on the back, the spots are very red and large, very much like the eruption of Scarlatina. The back is thickly covered. Temperature normal.

Erythema multiforme which showed itself twenty-four hours after the last dose of Antipyrine.

4. XI. Eruption is still well marked on the face and limbs, has disappeared from abdomen and back. Temperature normal. On the left of thorax, both anteriorly and posteriorly, dulness has almost completely disappeared. Over this part of the thorax, coarse crepitations can be heard, and indistinct râles. There is no bronchial breathing.

5. XI. There is some eruption on upper and lower limbs, abdomen, chest, and face. The spots are very

red, but turn pale on pressure. They are not quite so large as a pea. Temperature normal.

Lungs. On the left — posteriorly — the sounds are more sonorous, than over the corresponding part on the right. There are no râles and no bronchial breathing.

6. XI. This morning the spots have quite disappeared. Temperature normal.

7. XI. Eruption quite gone. Everywhere, there is vesicular breathing. Temperature is normal.

Weight 18,500 grammes.

The eruption lasted three days. There was no irritation with it.

10. XI. No fever. Child is quite well.

11. XI. Dismissed cured.

Date.	Time.	Temp.	* Antipyrine.
28. X.	2. P. M.	38.8.	0.5.
	4. "	36.8.	
	6. "	38.2.	
	8. "	38.2.	
29.	7. A. M.	38.4.	
	12. "	38.6.	
	3. P. M.	38.6.	
	6. "	38.0.	
	7. "	38.4.	
	10. "	38.4.	
30.	7. A. M.	37.8.	0.5.
	12. "	37.6.	
	3. P. M.	38.0.	
	5. "	38.6.	
	7. "	39.0.	
	8. "	38.6.	
	9. "	37.8.	
31.	7. A. M.	37.6.	
	12. "	37.6.	

Date.	Time.	Temp.	Antipyrine.
	3. P. M.	39.0.	
	4. "	38.8.	
	5. "	38.4.	
	6. "	37.6.	
	7. "	38.0.	
	9. "	37.6.	
	10. "	37.2.	
	12. "	38.6.	
1. XI.	4. A. M.	38.6.	
	7. "	38.4.	
	9. "	38.0.	
	11. "	38.0.	
	12. "	36.2.	0.25.
	3. P. M.	38.6.	0.25.
	4. "	38.6.	0.25.
	5. "	38.4.	
	6. "	37.4.	
	7. "	36.6.	
	10. "	37.0.	
2.	6. A. M.	37.0.	
	11. "	37.8.	
	3. P. M.	37.8.	
	9. "	37.4.	
3.	7. A. M.	38.0.	
	10. "	37.4.	
	12. "	37.6.	
	3. P. M.	37.0.	
	6. "	37.0.	
	10. "	37.0.	

Case 4.

Iseli, Anna; age 5 years.

Admitted: 13. XI. 84.

Discharged: 30. XI. 84.

Diagnosis: Broncho-Pneumonia.

Result: Cured.

Anamnesis: Father is a labourer. He has some disease of the lungs; he seems quite stupid. Mother has pain in her chest, and has a cough. It cannot be ascertained if there is tuberculosis in the family or not. Have had two children, one dead. This child — Anna — was nursed for three years. Has not had any serious illness. Since the 9th. has not been well. Headache, fever, cough; on the 10th. mother says child had a rigor. Yesterday it vomited three times. Since yesterday stools have been offensive and liquid. It is said the urine is not clear.

When received, the temperature was 39,5.

Antipyrine 0.25.

Present condition: 14. XI. 84. Fairly well nourished, cheeks red. Abdomen is not swollen. There is nothing particular to notice about the body.

Liver normal. *Spleen* normal.

Percussion and Auscultation of Lungs: Behind on the *right* side, over the scapula muffled tympanic sound; over supraspinous fossa well marked dullness, bronchial breathing. On the *left* large rhonchi.

In front on both sides, there is no dullness. It is difficult to make a correct examination because the child is so restless. Bowels not moved. Tongue very much coated. Urine clear. No albumin.

Weight 15,000 grammes.

At 12,45 a dose of Antipyrine 0,25 was given.

1 P. M. Herpes on face. It was not an Exanthem. but simply Herpes of Pneumonia.

16th. Last night from 8 to 10 o'clock strong sweat. Antipyrine 0,5 was given afterwards; the respirations were very frequent.

Auscultation and Percussion: On the left dulness; behind on the right, above the scapula, and on the left under the scapula, there is bronchial breathing, and moist rhonchi.

Diagnosis. Broncho-Pneumonia with Croupous-Pneumonia.

17th. Yesterday from 3 to 5 in the afternoon *sweat*, but not *very* strong. The child is much excited. At 3 o'clock, a dose of chloral was given, after which the child was much quieter.

Bowels not moved. Ol. Ricini given. Urine is a little turbid (through Antipyrine?) and red. No albumin, but a great deposit of phosphates.

Percussion and Auscultation. Resolution of the Pneumonia.

Up to 2 P.M. the child had fever. Three doses of 0,5 of Antipyrine were given.

19th. Yesterday two doses of 0,5 of Antipyrine. No sweat. Child is quieter. Chloral not necessary. Urine red. Bowels moved.

20th. Since yesterday temperature has been normal. No bronchial breathing. No crepitations. The resolution is complete.

23rd. Temperature normal. Child has a cough.

25th. Cough gone. Temperature normal.

30th. Dismissed cured.

Date.	Time.	Temp.	Antipyrine.
13. XI.	7. P. M.	38.6.	0.25.
	8. "	37.8.	
	9. "	37.4.	
	10. "	37.2.	

Date.	Time.	Temp.	Antipyrine.
14. XI.	2. A. M.	37.2.	
	6. "	36.6.	
	9. "	36.6.	
	12. "	38.0.	
	1. P. M.	38.8.	0.25.
	2. "	38.4.	0.25.
	3. "	37.8.	
	5. "	38.0.	
	6. "	38.2.	
	7. "	38.8.	0.25.
	9. "	38.0.	
	12. "	37.8.	
15.	1. A. M.	37.4.	
	6. "	37.6.	
	8. "	38.6.	0.25.
	10. "	38.0.	
	12. "	39.0.	0.25.
	1. P. M.	38.6.	0.25.
	2. "	38.0.	0.25.
	3. "	38.4.	
	4. "	39.2.	0.5.
	5. "	39.0.	0.5.
	6. "	38.6.	0.25.
	7. "	38.4.	
8. "	37.8.		
10. "	36.8.		
12. "	38.0.		
16.	4. A. M.	37.4.	
	8. "	37.6.	
	10. "	38.6.	
	12. "	39.0.	0.5.
	1. P. M.	39.0.	0.5.
	2. "	38.6.	0.5.

Date.	Time.	Temp.	Antipyrine.
	3. P. M.	37.6.	
	4. "	37.4.	
	5. "	36.2.	
	6. "	36.0.	
	8. "	36.0.	
17. XI.	6. A. M.	37.2.	
	10. "	37.4.	
	2. P. M.	39.0.	0.5.
	3. "	38.2.	0.5.
	4. "	37.6.	
	8. "	36.8.	
	10. "	36.4.	
18.	8. A. M.	37.6.	
	11. "	38.6.	0.25.
	1. P. M.	38.6.	0.25.
	3. "	38.2.	
	5. "	38.0.	
19.	8. A. M.	37.6.	
	6. P. M.	37.4.	
20.	8. A. M.	36.8.	
	6. P. M.	37.2.	

Case 5.

Bigler, Frederick. Age 7 months.

Admitted: 14. XI. 84.

Discharged: 21. XI. 84.

Diagnosis: Pneumonia.

Result: Cured.

Anamnesis. Father is a servant. Is strong. Mother says she has phthisis. During pregnancy coughs much, and has brought up blood. Has had ten children, five dead, two died at birth. This child — Frederick — was not nursed; brought up on gruel and milk. Has

always been well until this illness. On the 10th. had fever. To-day was much excited and irritable. No convulsions. Since the 11th. has had a strong cough. Will not take milk. Urine is red and turbid.

Present condition: Child is well nourished. There is nothing particular to notice about body.

Heart is normal.

Lungs: *Behind* on the *right* above the supraspinous fossa and over the scapula well marked dulness and tympanic sound; over this dulness the inspiration and expiration are sharp, with fine dry rhonchi.

In front, on the right, above clavicle and a little under, slight dulness.

Behind, on the left, some dulness and moist râles.

In front, on the left, normal.

Yesterday afternoon temperature 40,0. No Antipyrine given.

16th. Yesterday at 7. P. M. temperature 39.2, Antipyrine 0,1.

Tympanic sound disappeared. Moist râles. Rough crepitations. Bronchial breathing somewhat diminished.

18th. Since the 16th. no fever. Weight increased. *Behind* on the *right* over scapula get slight bronchial breathing, irregular moist râles.

Behind, on the *left*, moist râles.

In the front, on both sides, moist râles.

Resolution has commenced.

20th. Resolution progressing.

21st. Child is well. Dismissed cured.

Date.	Time.	Temp.	Antipyrine.
14. XI.	1. P. M.	38.8.	0.1.
	3. "	40.0.	0.1.
	6. "	40.0.	0.1.
	8. "	39.8.	

Date.	Time.	Temp.	Antipyrine.
15. XI.	10. P. M.	39.0.	
	6. A. M.	38.0.	
	9. "	37.4.	
	12. "	38.4.	
	3. P. M.	39.0.	0.1.
	5. "	39.0.	
	7. "	39.2.	0.1.
	8. "	38.0.	
	9. "	36.8.	
	10. "	37.4.	
16.	6. A. M.	37.0.	
	8. "	37.2.	
	10. "	37.6.	
	12. "	37.6.	
	2. P. M.	37.6.	
	4. "	37.8.	
	6. "	37.4.	
	8. "	37.0.	
17.	8. A. M.	36.4.	
	10. "	37.0.	
	12. "	37.2.	
	4. P. M.	37.4.	
	6. "	37.0.	
18.	9. "	37.0.	
	8. A. M.	36.0.	
	12. "	36.4.	
	6. P. M.	37.0.	

Case 6.

Probst, Rudolph; age 2 years.

Admitted: 15. X. 84.

Discharged: 7. XII. 84.

Diagnosis: Broncho-Pneumonia.

Result: Cured.

Anamnesis. Father is a labourer. Both parents healthy. Have had seven children. This child was nursed for seven months, then fed upon flour and milk. Has always been well until this illness. Has not been well since yesterday. Strong fever, pain in chest, cough. Much excited, no appetite. Bowels moved three or four times a day; motions loose and yellow. Urine normal.

Present condition: 16th. Child is fairly well nourished; somewhat pale, but cheeks are red. Herpes labialis. *Abdomen* slightly swollen. *Heart* normal.

Lungs. On the right. Under the scapula well marked dulness, strong bronchial breathing and fine metallic râles.

On the *left*, over the supraspinous fossa, bronchial breathing.

In front, on both sides, dry rhonchi non-metallic; on the right, under the clavicle, there is also slight dulness and bronchial respirations, so that there are two spots of pneumonia. Since yesterday 0.1 of Antipyrine.

17th. Examination of lungs shows the same state as yesterday. Dulness over both spots of Pneumonia. As the fever was not lessened by 0,1 dose of Antipyrine, larger doses were given, namely 0,2; 0,1; 0,1.

18th. Resolution has not commenced. The rhonchi are softer. The dulness more limited and less intense.

20th. On the *right* behind, there is dulness from the inferior angle of the scapula downwards. Over the scapula, and especially over the supraspinous fossa, there is well marked bronchial breathing. Lower down, the bronchial breathing is less marked.

Diagnosis. Pleuro-Exudation on the right side, behind and under the scapula.

Respirations very quick, 48 per minute.

At 2.P.M. temperat. 39,4. Antipyrine given at 3. P.M.

The child moans very much.

21st. Yesterday, at 3. P. M., there was no more fever, even a subnormal temperature.

Lungs: From the inferior angle of the scapula downwards, the sound is still dull and tympanic. There is also weak bronchial breathing.

22nd. Condition the same as yesterday.

Diagnosis: Pleuro-Pneumonia of the right side behind.

27th. Within the last five days, namely from the 22nd. to the 27th, the resolution of the Pneumonia has been complete and the exudation has quite disappeared.

Auscultation shows rough crepitations. Child looks well. No fever. Respirations 28 per minute and quiet.

7. II. Went home cured.

Date.	Time.	Temp.	Antipyrine.
15. XI.	2. P. M.	39.2.	0.1.
	3. "	38.6.	0.1.
	4. "	38.2.	0.1.
	5. "	37.6.	
	6. "	37.4.	
	8. "	36.8.	
16.	11. "	38.2.	
	8. A. M.	38.2.	
	12. "	38.8.	0.1.
	1. P. M.	38.0.	
	2. "	38.6.	0.1.
	3. "	38.4.	0.1.
	4. "	37.8.	
	5. "	37.6.	
	6. "	37.8.	
	7. "	38.0.	
9. "	38.3.		
17.	10. "	38.0.	
	3. A. M.	39.0.	0.1.
	4. "	38.4.	0.1.

Date.	Time.	Temp.	Antipyrine.
	5. A. M.	38.0.	
	6. "	37.8.	
	8. "	37.6.	
	10. "	37.4.	
	12. "	37.8.	0.2.
	1. P. M.	39.2.	0.1.
	2. "	38.4.	0.1.
	3. "	38.2.	
	4. "	37.8.	
	5. "	38.8.	0.2.
	6. "	38.2.	0.1.
	7. "	37.0.	
	8. "	37.6.	
	9. "	38.4.	0.25.
	10. "	39.0.	0.25.
	11. "	38.2.	
	12. "	37.8.	
18. XI.	2. A. M.	39.6.	0.25.
	3. "	38.6.	0.25.
	4. "	37.6.	
	5. "	37.0.	
	6. "	37.6.	
	7. "	38.6.	
	8. "	39.2.	0.25.
	9. "	38.2.	0.25.
	10. "	37.4.	
	11. "	37.0.	
	12. "	37.2.	
	1. P. M.	39.0.	0.25.
	2. "	38.6.	0.25.
	3. "	38.0.	0.1.
	4. "	37.4.	
	5. "	37.0.	

Date.	Time.	Temp.	Antipyrine.
	6. P. M.	37.6.	
	7. "	39.2.	0.25.
	8. "	38.4.	0.25.
	9. "	38.0.	0.1.
	10. "	36.6.	
	11. "	36.4.	
19. XI.	2. A. M.	37.6.	
	4. "	37.4.	
	6. "	38.4.	
	8. "	39.0.	0.25.
	9. "	38.4.	0.25.
	10. "	37.6.	0.1.
	12. "	37.0.	
	1. P. M.	39.4.	0.25.
	2. "	38.2.	
	3. "	38.0.	
	4. "	37.8.	
	6. "	38.2.	
	7. "	39.0.	0.5.
	8. "	38.4.	0.25.
	9. "	37.4.	
	10. "	37.2.	
	12. "	37.8.	
20.	2. A. M.	38.4.	
	4. "	38.2.	
	6. "	38.0.	
	8. "	38.0.	
	10. "	37.8.	
	12. "	38.4.	
	2. P. M.	39.4.	0.5.
	3. "	37.8.	
	4. "	37.4.	
	9. "	36.4.	

Date.	Time.	Temp.	Antipyrene.
	12. P. M.	37.0.	
21. XI.	8. A. M.	37.0.	
	6. P. M.	36.4.	
22.	8. A. M.	36.8.	
	6. P. M.	36.6.	

Case 7.

Heuser, Ernst. Age 5 months.

Admitted: 28. XI. 84.

Discharged: 11. XII. 84.

Diagnosis: Broncho-Pneumonia.

Result: Cured.

Anamnesis: Father is a painter and plâsterer. Has suffered from some affection of the chest and stomach. Was treated in the hospital for lead colic. Mother is strong. Has had twelve children, and one abortion. Eight children are living. Two died from pneumonia, one from diarrhœa and one from inflammation.

This child — Ernst — was nursed for three months, afterwards fed on milk and tea. Has always been well until three weeks since. Has always suffered from constipation. Three weeks since had an abscess on the left nates. It went away without any treatment. Eight days since another came on the front of left thigh.

Fourteen days since, the child had strong fever, pain in chest, cough, very much excited. Constipated. Urine normal.

Present conditions: 29. XI. 84. The child is pretty well nourished. Cheeks red. Lips slightly cyanotic. Breathing difficult.

Thorax: Behind on the right under scapula dulness with slight tympanic sound. Fine crepitations. Dry râles.

Percussion: On the left behind somewhat dull. All over and under scapula dry vesicular râles. In front on both sides nothing abnormal. Heart normal. Abdomen normal. There is an abscess on front of left thigh.

Diagnosis: Broncho-Pneumonia of the lower lobe of left lung.

Yesterday the child had strong fever. 0,1 Antipyrine.

I. XII. On the right, the sound is somewhat tympanic.

On the left, under the scapula, the pneumonia is still more extended. Abundant fine crepitations and moist râles. The sounds are somewhat muffled. Child has fever.

2nd. Abscess on front of left thigh opened. There was a quantity of pus. Drainage tube and antiseptic dressing.

3rd. No fever. On the right, behind, some moist râles. On the left there are fewer râles.

Resolution is going on.

11th. Dismissed cured.

Date.	Time.	Temp.	Antipyrine.
28. XI.	1. P. M.	38.8.	0.1.
	2. "	37.4.	
	3. "	37.8.	
	4. "	40.0.	0.1.
	5. "	40.0.	0.1.
	6. "	38.8.	0.1.
	7. "	38.6.	0.1.
	9. "	38.8.	0.1.
	10. "	38.8.	
	12. "	38.0.	
28.	6. A. M.	39.0.	0.1.
	8. "	39.0.	0.1.
	9. "	38.6.	
	10. "	37.8.	

Date.	Time.	Temp.	Antipyrine.
	11. A. M.	37.6.	
	1. P. M.	37.8.	
	4. "	39.0.	0.1.
	5. "	38.4.	0.1.
	6. "	37.8.	
	7. "	37.2.	
	10. "	38.0.	
30. XI.	2. A. M.	39.6.	0.1.
	6. "	36.8.	
	9. "	38.2.	
	11. "	39.0.	0.1.
	12. "	39.0.	0.1.
	1. P. M.	38.2.	
	2. "	37.8.	
	7. "	39.0.	0.1.
	8. "	38.4.	0.1.
	9. "	37.8.	
1. XII.	6. A. M.	39.0.	0.1.
	7. "	38.6.	0.1.
	8. "	37.8.	
	11. "	39.0.	0.1.
	12. "	38.8.	0.1.
	1. P. M.	38.4.	0.1.
	2. "	38.8.	0.1.
	4. "	37.8.	
	5. "	37.8.	
	7. "	39.0.	0.25.
	8. "	38.6.	
	9. "	37.4.	
2.	8. A. M.	37.8.	
	7. P. M.	37.4.	
3.	8. A. M.	37.0.	
	6. P. M.	37.2.	

Case 8.

Schneider, Marguerite. Age $2\frac{1}{2}$ years.

Admitted: 30. XI. 84.

Discharged: 3. XII. 84.

Diagnosis: Bronchitis with limited croupous pneumonia of the superior lobe of left lung.

Result: Cured.

Anamnesis: The patient was not nursed by her mother. was brought up by hand. In the spring had inflammation of the lungs. Except that illness has always been well until this illness.

Since the 28th. has had a cough. Mother says, has also had strong fever. Not excited. appetite good, and does not seem to be very ill.

Present condition: Strong, well developed child, with healthy looking face. There is nothing abnormal to notice on the body.

Thorax: Limits of lungs normal.

Percussion: On the left, over the supraspinous fossa, there is dulness.

Auscultation: Bronchial breathing. Vesicular râles. On the right in front dulness. Behind strong coarse crepitations. Here there is no bronchial breathing. No dulness.

Heart dulness and sounds normal.

Abdomen normal.

Diagnosis: Bronchitis with limited croupous pneumonia of the superior lobe of left lung.

Yesterday afternoon temperature 39,2.

Antipyrine 0,2.

2nd. Dulness in the left in front greatly diminished. Bronchial breathing less; moist râles have disappeared.

3rd. Dulness nearly gone. Bronchial breathing has disappeared. On the right there are still moist râles.

Dismissed for want of room. Is to attend as an out-patient.

5th. Quite well.

Date.	Time.	Temp.	Antipyrine.
30. XI.	1. P. M.	37.4.	
	3. "	37.8.	
	5. "	38.2.	
	7. "	39.2.	0.2.
	8. "	36.6.	
	10. "	36.8.	
1. XII.	12. "	36.6.	
	7. A. M.	37.2.	
	10. "	37.0.	
	3. P. M.	36.6.	
2.	6. "	37.0.	
	10. "	36.8.	
	9. A. M.	37.2.	
	3. P. M.	37.4.	

Case 9.

Haberstich, Emilie. Age $2\frac{1}{2}$ years.

Admitted: 2. XII. 84.

Discharged: 9. XII. 84.

Diagnosis: Broncho-Pneumonia.

Result: Cured.

Anamnesis. Father is a locksmith, is strong. Mother is said to have some disease of the heart. Has had six children; four living, one died of inflammation of the lungs, and one at birth. This child — Emilie — was not nursed by her mother, was brought up with milk and gruel. Has had inflammation of lungs twice. Sometimes suffers from diarrhoea. Since the 27th. November has had a cough and has been excited. On the 28th.

of November had strong fever, cough worse, breathing painful. Constipated. Urine scanty.

Present conditions: 3. XII. Child is fairly well nourished, face is pale, cheeks red.

Lungs: On the right, behind, over the supraspinous fossa muffled tympanic percussion sound. Strong bronchial expiration and metallic fine crepitations. Passing downwards there are moist coarse crepitations.

On the left under the scapula feeble, bronchial breathing; slight dulness, on both sides; in front there is no dulness. No bronchial breathing or moist râles.

Heart normal. Abdomen normal.

Diagnosis: Broncho-Pneumonia (Croupous Pneumonia spots).

Yesterday at 1. P. M. temperature 40.0.

Antipyrine 0.25. At 10. P. M. sweat but not strong. To-day at 12 o'clock the child had no fever. Breathing is neither difficult or painful. Face non-cyanotic.

4th. On the right, behind, over the supraspinous fossa distinct bronchial breathing. Metallic coarse crepitations and moist râles.

On percussing get muffled sound. Child coughs a great deal. Is paler and is more languid.

6th. Condition not changed. Over the spots of pneumonia abundant moist râles and crepitations.

7th. Resolution has commenced.

9th. On the right side over the scapula on percussing the sounds are normal. No râles or bronchial breathing. No fever.

9th. Dismissed cured.

Date.	Time.	Temp.	Antipyrine.
2. XII.	1. P. M.	40.0.	0.25.
	2. "	38.6.	

Date.	Time.	Temp.	Antipyrine.
	3. P. M.	37.6.	
	4. "	37.0.	
	5. "	38.0.	
	6. "	38.2.	
	7. "	38.0.	
	10. "	37.0.	
	12. "	36.8.	
3. XII.	6. A. M.	36.0.	
	9. "	36.6.	
	12. "	37.0.	
	4. P. M.	37.4.	
	6. "	37.6.	
	11. "	37.2.	
4.	6. A. M.	36.6.	
	11. "	37.6.	
	6. P. M.	37.4.	
5.	8. A. M.	37.2.	
	6. P. M.	37.4.	
6.	8. A. M.	37.0.	
	6. P. M.	37.6.	
7.	8. A. M.	36.8.	
	6. P. M.	37.0.	

Case 10.

Weber, Louisa. Age 11 months.

Admitted: 8. XII. 84.

Discharged: 15. XII. 84.

Diagnosis: Broncho-Pneumonia.

Result: Cured.

Anamnesis. Syphilis in the family. This child, some weeks after birth, was treated as an outpatient for cutaneous syphilis. After this Condylomata. Cured Inunction.

Child has had several catarrhs of bowels, also bronchial catarrh frequently.

On the 13th. of November had an attack of bronchial catarrh. For the last two or three days has had fever.

Present condition 9. XII. 84 :

Percussion und Auscultation of lungs. On the right over supraspinous fossa muffled tympanic sound and fine crepitations.

On the left behind some rhonchi.

In front there is no dulness but the Inspiration is rough.

Heart normal.

Abdomen swollen.

Diagnosis. Broncho-Pneumonia (Croupous Pneumonia spots?)

Medicine Antipyrine and Acidi Sulph. with Camphora.

When received the temperature was 40,2. After three doses of Antipyrine of 0,1 the temperature went down very much.

To-day no fever.

9th. Dulness is still well marked, gasping expiration. Bronchial breathing over the supraspinous fossa. Moist râles. The percussion sound is somewhat tympanic.

10th. Dulness considerably diminished. Moist râles. Bronchial breathing is weaker. General condition better. Slight cyanosis.

11th. Respirations, which were between 32 and 44 per minute, are much lower and more regular. The dulness over the supraspinous fossa scarcely noticeable. Bronchial breathing has disappeared.

General condition good.

12th. Resolution of pneumonia is going on.

13th. Dismissed cured.

Date.	Time.	Temp.	Antipyrine.
8. XII.	6. P. M.	40.2.	0.1.
	7. "	39.8.	0.1.
	8. "	38.8.	0.1.
	9. "	37.6.	
	10. "	37.0.	
	11. "	36.6.	
9.	1. A. M.	36.4.	
	8. "	36.2.	
	10. "	36.6.	
	12. "	37.2.	
	4. P. M.	37.0.	
	8. "	36.6.	
10.	6. A. M.	36.8.	
	9. "	37.2.	
	7. P. M.	36.2.	
11.	6. A. M.	37.0.	
	8. P. M.	37.2.	
12.	6. A. M.	36.8.	
	8. P. M.	37.2.	

Having given the clinical histories of these cases, it still remains for us to take a short survey of each case separately; the age of each patient; the highest, and the lowest point of the temperature of each case; the length of time each patient was ill; and the amount of Antipyrine given in each case.

Of these cases the diseases were:

Pneumonia	4
Broncho-Pneumonia	5
Bronchitis with limited Pneumonia	1

The first case of Pneumonia lasted sixteen days ¹⁶⁾. The highest temperature in this case was 41,0. The lowest 35,2. During his illness he had 5,50 grammes of Antipyrine. This was one of the most severe cases and occurring in a delicate child.

The second case of Pneumonia was much less severe. The disease lasted thirteen days. The highest temperature was 39,0. Lowest 36,0. The child had 0,7 gramm of Antipyrine.

The third case of Pneumonia (case 3) was ill sixteen days. Highest temperature 39,0. Lowest 36,4. She had 1,25 grammes of Antipyrine. In this case there was a well marked Erythema.

The fourth case of Pneumonia (case 5) was ill twelve days. Highest temperature 40,0. Lowest 36,0. He was in the Hospital seven days; with a previous illness of five days so that he was ill eleven days. He had 0,2 of Antipyrine.

The first case of Broncho-Pneumonia (case 4) was ill sixteen days. Highest temperature 39,5. Lowest 36,0. This child had sweats, but not any rigors. Amount of Antipyrine 5,75 grammes.

The second case of Broncho-Pneumonia (case 6) was ill thirteen days. Highest temperature 39,6. Lowest 36,0. Amount of Antipyrine 6,05. In this case there was more difficulty than usual in getting the temperature down; it was only when the amount of drug was increased that this was possible.

The third case of Broncho-Pneumonia (case 7) was ill twenty days. Highest temperature 40,0. Lowest 37,0. Amount of Antipyrine 2,25 grammes.

The fourth case of Broncho-Pneumonia (case 9) was ill for thirteen days. Highest temperature 40,0. Lowest 36,0. Amount of Antipyrine 0,25 gramm.

¹⁶⁾ The number of days the patients were ill, is counted from the time their friends said they had showed symptoms of the illness, until they were considered free from the disease.

The fifth case of Broncho-Pneumonia (case 10) was ill for nine days. Highest temperature 39,2. Lowest 37,4. Amount of Antipyrine 0,2 gramm.

The youngest of these patients was five months, the eldest six years.

The ages were:

- One: Five months.
- One: Seven months.
- One: Eleven months.
- One: Fifteen months.
- One: Two years.
- Two: Two years and a half.
- One: Four years.
- One: Five years.
- One: Six years.

Average age 30,2 months.

The highest temperatures were:

- One: 41,0.
- One: 40,2.
- Three: 40,0.
- One: 39,6.
- One: 39,5.
- One: 39,2.
- Two: 39,0.

Average 39,75.

The lowest point to which the temperatures fell after Antipyrine was given, was:

- One: 37,4.
- One: 37,0.
- One: 36,4.
- One: 36,2.
- Five: 36,0.
- One: 35,2.

Average 36,22.

The time the patients were ill was :

Pneumonia.

Two cases: 16 days.

One case: 13 ..

One case: 12 ..

Average 14,25 days.

Broncho-Pneumonia.

One case: 20 days.

One .. 16 ..

Two cases: 13 ..

One case: 9 ..

Average 14,2 days.

The case of bronchitis with limited pneumonia was ill nine days.

The amount of Antipyrine given to each case was:

Case	1.	6.50	gramms
..	6.	6.30	..
..	4.	6,25	..
..	7.	2,35	..
..	3.	1,75	..
..	2.	0,7	..
..	10.	0,3	..
..	5.	0,5	..
..	9.	0,25	..
..	8.	0,2	..

Average to each case 2,51 grammes.

In all these cases the medicine was well borne by the patients — and — except in one case, where there was a well marked eruption all over the body — there was nothing to contra-indicate its use.

We have now to consider a few general points with regards to the use of Antipyrine.

1st. It seems to have no *important, direct influence* or *shortening the duration of the disease*; and, on the pro-

gress of Pneumonic infiltration it seems to have no influence. But, when we consider the power it has of lowering the temperature, and that, without rigors, often without sweat, and without grave collapse — which symptoms are not only disagreeable to the patient, but often dangerous — we can consider that it has a favourable influence on the course of the disease.

Patients suffering from diseases attended with high fever — who are treated by this drug — are spared the symptoms from high blood pressure: somnolence, anorexia, etc.; or, if they are present, it is in a much less degree.

2nd. It is superior to Quinine or Kaïrin in these particulars.

a) To Quinine. — It can be given in larger doses, and for a longer time than Quinine, without giving rise to those disagreeable symptoms of ringing in the ears, etc., which only those, who have suffered the misery, following large doses of Quinine continued over three or four days, can fully understand.

b) To Kaïrin. — It not only brings the temperature down steadily without rigors, but, when it is discontinued, the temperature does not immediately rise, which is the case with Kaïrin. And, when the temperature does begin to rise again, it does so *steadily* without rigors. Though sweating often follows the use of Antipyrine, there is no rigor, — it is — if I may use the expression — a comfortable sweat.

3rd. One of the greatest advantages of Antipyrine is the length of time the temperature remains down; — sometimes for as long as ten or twelve hours or, even longer. As we have said, when the temperature begins to rise again, it does so steadily, without any bad symp-

toms; and, as a rule, - a much less dose is required to bring the temperature down a second time.

4th. Disadvantages attending the use of Antipyrine:

a) In some cases it has been noticed, that the temperature fell rapidly *below* normal, the patients getting into a state of collapse. For this reason, it has been thought necessary to take the temperature every hour during the time the medicine is given. If this is really necessary, it would limit the use of Antipyrine to patients, who would have a trained nurse or to Hospital practice. But the cases where this tendency to collapse has been noticed, are so very few, that we think — with proper care — the drug can be given with perfect safety in ordinary private practice, as well as, where a trained nurse can be left in charge of the case.

An other advantage of Antipyrine is, that though it brings the temperature down so markedly, it does not disturb the digestive functions. In this respect also, it is superior to Kairin and Salicylic of Soda, and may also, from this reason, be said to have a favourable influence on the course of the disease.

It has been said by some authors, that the vomiting is not in any case distressing or continuous; but Professor Demme has noticed, in some cases treated in his hospital, that the vomiting is *both distressing and continuous*. And moreover this is specially the case, where collapse is to be feared.

In some cases the thirst is most intense; no amount of liquid being sufficient to satisfy the patient, until the effect of the drug has almost passed off.

Finally, we wish again to draw attention to a fact, we have mentioned before — that is — when the action of the heart is weak, or the circulation impeded: Antipyrine is contra-indicated.

Professor Demme has proved this by his experiments on rabbits and frogs ¹⁷⁾, and he has also proved it clinically in a case of severe Diphtheria, where the use of the drug gave rise to most grave symptoms and, if it had been continued, in all probability the patient would have succumbed to the effects ¹⁸⁾.

So, in any disease which has weakened the patient, and we get as a secondary symptom — say Pneumonia — the use of Antipyrine is most decidedly contraindicated. The patient being already weakened by the primary disease cannot bear the lowering effects of Antipyrine.

Hitherto the record of cases given, and the remarks made, have had reference only to patients treated in the hospital, where they were well nursed, and the temperatures taken every hour. Now, the question is: Can Antipyrine be given with safety to children, whose parents are too poor to have a trained nurse, but who, for various reasons, will not allow their children to go to a hospital? In short, is this new drug only another antipyretic which must be confined in its use to rich or hospital patients?

Through the kindness of Dr. Sahli — Assistant-Physician in the Out-Patient department Berne — I have been able to prove in two cases, that the drug can be given to poor children living in their own homes, and nursed by their mothers. I would take this opportunity of thanking Dr. Sahli most sincerely for his kind help, and of expressing my regret, that I was not able to avail myself more fully of the cases he would have allowed me to treat.

Case 1. Ida Gerber. Age 2½ years.

Diagnosis. Broncho-Pneumonia.

¹⁷⁾ Fortschritte der Medicin, No. 20, Oct. 15th, 1884.

¹⁸⁾ " " " No. 21, Nov. 1st, 1884.

First seen on November 11th., 1884.

Mother said the child had always been strong and well.

On the 7th. had fever, cough, pain in chest, and headache.

Present condition: The child is well nourished. There is nothing abnormal to notice, on the body.

Lungs: On the right, in front, dulness from the clavicle to the third rib. Over this spot, the breath sounds are metallic. Behind, on the right, dulness over the supraspinous fossa. Respirations short and sharp. Other parts of the chest normal.

November 11th. 3. P. M.

Temperature 39.8. Pulse 120. Respirations 36.

Antipyrine 0.2.

6. P. M. ditto 0.2.

6. 30. Temperature 39.0.

7. P. M. Antipyrine 0.2.

8. 30. Temperature 38.6.

The breathing is quieter.

12th. 8. A. M. Temperature 37.

Cough very troublesome. Pain in chest.

Mother says child has slept well. Bowels moved.

Urine red, otherwise normal.

4. P. M. Temperature 38.0.

The general condition of the child has been better to-day.

6. P. M. Temperature 39.0. Pulse 120. Resp. 36.

Antipyrine 0.2.

7. P. M. Temperature 39.4.

Antipyrine 0.2.

8. P. M. „ 0.2.

13th. 8. A. M. Temperature 37.8.

Mother says child had strong fever up to midnight, after which it slept well.

This morning the cough is troublesome, but the child has less pain in her chest.

2. P. M. Temperature 40,0.

Antipyrine 0,2.

3. 30 " 0,2.

4. P. M. Temperature 39,8.

4. 30 Antipyrine 0,2.

5. P. M. Temperature 39,4.

6. 30 .. 38,4.

14th. 8. A. M. ,, 40,0.

Child has had a bad night. Strong fever, cough troublesome. Not slept at all.

14th. 9. A. M. Antipyrine 0,5.

10. " 0,5.

10. 30 Temperature 39,0.

11. A. M. Antipyrine 0,5.

2. P. M. Temperature 38,0.

Child seems better.

6. P. M. Temperature 37,8.

15th. 8. A. M. The child has had a much better night. Mother says she has had no fever, but cough troublesome.

Temperature 37,4.

There is an eruption on the face, chest and arms very much like rubeola.

2. P. M. Temperature 37,0.

Cough much less.

Eruption more marked and has extended to the legs.

16th. 8. A. M. Temperature 37,0.

Eruption the same as yesterday. The general condition of the child is better.

17th. 8. A. M. Temperature 36,8.

Eruption not so well marked. Child much better.
 18th. Temperature normal.
 19th. Eruption gone.
 20th. Child well.

Case 2. Hodel, Rosa. Age 2 years and 4 months.

Diagnosis. Croupous Pneumonia.

First seen on December 3rd, 1884.

Mother said the child had always been delicate. This illness commenced on the 28th of November with fever; the following day the child had a cough, pain in chest, and head ache.

Present condition: Child is very pale, and thin. Abdomen is a little swollen. Lips cyanotic. Temperature 40,0. Pulse 120. Respirations 34. A short dry cough, which evidently caused pain. Bowels not moved for two days. Urine red, and scanty. No Albumin.

Lungs: On the right behind dulness, specially marked over the supraspinous fossa. The respirations are short and sharp. Some moist râles below the inferior angle of the scapula on the left behind. Percussion: no dulness. Some bronchial breathing.

In front, on both sides, nothing abnormal.

9. A. M. Antipyrine 0,2.

10. " 0,2.

11. Temperature 39,6.

" Antipyrine 0,2.

6. P. M. Temperature 39,8.

7. Antipyrine 0,2.

9. " 0,2.

11. " 0,2.

4th. 8. A. M. Temperature 37,6.

The child has had a better night. Urine more free, but very red. Bowels moved. Cough troublesome.

Lips very cyanotic. Breathing is very laboured. Pulse 120. Respirations 30. The general condition has in no way improved.

3. P. M. Temperature 38,0.

6. P. M. Temperature 39,4. Pulse 124. Resp. 40.
The child is very ill.

Antipyrine 0,5.

8. P. M. 0,5.

5th. 8. A. M. Temperature 37,6. Respiration 30.
Mother says the child has had no fever since 10 o'clock last night. Has slept for several hours.

The dulness is less over the right lung.

3. P. M. Temperature 37,4.

Child is very weak. To have half a teaspoonful of brandy every four hours.

6. P. M. Temperature 37,0.

6th. 8. A. M. Temperature 37,0.

Child has had a fair night, still very weak.

6. P. M. Temperature 38,8.

Antipyrine 0,5.

7th. 8. A. M. Temperature 37,0.

Child more cheerful. Has slept nearly all night.

Cough is constant, but there is not so much pain in the chest. Lips less cyanotic.

6. P. M. Temperature 37,4.

8th. 8. A. M. „ 36,8.

Child is very weak. Mother says she had some fever during the night. Brandy to be continued.

9th. 8. A. M. Temperature 37,4.

The child is not so weak. More bright and cough less.

2. P. M. Temperature 38,0.

6. P. M. „ 38,4.

Antipyrine 0,2.

10. P. M. „ 0,2.

10. A. M. Temperature 37.2.

Child is much better.

From this time, the child had no more fever.

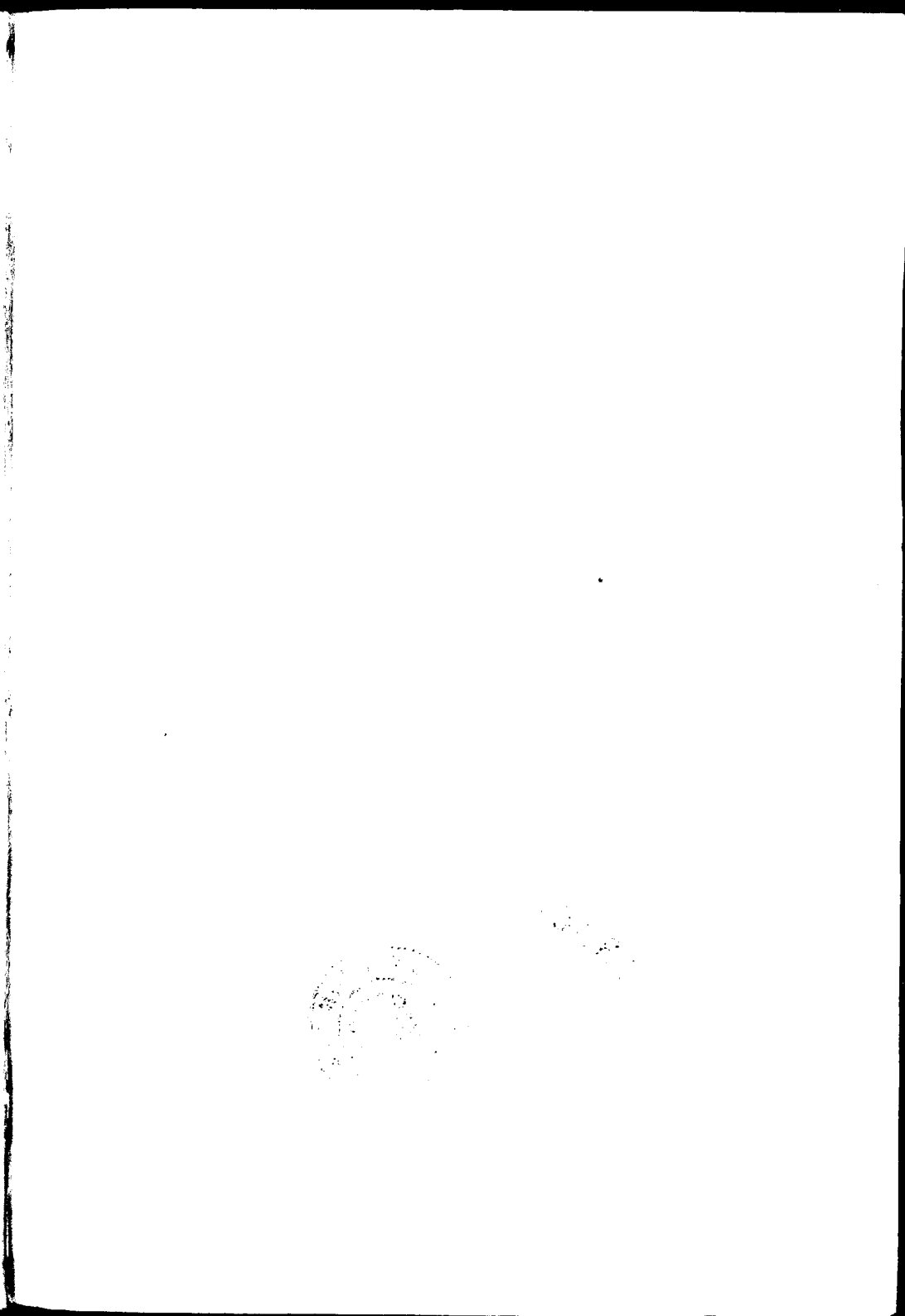
So we see Antipyrine can be used — with ordinary care — in the treatment of patients at their own homes as well, as in hospitals; and it will be found a powerful, trustworthy and quite safe Antipyretic.

In acute diseases of the respiratory system in children, it offers nothing more — as an Antipyretic — than other well known drugs, used for that purpose. Yet, its effect is certainly a quicker and more lasting one, and its use is not attended with those disagreeable symptoms, which follow the use of some of the well known Antipyretics.

Combined with cold compresses on the trunk — which have proved so effectual in the treatment of Pneumonia in children — its use, when the temperature is *very* high, seems decidedly to be recommended.

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